7-11 Mission Avenue and Rock Springs Gas Station Project (APN: 228-220-13-00 & 228-220-43-00) Traffic Impact Study

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EXECUTIVE SUMMARY

Purpose of the Report

The purpose of this Traffic Impact Study (TIS) report is to identify and document potential traffic impacts related to the proposed development project (Project) in the City of Escondido. This technical report will also recommend transportation mitigation measures and improvements to address any potential Project impacts to the local transportation network within the study area.

Project Overview

The proposed Project is located on at the northwest corner of W Mission Avenue and Rock Springs Road. Access to the Project site will be provided via two right-in and right-out access driveways on W. Mission Avenue and Rock Springs Road respectively. The Project will replace the existing automobile sale land use with the construction of a new gas station with 16 fueling positions (8 dispenser pumps) and a 4,000 square foot convenience store including 51 square foot office and 2,615 square foot retail spaces.

The Project trip generation was calculated by using the Brief Guide of Vehicular Traffic Generation Rates for The San Diego Region published by San Diego Association of Government (SANDAG) on April 2002. A trip generation credit from the existing automobile sale was applied. It is estimated that the Project will generate 1,650 net new daily trips, 122 net new A.M. peak hour trips and 59 net new P.M. peak hour trips. Project trip distribution and assignment were developed, in coordination with City staff, based on characteristics of the surrounding land uses in the vicinity of the Project site, the anticipated travel patterns to and from the Project site, and the existing travel patterns within the study area. Project scenarios and study area were then established in coordination with City staff to determine the potential Project impacts on the transportation network.

Project Scenarios:

- Existing Conditions (2019)
- Existing Conditions with Project
- Opening Year Conditions (2021) – Existing Traffic plus ambient growth (2% compounded for 2 years)
- Opening Year Conditions with Project
- Future Conditions (2035)
- Future Conditions with Project

Study Area

The study area for this project was developed consistent with the City of Escondido guidelines. The following key intersection and roadway segment locations will be analyzed as part of this effort:

Intersections:

- W. Mission Avenue and Rock Springs Road
- Rock Springs Road and W. Lincoln Avenue
- W. Mission Avenue and N. Quince Street
- W. Mission Avenue and Metcalf Street

Roadway Segments:

- Rock Springs Road, north of W. Lincoln Avenue
- Rock Springs Road, W. Lincoln Avenue to Lenser Way
- Rock Springs road, Lenser Way to W. Mission Avenue
- Rock Springs Road, south of W Mission Avenue
- W. Mission Avenue, west of Metcalf Street
- W. Mission Avenue, Metcalf Street to Rock Springs Road
- W. Mission Avenue, Rock Springs Road to N. Quince Street
- W. Mission Avenue, east of N. Quince Street

Analysis Results and Recommendations

Existing Conditions (2019)

The following intersection operates at an unacceptable LOS under Existing Conditions:

- Rock Springs Road and W. Lincoln Avenue

All analyzed roadway segments are operating at an acceptable LOS under Existing Conditions, except for the following:

- Rock Springs Road, north of W. Lincoln Avenue
- Rock Springs Road, W. Lincoln Avenue to Lenser Way

The proposed Project would have a significant Project related traffic impacts under Existing with Project Conditions at the following intersection:

- Rock Springs Road and W Lincoln Avenue

The proposed Project would not have a significant Project related traffic impact under Existing with Project Conditions at any analyzed roadway segment.

The following transportation improvement will mitigate the identified significant Project related traffic impact to less than significant:

- Rock Springs Road and W. Lincoln Avenue – Signalize the intersection. Signal warrant at this location is satisfied under Existing Conditions and is included in **Appendix K**.

The Project will be conditioned to construct a signal at the intersection of Rock Springs Road and W. Lincoln Avenue. All proposed transportation improvements within the City of Escondido shall be constructed to the satisfaction of the City Engineer.

Opening Year Conditions (2021)

The following intersection would operate at an unacceptable LOS under Opening Year Conditions:

- Rock Springs Road and W. Lincoln Avenue

All analyzed roadway segments are operating at an acceptable LOS under Opening Year Conditions, except for the following:

- Rock Springs Road, north of W. Lincoln Avenue
- Rock Springs Road, W. Lincoln Avenue to Lenser Way

- Rock Springs road, south of W. Mission Avenue

The proposed Project would have a significant Project related traffic impacts under Opening Year with Project Conditions at the following intersection:

- Rock Springs Road and W. Lincoln Avenue

The proposed Project would not have a significant Project related traffic impact under Opening Year with Project Conditions at any analyzed roadway segment.

The following transportation improvement will mitigate the identified significant Project related traffic impact to less than significant:

- Rock Springs Road and W. Lincoln Avenue – Signalize the intersection. Signal warrant at this location is satisfied under Existing Conditions and is included in **Appendix K**.

The Project will be conditioned to construct a signal at the intersection of Rock Springs Road and W. Lincoln Avenue. All proposed transportation improvements within the City of Escondido shall be constructed to the satisfaction of the City Engineer.

Future Conditions (2035)

The following intersections would operate at an unacceptable LOS under Future Conditions:

- Rock Springs Road and W. Lincoln Avenue

All analyzed roadway segments are operating at an acceptable LOS under Future Conditions.

The proposed Project would have a significant Project related traffic impacts under Future with Project Conditions at the following intersection:

- Rock Springs Road and W. Lincoln Avenue

The proposed Project would not have a significant Project related traffic impact under Future Conditions with Project at any analyzed roadway segment.

The following transportation improvement will mitigate the identified significant Project related traffic impact to less than significant:

- Rock Springs Road and W Lincoln Avenue – Signalize the intersection. Signal warrant at this location is satisfied under Existing Conditions and is included in **Appendix K**.

The Project will be conditioned to construct a signal at the intersection of Rock Springs Road and W. Lincoln Avenue. All proposed transportation improvements within the City of Escondido shall be constructed to the satisfaction of the City Engineer.

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1.0 PROJECT INTRODUCTION

This traffic impact study (TIS) report has been prepared for the 7-11 Mission Avenue and Rock Springs Gas Station Project located on the northwest corner of W. Mission Avenue and Rock Springs Road. Access to the Project site will be provided via one right-in and right-out access driveway on W. Mission Avenue and one full access driveway on Rock Springs Road.

PROJECT DESCRIPTION

The Project will replace the existing automobile sale land use with the construction of a new gas station with 16 fueling positions (8 dispenser pumps) and a 4,000 square foot convenience store including 51 square foot office and 2,615 square foot retail spaces.

Figure 1-1 shows the Project site plan.

STUDY AREA

The study area for this Project was developed consistent with the City of Escondido guidelines. IEG prepared a Project traffic study scoping agreement defining the study area which was reviewed and approved by City staff prior to the preparation of this technical report.

Figure 1-2 presents the study area that includes the following key intersection and roadway segment locations:

Intersections:

- W. Mission Avenue and Rock Springs Road
- Rock Springs Road and W. Lincoln Avenue
- W. Mission Avenue and N. Quince Street
- W. Mission Avenue and Metcalf Street

Roadway Segments:

- Rock Springs Road, north of W. Lincoln Avenue
- Rock Springs Road, W. Lincoln Avenue to Lenser Way
- Rock Springs Road, Lenser Way to W. Mission Avenue
- Rock Springs Road, south of W. Mission Avenue
- W. Mission Avenue, west of Metcalf Street
- W. Mission Avenue, Metcalf Street to Rock Springs Road
- W. Mission Avenue, Rock Springs Road to N. Quince Street
- W. Mission Avenue, east of N. Quince Street

PROJECT TRIP GENERATION

The trip generation is a measure or forecast of the number of trips that begin or end at the Project site. The traffic generated is a function of the extent and type of development proposed for the site. These trips will result in some traffic increases on the streets where they occur. Project vehicular traffic generation characteristics and pass-by trip reduction are estimated based on established rates, contained in the Brief Guide of Vehicular Traffic Generation Rates for The San Diego Region published

by SANDAG in April 2002. The proposed Project trip generation rates and trip calculation summaries are presented in **Tables 1-1 and 1-2**, respectively.

Table 1-1
Project Trip Generation Rate

Land Use[1]	Units[2]	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Convenience Market (w/ gasoline pumps)	TSF	50%	50%	6%	50%	50%	7%	850
Office	TSF	90%	10%	14%	20%	80%	13%	20
Automobile Sale	TSF	70%	30%	5%	40%	60%	8%	50

[1]Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region published by SANDAG on April 2002
[2]TSF = Thousand Square Feet

Table 1-2 summarizes the trip generation based on the floor areas associated with the proposed Project. As shown on Table 1-2, a trip generation credit from the existing automobile sale was applied. It is estimated that the Project will generate 1,650 net new daily trips, 122 net new A.M. peak hour trips and 59 net new P.M. peak hour trips.

Table 1-2
Project Trip Generation

Land Use	Intensity	Units[1]	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Convenience Market (w/ gasoline pumps)	2.615	TSF	67	67	134	78	78	156	2,223
Pass-by Reduction (50% - PM Peak, 15% ADT)[2]			-	-	-	39	39	78	*333*
Office	.051	TSF	0	0	0	0	0	0	1
		Subtotal	*67*	*67*	*134*	*39*	*39*	*78*	*1,890*
Existing Automobile Sales (Trip Credit)	4.8	TSF	8	4	12	8	12	20	240
		TOTAL	**59**	**63**	**122**	**31**	**28**	**59**	**1,650**

[1]TSF = Thousand Square Feet
[2]Pass-by reduction percentage is based on the Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region published by SANDAG on April 2002

PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

Trip distribution and assignment is the process of identifying the probable destinations, directions and traffic routes that Project related traffic will likely affect. Trip distribution and assignment information can be estimated from observed traffic patterns, experience or through use of a computerized travel forecast model. Once the proposed developments trips have been estimated, they are assigned to the study area network. For this Project, the trip distribution was developed based on the land use characteristics, surrounding land uses in the vicinity of the Project site, anticipated travel patterns to and from the Project site and existing travel patterns within the study area.

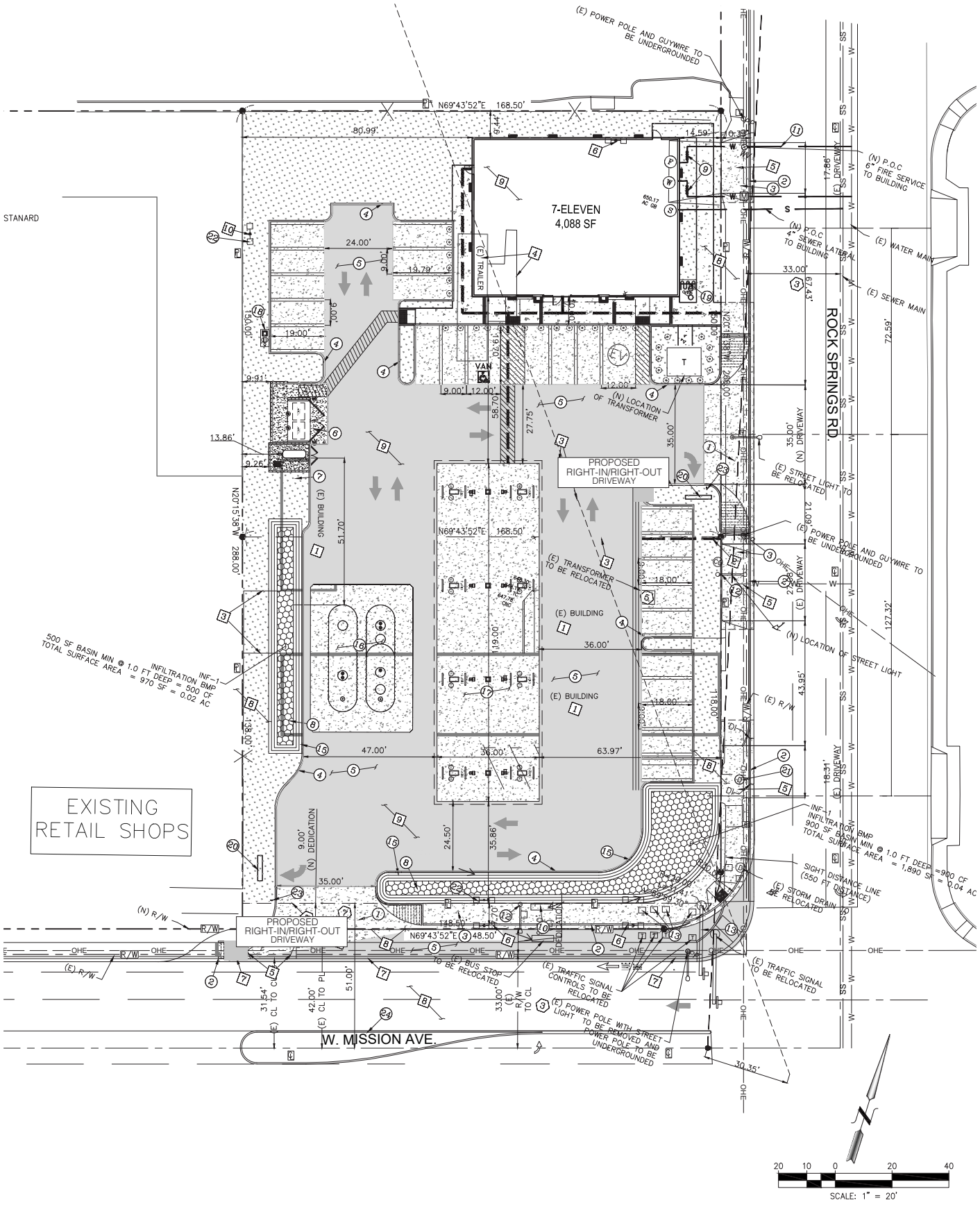
Figures 1-1 through 1-4 show Project site plan, study area, trip distribution/assignment, and intersection turning movement volumes.

PROJECT ACCESS

Access to the Project site will be provided via two right-in and right-out access driveways on W. Mission Avenue and Rock Springs Road respectively.

PARKING

The proposed development will be required to provide on-site parking spaces consistent with City of Escondido parking requirements.


7-ELEVEN
4,088 SF
PROPOSED
RIGHT-IN/RIGHT-OUT
DRIVEWAY
PROPOSED
RIGHT-IN/RIGHT-OUT
DRIVEWAY
EXISTING
RETAIL SHOPS
ROCK SPRINGS RD.
W. MISSION AVE.
(E) BUILDING
(E) TRAILER
(N) LOCATION OF TRANSFORMER
(E) TRANSFORMER TO BE RELOCATED
(N) LOCATION OF STREET LIGHT
(E) STREET LIGHT TO BE RELOCATED
(E) POWER POLE AND GUYWIRE TO BE UNDERGROUNDED
(N) P.O.C 6" FIRE SERVICE TO BUILDING
(N) P.O.C 4" SEWER LATERAL TO BUILDING
(E) WATER MAIN
(E) SEWER MAIN
(E) STORM DRAIN TO BE RELOCATED
(E) BUS STOP TO BE RELOCATED
(E) TRAFFIC SIGNAL CONTROLS TO BE RELOCATED
(E) TRAFFIC SIGNAL TO BE RELOCATED
(E) POWER POLE WITH STREET LIGHT TO BE REMOVED AND POWER POLE TO BE UNDERGROUNDED
INF-1 INFILTRATION BMP 500 SF BASIN MIN @ 1.0 FT DEEP = 500 CF TOTAL SURFACE AREA = 970 SF = 0.02 AC
INF-1 INFILTRATION BMP 900 SF BASIN MIN @ 1.0 FT DEEP = 900 CF TOTAL SURFACE AREA = 1,890 SF = 0.04 AC
SIGHT DISTANCE LINE (550 FT DISTANCE)
(N) R/W
(E) R/W
N69°43'52"E 168.50'
N20°15'38"W 288.00'
SCALE: 1" = 20'

LEGEND # Intersection ◯ Project Driveway ▬ Roadway Segment

LEGEND (#) Intersection (#) Project Driveway

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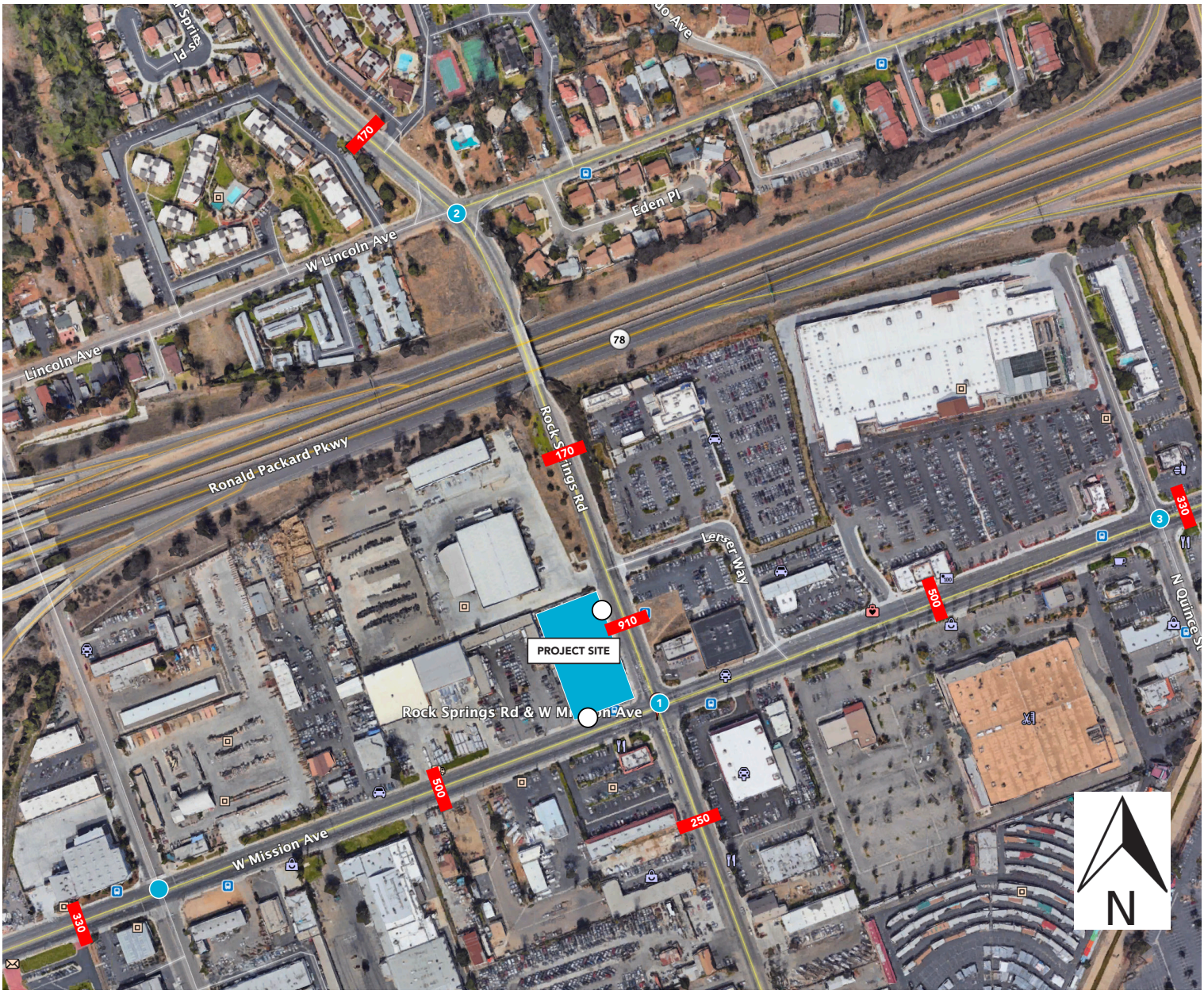
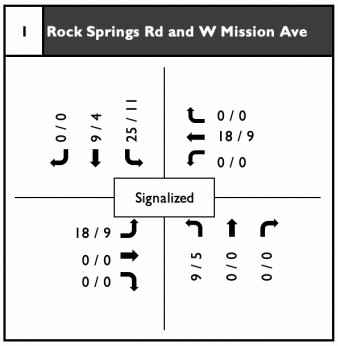
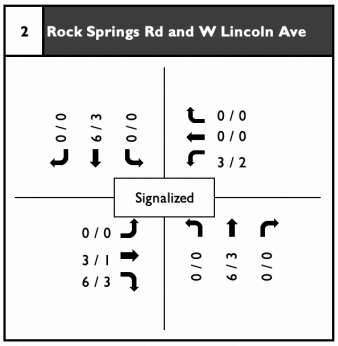
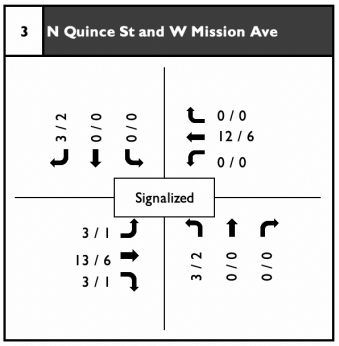
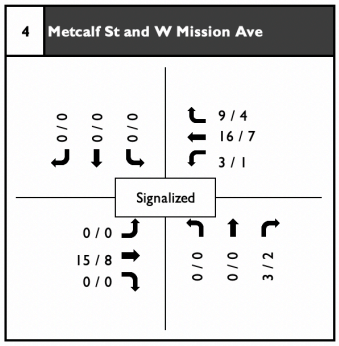
7-11 Mission Ave & Rock Springs Gas Station
Project Distribution
Figure 1-3











LEGEND (#) Intersection (#) Project Driveway Roadway Segment

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7

7-11 Mission Ave & Rock Springs Gas Station

Project AM/PM
Peak Hour Intersection Volumes

Figure 1-4

2.0 METHODOLOGIES

This section documents the methodologies and assumptions used to conduct the circulation impact analysis for the proposed Project. This section contains the following background information:

- Study scenarios
- Study time periods
- Analysis methodologies

STUDY SCENARIOS

This report presents an analysis of the intersection operating conditions during the peak periods, which were selected in consultation with City staff for the following anticipated timeframe scenarios:

- Existing Conditions (2019)
- Existing Conditions (2019) with Project
- Opening Year Conditions (2021) – Existing Traffic plus ambient growth (2% compounded for 2 years)
- Opening Year Conditions (2021) with Project
- Future Conditions (2035)
- Future Conditions (2035) with Project

The SANDAG regional traffic model will be used to generate a growth factor that will be applied to the existing counts in order to develop Future Conditions (2035) intersection turning movement volumes.

STUDY TIME PERIODS

The City selected the following peak hours for analysis:

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

ANALYSIS METHODOLOGIES

Street system operating conditions are typically described in terms of "level of service." Level of service is a report-card scale used to indicate the quality of traffic flow on roadway segments and at intersections. Level of service (LOS) ranges from LOS A (free flow, little congestion) to LOS F (forced flow, extreme congestion). **Table 2-1** describes generalized definitions of auto LOS A through F.

Table 2-1
Vehicular Level of Service Definitions

LOS	Characteristics
A	Primarily free-flow operation. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Controlled delay at the boundary intersections is minimal. The travel speed exceeds 85% of the base free-flow speed.
B	Reasonably unimpeded operation. The ability to maneuver within the traffic stream is only slightly restricted and control delay at the boundary intersections is not significant. The travel speed is between 67% and 85% of the base free-flow speed.
C	Stable operation. The ability to maneuver and change lanes at mid-segment locations may be more restricted than at LOS B. Longer queues at the boundary intersections may contribute to lower travel speeds. The travel speed is between 50% and 67% of the base free-flow speed.
D	Less stable condition in which small increases in flow may cause substantial increases in delay and decreases in travel speed. This operation may be due to adverse signal progression, high volume, or inappropriate signal timing at the boundary intersections. The travel speed is between 40% and 50% of the base free-flow speed.
E	Unstable operation and significant delay. Such operations may be due to some combination of adverse signal progression, high volume, and inappropriate signal timing at the boundary intersections. The travel speed is between 30% and 40% of the base free-flow speed.
F	Flow at extremely low speed. Congestion is likely occurring at the boundary intersections, as indicated by high delay and extensive queuing. The travel speed is 30% or less of the base free-flow speed. Also, LOS F is assigned to the subject direction of travel if the through movement at one or more boundary intersections have a volume-to-capacity ratio greater than 1.0.

Source: Highway Capacity Manual, Transportation Research Board (2016)

Intersection Capacity Analysis

The analysis of peak hour intersection performance was conducted using the Synchro 10 software program, which uses methodologies defined in the Highway Capacity Manual (HCM) Sixth Edition to calculate LOS. Level of service (LOS) for intersections is determined by control delay. Control delay is defined as the total elapsed time from when a vehicle stops at the end of a queue to the time the vehicle departs from the stop line. The total elapsed time includes the time required for the vehicle to travel from the last-in-queue position to the first-in-queue position, including deceleration of vehicles from free-flow speed to the speed of vehicles in the queue.

Signalized Intersections

The HCM analysis methodology for evaluating signalized intersections is based on the "operational analysis" procedure. This technique uses 1,900 passenger cars per hour of green per lane (pcphgpl) as the maximum saturation flow of a single lane at an intersection. This saturation flow rate is adjusted to account for lane width, on-street parking, conflicting pedestrian flow, traffic composition, (e.g., the percentage of vehicles that are trucks) and shared lane movements (e.g., through and right-turn movements from the same lane). Average control delay is calculated by taking a volume-weighted average of all the delays for all vehicles entering the intersection. **Table 2-2** summarizes the level of service criteria for signalized intersections.

Table 2-2
Signalized Intersection Level of Service HCM Operational Analysis Method

Average Control Delay Per Vehicle (seconds)	Level of Service (LOS) Characteristics
≤10.0	*LOS A* occurs when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.
10.1 – 20.0	*LOS B* occurs when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.
20.1 – 35.0	*LOS C* occurs when progression is favorable or the cycle length is moderate. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.
35.1 – 55.0	*LOS D* occurs when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.
55.1 – 80.0	*LOS E* occurs when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.
>80.0	*LOS F* occurs when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

Source: Highway Capacity Manual, Transportation Research Board (2016)

All-way Stop-controlled (AWSC) Intersections

The HCM analysis methodology for evaluating all-way Stop-controlled intersections is based on the degree of conflict for each independent approach created by the opposing approach and each conflicting approach. Level of Service for AWSC intersections is also based on the average control delay. However, AWSC intersections have different threshold values than those applied to signalized intersections. This is based on the rationale that drivers expect AWSC intersections to carry lower traffic volumes than at signalized intersections. Therefore, a higher level of delay is acceptable at a signalized intersection for the same LOS.

Two-way Stop-controlled (TWSC) Intersections

The HCM analysis methodology for evaluating two-way Stop-controlled (TWSC) intersections is based on gap acceptance and conflicting traffic for vehicles stopped on the minor-street approaches. The critical gap (minimum gap that would be acceptable) is defined as the minimum time interval in the major-street traffic stream that allows intersection entry for one minor-street vehicle. Average control delay and LOS for the "worst approach" are reported. Level of service is not defined for the intersection as a whole. **Table 2-3** summarizes the level of service criteria for unsignalized intersections.

Table 2-3
Level of Service Criteria for Stop Controlled Unsignalized Intersections

Average Control Delay Per Vehicle (sec)	Level of Service (LOS)
≤10.0	A
10.1 – 15.0	B
15.1 – 25.0	C
25.1 – 35.0	D
35.1 – 50.0	E
>50.0	F

Source: Highway Capacity Manual, Transportation Research Board (2016)

Roadway Segment Capacity Analysis

The City of Escondido Traffic Impact Analysis Guidelines provides roadway segment volume capacities based on street classifications. Table 2-4 shows the average daily vehicle trip (ADT) thresholds for the City of Escondido.

Table 2-4
City of Escondido Proposed Level of Service Standards
Street Segment Average Daily Vehicle Trip Thresholds

Street Classification	Lanes	Level of Service				
		A	B	C	D	E
Prime Arterial	(8 lanes) (6 lanes)	23,800 20,400	37,800 32,400	51,800 44,400	62,300 53,400	70,000 60,000
Major Road	(6 lanes) (4 lanes)	17,000 12,600	27,000 20,000	37,000 27,400	44,500 32,900	50,000 37,000
Collector	(4 lanes) (4 lanes) (3 lanes)	11,600 6,800 8,350	18,500 10,800 13,300	25,300 14,800 18,200	30,400 17,800 21,900	34,200 20,000 24,600
Local Collector	(2 lanes)	5,100 3,400	8,100 5,400	11,100 7,400	13,400 8900	15,000 10,000

Traffic Signal Warrant Analysis

The Federal Highway Administration's (FHWA) Manual on Uniform Traffic Control Devices (MUTCD), amended with California MUTCD 2014 Edition, presents warrant criteria for justifying the installation of a traffic signal at an unsignalized intersection. The criteria include studying traffic conditions, pedestrian characteristics, and physical characteristics of the intersection location. The MUTCD indicates that satisfaction of one or more of the traffic signal warrants does not in itself require the installation of a traffic control signal.

This study uses MUTCD Section 4C.04 Warrant3, Peak Hour to assess the need of a traffic signal at the unsignalized intersection location shown below:

- Rock Springs Road and W. Lincoln Avenue

Signal warrant worksheets are included in **Appendix K**.

Analysis of Significance

Traffic impacts are identified if the proposed Project will result in a significant change in traffic Conditions on a roadway or intersection. A significant impact is normally defined when Project related traffic would cause level of service to deteriorate to below the minimum acceptable level by a measurable amount. Impacts may also be significant if the location is already below the minimum acceptable level and Project related traffic causes a further decline. The City of Escondido has established LOS "C" as the minimum allowable level of service during peak hours at signalized intersections. Therefore, any intersection operating at LOS "D" or worse will be considered deficient for the purposes of this analysis. Mitigation measures shall be considered by development projects within the City of Escondido when traffic Conditions are forecasted to decline from a LOS C to poorer levels of service. In the case of existing deficiency where existing without Project Conditions is already below LOS C (i.e., LOS D, E or F), the Project will be required to mitigate its incremental transportation related impacts to level of service that's equal to or better than the LOS identified under without Project Conditions as summarized in **Table 2-5**.

Table 2-5
City of Escondido Analysis of Significance

Level of Service with Project	Allowable Change due to Project Impact		
	Roadway Segments		Intersections
	v/c[1]	Speed Reduction (mph)	Delay (sec)
D, E or F	0.02	1	2

Notes:
[1]v/c = volume to capacity ration (use LOS "E")
No significant impact occurs at areas in GP Downtown Specific Area that operates on LOS "D" or better
Mitigation measures should also be considered for any segment or intersection operating at LOS "F" subject to less than significant impact

3.0 EXISTING CONDITIONS (2019)

This section documents the existing circulation system conditions within the study area of the Project under the Existing without and with Project scenarios. The Existing Conditions (2019) without Project traffic volumes analysis utilizes existing volume counts to evaluate the existing baseline traffic operation within the study area. Project traffic volumes are then added to the existing traffic volumes to analyze the Existing with Project Conditions (2019). This section also documents potential Project related traffic impacts on the local circulation network. No network improvements are assumed under these scenarios.

ROADWAY NETWORK

Locally significant roadways located within the study area are discussed below.

W. Mission Avenue is classified as a Major Road that extends east to El Norte Parkway from the western boundary of the City of Escondido. Within the study area of the Project, W. Mission Avenue functions as a four-lane Collector between Metcalf Street and N Quince Road with bike lanes on both sides. The posted speed limit on W. Mission Avenue is 40 miles per hour (mph) within the vicinity of the Project.

Rock Springs Road – is classified as a Collector roadway that extends from Washington Avenue to Bennett Avenue within the City of Escondido. Within the study area of this Project, El Prado Road functions as a two-lane Local Collector with parking south of W Mission Avenue and without parking north of W. Mission Avenue. The posted speed limit on Central Avenue is 35 miles per hour (mph) within the vicinity of the Project.

Figure 3-1 shows City of Escondido Circulation Diagram.

TRAFFIC VOLUMES & EXISTING SIGNAL TIMING

The intersection turning movement and roadway segment 24-hour ADT counts were conducted on November 7, 2019. The intersection counts were conducted during the weekday morning peak period from 7:00 AM to 9:00 AM and during the weekday evening peak period from 4:00 PM to 6:00 PM. Existing signal timing sheets were provided by the City Engineer. The turning movement counts and existing signal timing sheets were utilized in Synchro software to determine the LOS at all study intersections. Traffic count data and signal timing sheets are included in **Appendix A**.

TRANSIT NETWORK

North County Transit District (NCTD) is the main transit agency servicing the City of Escondido and other cities in the region. From Escondido's multimodal transit center, NCTD operates the BREEZE bus system and the SPRINTER light rail line. Bus route 356 currently services the Project study area.

Figure 3-2 shows City of Escondido Existing and Planned Transit Routes.

ACTIVE TRANSPORTATION NETWORK

Sidewalks are provided along the property frontage and existing bicycle lanes are provided along the property frontage on W. Mission Avenue. Additionally, there are planned bicycle lanes along the property frontage on Rock Springs Road.

Figure 3-3 shows City of Escondido Existing and Planned Bikeways.

ANALYSIS RESULTS

Tables 3-1 and **3-2** shows Existing Conditions intersection operation and roadway segment capacity analysis results.

Table 3-1
Existing Conditions (2019) Intersection Operation Analysis

Intersection	Control Type	Existing Without Project		Existing with Project		Δ Delay	Impact?
		Delay[a]	LOS[b]	Delay[a]	LOS[b]		
AM/PM Peak Hour							
1. W. Mission Avenue and Rock Springs Road	Signalized	28.2/27.3	C/C	29.2/27.5	C/C	1.0/0.2	N/N
2. Rock Springs Road and W. Lincoln Avenue	SSSC	>180/>180	**F/F**	>180/>180	**F/F**	69.3/33.6	**Y/Y**
3. W. Mission Avenue and N Quince Street	Signalized	26.4/31.4	C/C	26.9/31.5	C/C	0.5/0.1	N/N
4. W. Mission Avenue and Metcalf Street	Signalized	19.6/11.8	B/B	19.7/11.7	B/B	0.1/-0.1	N/N

Notes:
***Bold** values indicate intersections operating at LOS E or F.*
SSSC indicates side street stop-controlled intersection
(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At unsignalized intersections with side street stop control, delay refers to the worst movement.
(b) LOS calculations are based on the methodology outlined in the Highway Capacity Manual 6th Edition and performed using Synchro 10

Per the analysis results shown in **Table 3-1**, all analyzed intersections are operating at an acceptable LOS under Existing Conditions, except for Rock Springs Road and W Lincoln Avenue.

Table 3-2
Existing Conditions (2019) Roadway Segment Capacity Analysis

Roadway Segment	Classification	LOS E Capacity	Existing Without Project			Existing With Project			Δ v/c	Impact?
			ADT	v/c ratio	LOS	ADT	v/c ratio	LOS		
Rock Springs Road										
North of W. Lincoln Avenue	2-lane Local Collector, NP	15,000	13,209	0.881	**D**	13,379	0.892	**D**	0.011	N
W. Lincoln Avenue to Lenser Way	2-lane Local Collector, NP	15,000	14,685	0.979	**E**	14,855	0.990	**E**	0.011	N
Lenser Way to W. Mission Avenue	3-lane Collector, NP	24,600	14,685	0.597	C	15,595	0.634	C	0.037	N
South of W. Mission Avenue	2-lane Local Collector, NP	15,000	10,706	0.714	C	10,956	0.730	C	0.017	N
W Mission Avenue										
West of Metcalf Street	4-lane Collector, NP	34,200	18,582	0.543	C	18,912	0.553	C	0.010	N
Metcalf Street to Rock Springs Road	4-lane Collector, NP	34,200	18,102	0.529	B	18,602	0.544	C	0.015	N
Rock Springs Road to N. Quince Street	4-lane Collector, NP	34,200	19,161	0.560	C	19,661	0.575	C	0.015	N
East of N. Quince Street	4-lane Collector, NP	34,200	24,597	0.719	C	24,927	0.729	C	0.010	N

Notes:
***Bold** values indicate intersections operating at LOS E or F.*

Per the analysis results shown in **Table 3-2**, all analyzed roadway segments are operating at an acceptable LOS under Existing Conditions, except for the following:

- Rock Springs Road, north of W. Lincoln Avenue
- Rock Springs Road, between W. Lincoln Avenue and Lenser Way

Table 3-3
Existing with Project Conditions (2019) Queue Analysis Summary

Intersection	Movement	Stacking Distance (ft)	Queue (ft)		Excess Demand	
			AM	PM	AM	PM
1. W. Mission Avenue and Rock Springs Road	SBL	150	221	169	71	19

Per the analysis results shown in **Table 3-3,** there will be excess queue demand as the anticipated vehicular queues exceed the stacking area available at the analyzed location by 71 feet and 19 feet during the AM and PM peak hours, respectively. Project will be conditioned to construct physical improvement at the proposed driveway on Rock Springs Road to restrict access to right-in/right-out only. The existing configuration of Rock Springs currently provides the opportunity to extend the southbound left turn lane capacity at the intersection of W. Mission Avenue and Rock Springs Road up to 280 feet including the current southbound left turn pocket length and center two-way left turn lane that extends along the entire property frontage.

SIGNIFICANT IMPACTS AND RECOMMENDED IMPROVEMENTS

The proposed Project would have a significant Project related traffic impact under Existing Conditions with Project at the following intersection:

- Rock Springs Road and W. Lincoln Avenue

The proposed Project would not have any significant Project related traffic impact under Existing Conditions with Project at a roadway segment.

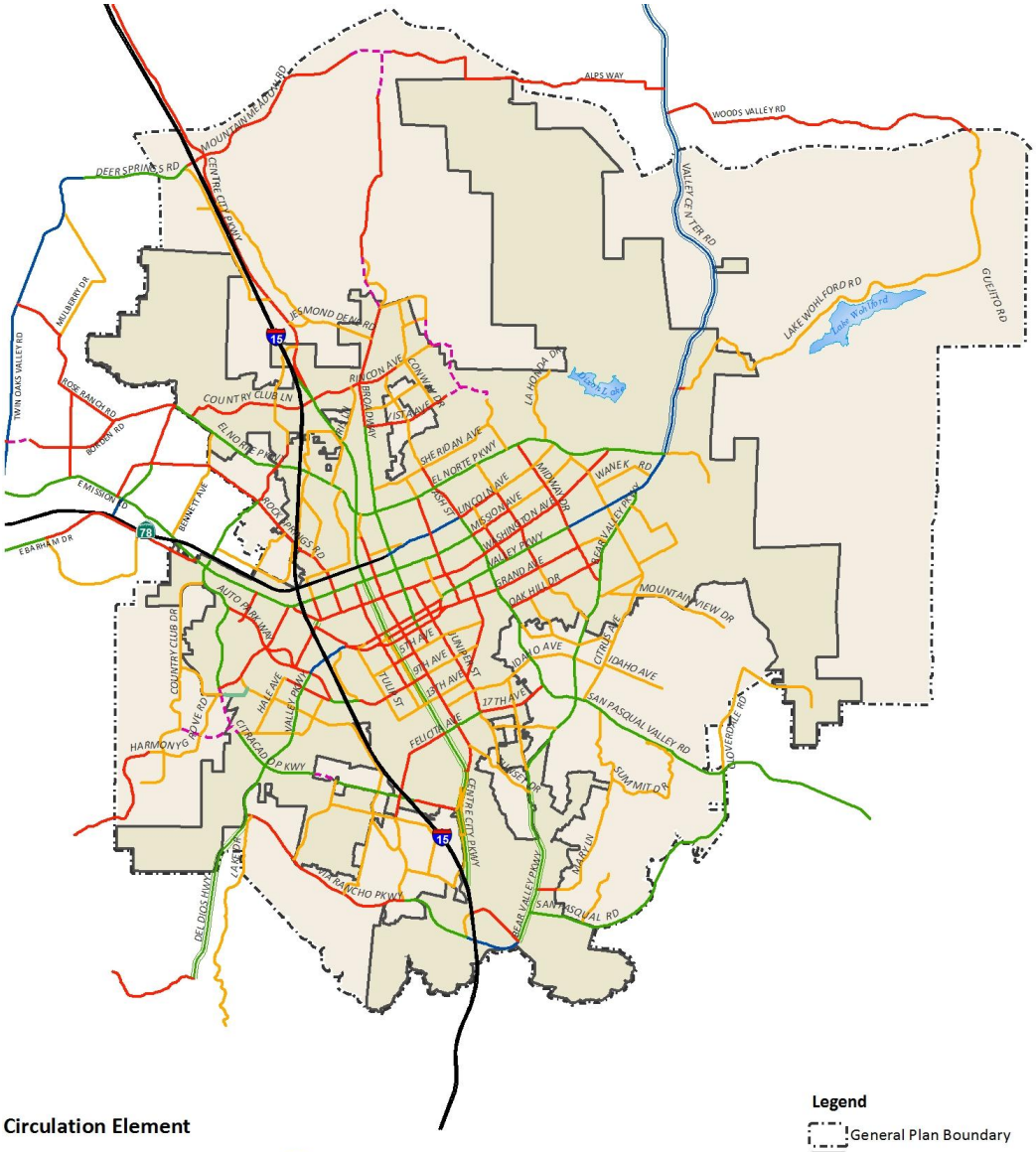
The following transportation improvements will mitigate the identified significant Project related traffic impacts to less than significant:

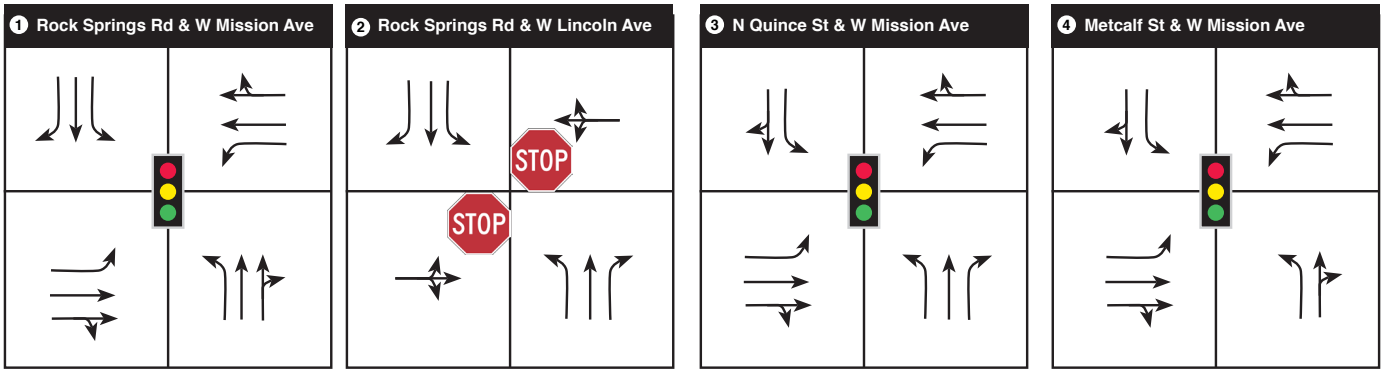
- Rock Springs Road and W. Lincoln Avenue – Signalize the intersection. Signal warrant at this location is satisfied under Existing Conditions and is included in **Appendix K**.

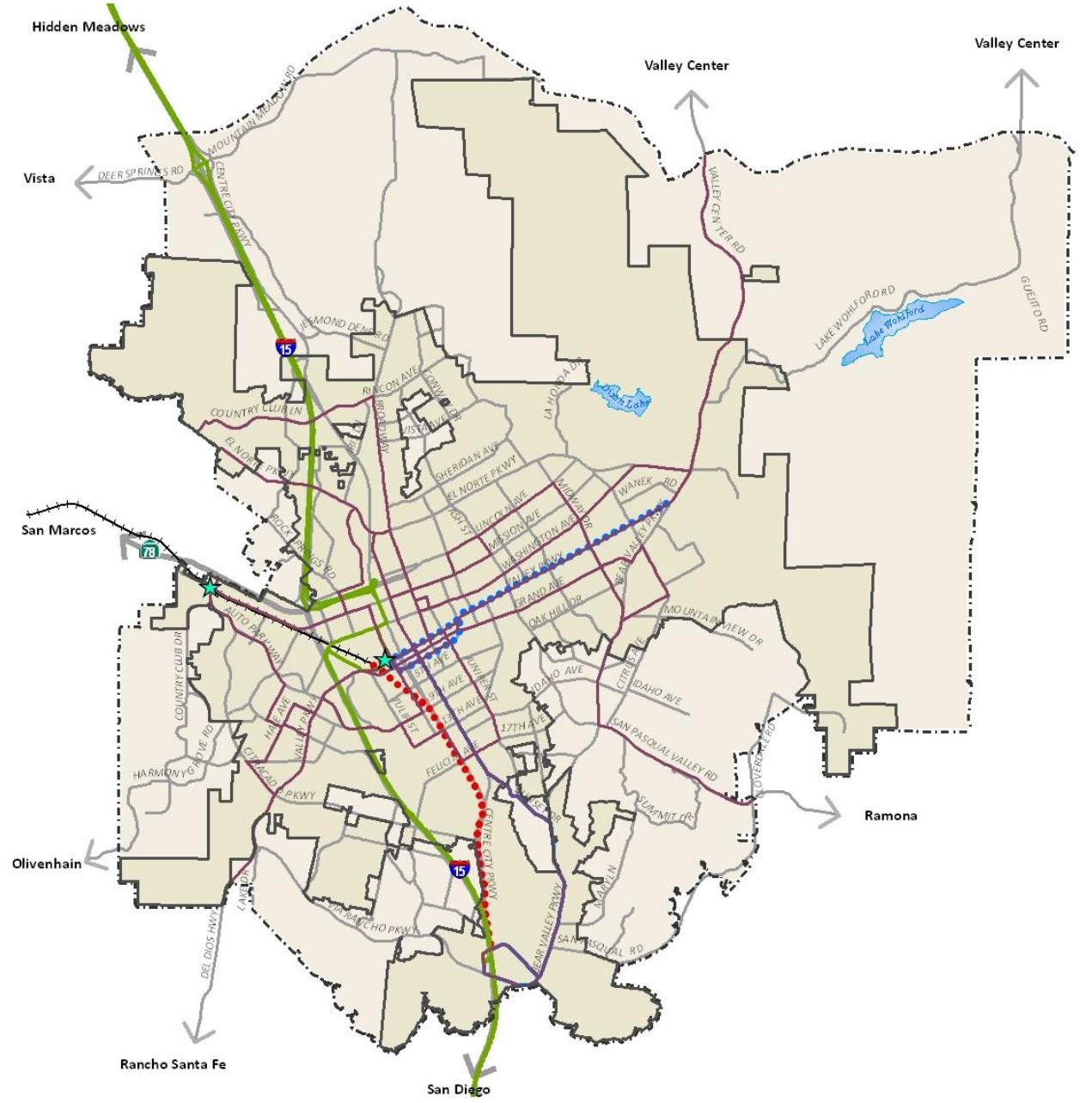
The Project will be conditioned to construct a signal at the intersection of Rock Springs Road and W. Lincoln Avenue. All proposed transportation improvements within the City of Escondido shall be constructed to the satisfaction of the City Engineer.

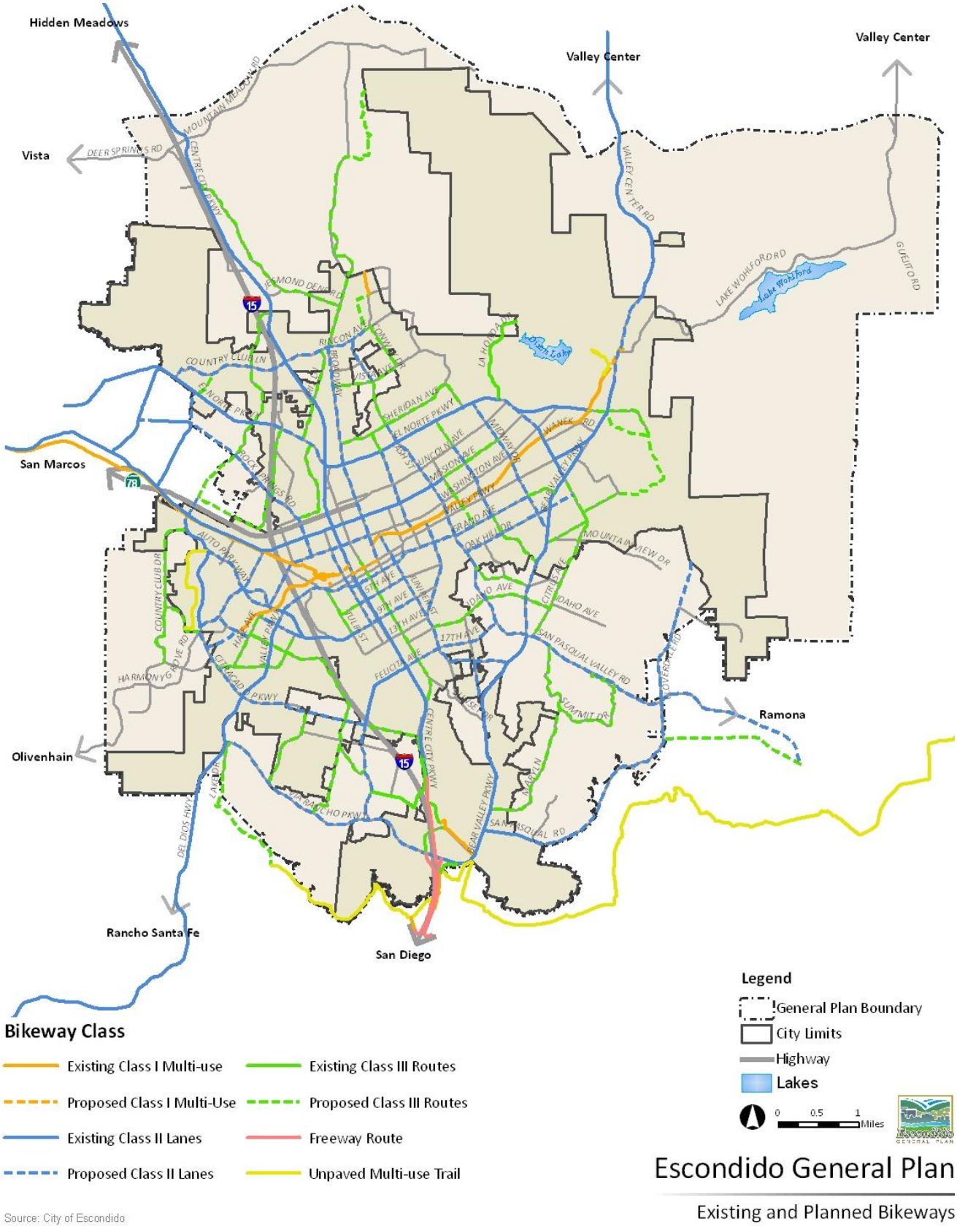
Figures 3-4 through **3-6** show study area intersection configuration and control, Existing Conditions peak hour intersection turning movement volumes and Existing Conditions with Project peak hour intersection turning movement volumes, respectively.

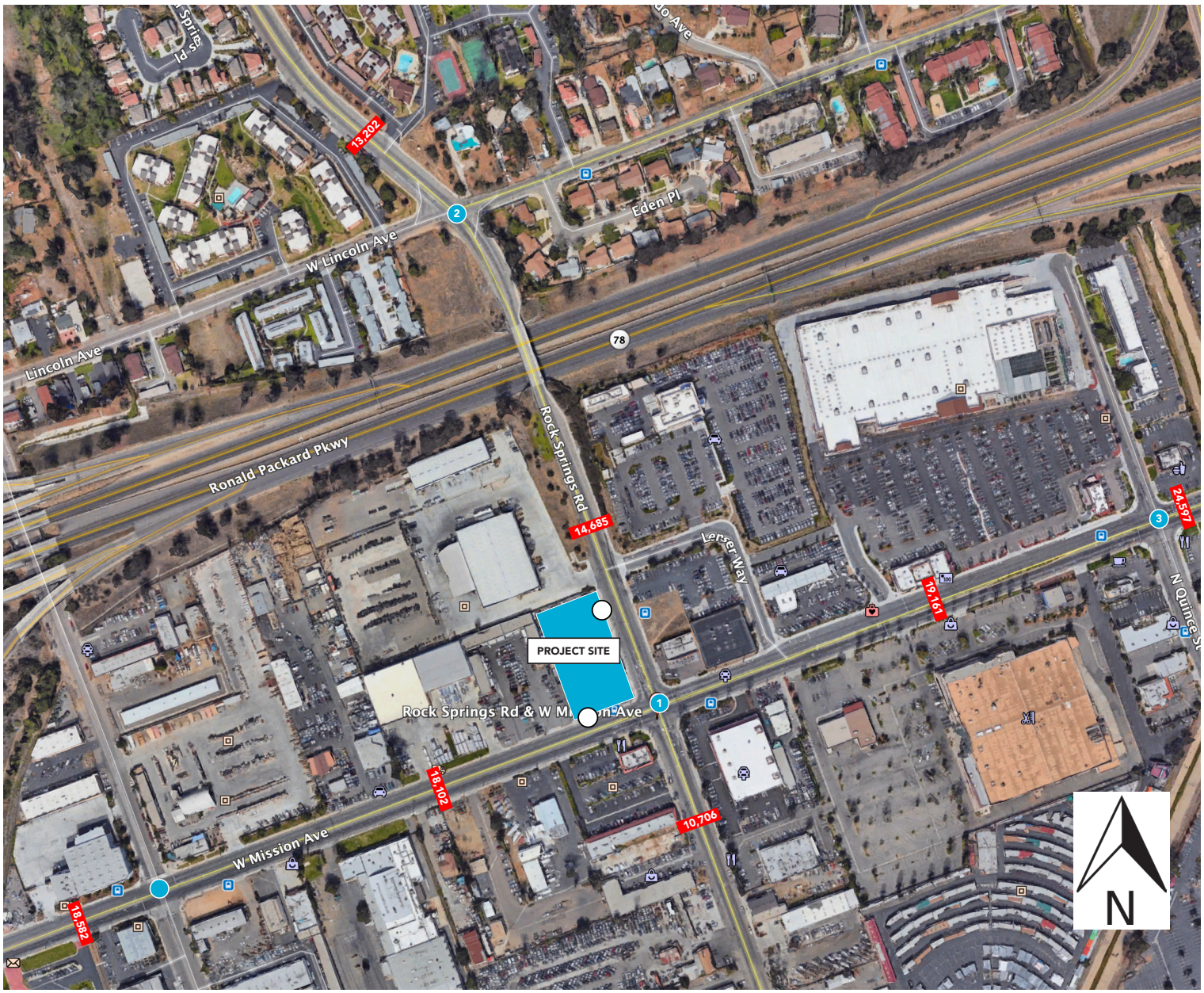
Existing and Existing with Project peak hour analysis worksheets are provided in **Appendices B and C** respectively. Vehicular queue worksheets are provided in **Appendix I**.

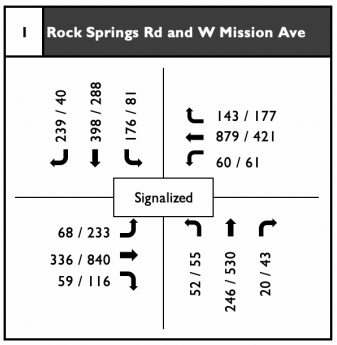

Circulation Element
Freeway
Super Prime Arterial
Prime Arterial
Super Major Road
Major Road
Collector
Local Collector
Future Alignment
Legend
General Plan Boundary
City Limits
Lakes
0 0.5 1 Miles
Escondido General Plan
Circulation Diagram

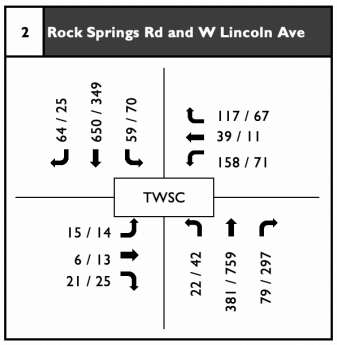

1 Rock Springs Rd & W Mission Ave
2 Rock Springs Rd & W Lincoln Ave
STOP
STOP
3 N Quince St & W Mission Ave
4 Metcalf St & W Mission Ave

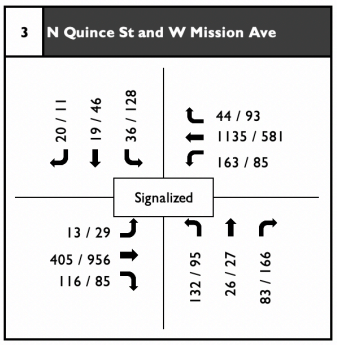

Hidden Meadows
Valley Center
Valley Center
Vista
San Marcos
Olivenhain
Rancho Santa Fe
San Diego
Ramona
Lake Wohlford
Dixon Lake
North County Transit District Bus/Rail Routes*
Existing SPRINTER Rail Line
Existing NCTD Rapid Bus
Transit Station
Projected NCTD Rail Line
Projected Future NCTD Rapid Bus
Local Bus
BRT (Bus Rapid Transit) Routes
*Note: Additional NCTD bus transit servicing the community is not depicted.
Projected NCTD rail service from the existing transit center to Westfield
Shoppingtown requires additional evaluation and approval.
Source: City Of Escondido
Legend
General Plan Boundary
City Limits
Highway
Lakes
0
0.5
1
Miles
Escondido General Plan
Existing & Proposed Transit Routes

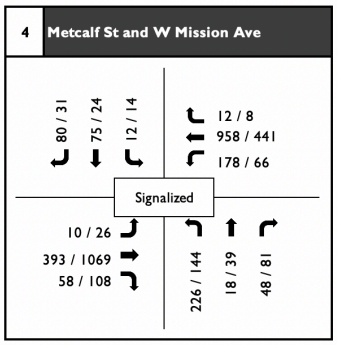

Hidden Meadows
Valley Center
Valley Center
Vista
San Marcos
Ramona
Olivenhain
Rancho Santa Fe
San Diego
Lake Wohlford
Bikeway Class
Existing Class I Multi-use
Proposed Class I Multi-Use
Existing Class II Lanes
Proposed Class II Lanes
Existing Class III Routes
Proposed Class III Routes
Freeway Route
Unpaved Multi-use Trail
Source: City of Escondido
Legend
General Plan Boundary
City Limits
Highway
Lakes
0
0.5
1
Miles
Escondido General Plan
Existing and Planned Bikeways







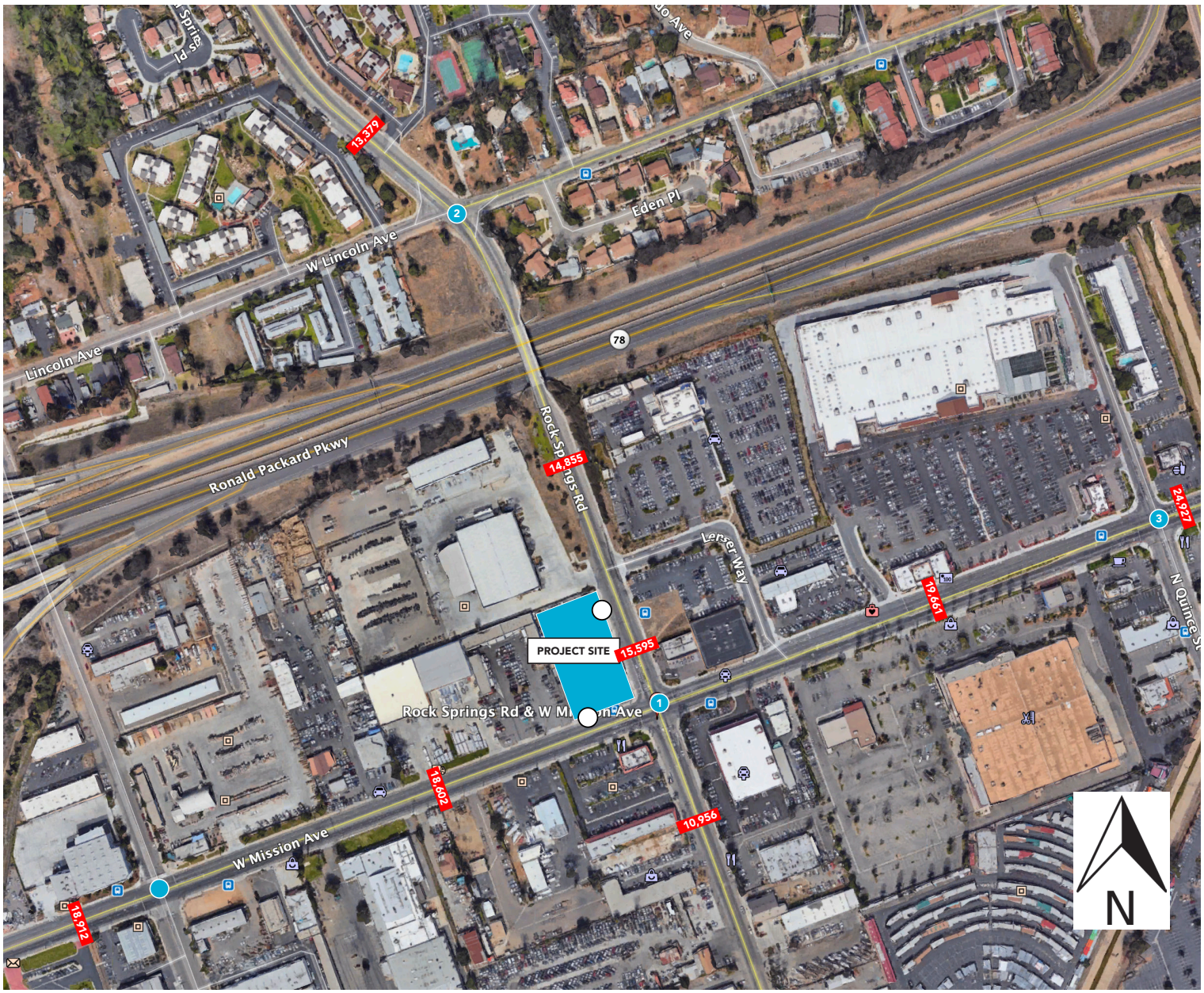




LEGEND (#) Intersection (#) Project Driveway Roadway Segment

INTEGRATED ENGINEERING GROUP
TRANSPORTATION PLANNING AND ENGINEERING

7-11 Mission Ave & Rock Springs Gas Station
Existing ADT & AM/PM Peak Hour Volumes
Figure 3-4



1 Rock Springs Rd and W Mission Ave

239 / 40	407 / 292	201 / 92
143 / 177	897 / 430	60 / 61

Signalized

86 / 242			
336 / 840			
59 / 116	61 / 60	246 / 530	20 / 43

2 Rock Springs Rd and W Lincoln Ave

64 / 25	656 / 352	59 / 70
117 / 67	39 / 11	161 / 73

TWSC

15 / 14			
9 / 14			
27 / 28	22 / 42	387 / 762	79 / 297

3 N Quince St and W Mission Ave

23 / 13	19 / 46	36 / 128
44 / 93	1147 / 587	163 / 85

Signalized

16 / 30			
418 / 962			
119 / 86	135 / 97	26 / 27	83 / 166

4 Metcalf St and W Mission Ave

80 / 31	75 / 24	12 / 14
21 / 12	974 / 448	181 / 67

Signalized

10 / 26			
408 / 1077			
58 / 108	226 / 144	18 / 39	51 / 83

LEGEND (#) Intersection (#) Project Driveway Roadway Segment

INTEGRATED ENGINEERING GROUP
TRANSPORTATION PLANNING AND ENGINEERING

21

7-11 Mission Ave & Rock Springs Gas Station
Existing With Project
ADT & AM/PM Peak Hour Volumes
Figure 3-5

4.0 OPENING YEAR CONDITIONS (2021)

This section documents the circulation system Conditions within the study area of the Project under Opening Year without and with Project scenarios. The Opening Year without Project Conditions traffic volumes were developed by adding a compounded 2% per year growth factor over a two-year period to the existing counts. Project traffic volumes are then added to the Opening Year without Project Conditions traffic volumes to develop the Opening Year with Project Conditions traffic volumes. This section also documents potential cumulative Project impacts to the existing circulation networks. No network improvements are assumed under Opening Year Condition scenarios.

ANALYSIS RESULTS

Tables 4-1 and **4-2** show Opening Year Conditions (2021) intersection operation and roadway segment capacity analysis results.

Table 4-1
Opening Year Conditions (2021) Intersection Operation Analysis

Intersection	Control Type	Opening Year without Project		Opening Year with Project		Δ Delay	Impact?
		Delay[(a)]	LOS[(b)]	Delay[(a)]	LOS[(b)]		
AM/PM Peak Hour							
1. W. Mission Avenue and Rock Springs Road	Signalized	28.7/27.5	C/C	29.9/27.7	C/C	1.2/0.2	N/N
2. Rock Springs Road and W. Lincoln Avenue	SSSC	>180/>180	**F/F**	>180/>180	**F/F**	56.9/20.8	**Y/Y**
3. W. Mission Avenue and N. Quince Street	Signalized	27.0/32.8	C/C	27.4/32.9	C/C	0.4/0.1	N/N
4. W. Mission Avenue and Metcalf Street	Signalized	16.4/12.0	B/B	16.4/12.0	B/B	0.0/0.0	N/N

Notes:
***Bold** values indicate intersections operating at LOS E or F.*
SSSC indicates side street stop-controlled intersection
(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At unsignalized intersections with side street stop control, delay refers to the worst movement.
(b) LOS calculations are based on the methodology outlined in the Highway Capacity Manual 6th Edition and performed using Synchro 10

Per the analysis results shown in **Table 4-1**, all analyzed intersections are operating at an acceptable LOS under Opening Year Conditions, except for Rock Springs Road and W Lincoln Avenue.

Table 4-2
Opening Year Roadway Segment Capacity Analysis

Roadway Segment	Classification	LOS E Capacity	Opening Year without Project			Opening Year with Project			Δ v/c	Impact?
			ADT	v/c ratio	LOS	ADT	v/c ratio	LOS		
Rock Springs Road										
North of W. Lincoln Avenue	2-lane Local Collector, NP	15,000	13,743	0.916	**E**	13,913	0.928	**E**	0.012	N
W. Lincoln Avenue to Lenser Way	2-lane Local Collector, NP	15,000	15,278	1.019	**F**	15,448	1.030	**F**	0.011	N
Lenser Way to W. Mission Avenue	3-lane Local Collector, NP	24,600	15,278	0.621	C	16,188	0.658	C	0.037	N
South of W. Mission Avenue	2-lane Local Collector, NP	15,000	11,139	0.743	**D**	11,389	0.759	**D**	0.016	N
W Mission Avenue										
West of Metcalf Street	4-lane Collector, NP	34,200	19,333	0.565	C	19,663	0.575	C	0.010	N
Metcalf Street to Rock Springs Road	4-lane Collector, NP	34,200	18,833	0.551	C	19,333	0.565	C	0.014	N
Rock Springs Road to N. Quince Street	4-lane Collector, NP	34,200	19,935	0.583	C	20,435	0.598	C	0.015	N
East of N. Quince Street	4-lane Collector, NP	34,200	25,591	0.748	**D**	25,921	0.758	**D**	0.010	N

Notes:
***Bold** values indicate intersections operating at LOS E or F.*

Per the analysis results shown in **Table 4-2**, all analyzed roadway segments are operating at an acceptable LOS under Opening Year Conditions, except for the following:

- Rock Springs Road, north of W. Lincoln Avenue
- Rock Springs Road, W. Lincoln Avenue to Lenser Way

Rock Springs Road, south of W. Mission Avenue

Table 4-3
Opening Year with Project Conditions (2021) Queue Analysis Summary

Intersection	Movement	Stacking Distance (ft)	Queue (ft)		Excess Demand (ft)	
			AM	PM	AM	PM
1. W. Mission Avenue and Rock Springs Road	SBL	150	212	189	62	39

Per the analysis results shown in **Table 4-3**, there will be excess queue demand as the anticipated vehicular queues exceed the stacking area available at the analyzed location by 62 feet and 39 feet during the AM and PM peak hours, respectively. Project will be conditioned to construct physical improvement at the proposed driveway on Rock Springs Road to restrict access to right-in/right-out only. The existing configuration of Rock Springs currently provides the opportunity to extend the southbound left turn lane capacity at the intersection of W. Mission Avenue and Rock Springs Road up to 280 feet including the current southbound left turn pocket length and center two-way left turn lane that extends along the entire property frontage.

SIGNIFICANT IMPACTS AND RECOMMENDED IMPROVEMENTS

The proposed Project would have a significant Project related traffic impact under Opening Year Conditions with Project at the following intersection:

- Rock Springs Road and W. Lincoln Avenue

The proposed Project would not have a significant Project-related traffic impact under Opening Year Conditions with Project at a roadway segment.

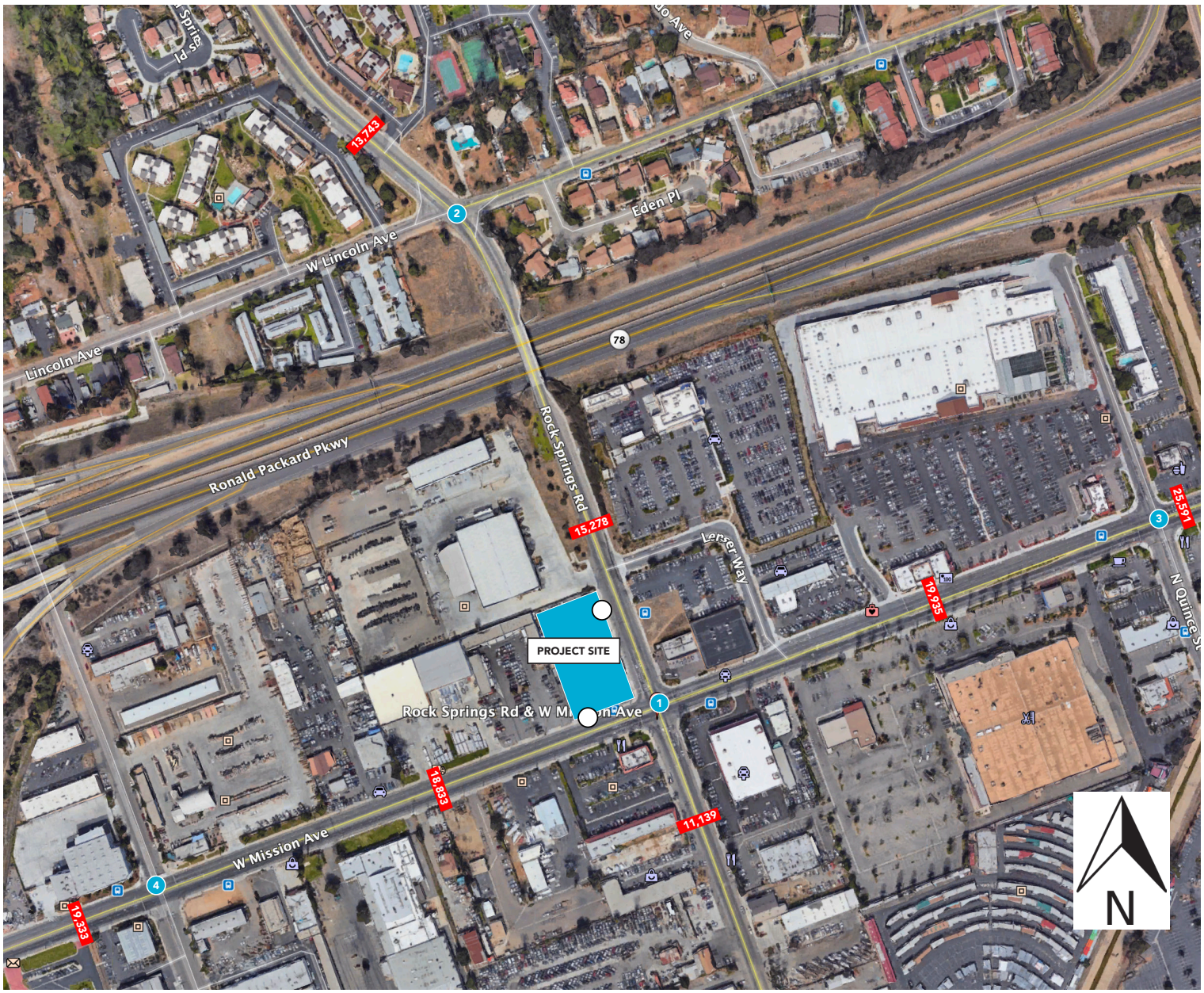
The following transportation improvements will mitigate the identified significant Project related traffic impacts to less than significant:

- Rock Springs Road and W. Lincoln Avenue – Signalize the intersection. Signal warrant at this location is satisfied under Existing Conditions and is included in **Appendix K**.

The Project will be conditioned to construct a signal at the intersection of Rock Springs Road and W. Lincoln Avenue. All proposed transportation improvements within the City of Escondido shall be constructed to the satisfaction of the City Engineer.

Figures 4-1 and **4-2** show Opening Year Conditions (2021) without Project and with Project intersection turning movement volumes.

Opening Year and Opening Year with Project peak hour analysis worksheets are provided in **Appendices D and E** respectively. Vehicular queue worksheets are provided in **Appendix I**.



1 Rock Springs Rd and W Mission Ave

249 / 42	414 / 300	183 / 84
	Signalized	
71 / 242	54 / 57	256 / 551
350 / 874		
61 / 121		21 / 45

149 / 184
915 / 438
62 / 63

2 Rock Springs Rd and W Lincoln Ave

67 / 26	676 / 363	61 / 73
	TWSC	
16 / 15	23 / 44	396 / 790
6 / 14		
22 / 26		82 / 309

122 / 70
41 / 11
164 / 74

3 N Quince St and W Mission Ave

21 / 11	20 / 48	37 / 133
	Signalized	
14 / 30	137 / 99	27 / 28
421 / 995		
121 / 88		86 / 173

46 / 97
1181 / 604
170 / 88

4 Metcalf St and W Mission Ave

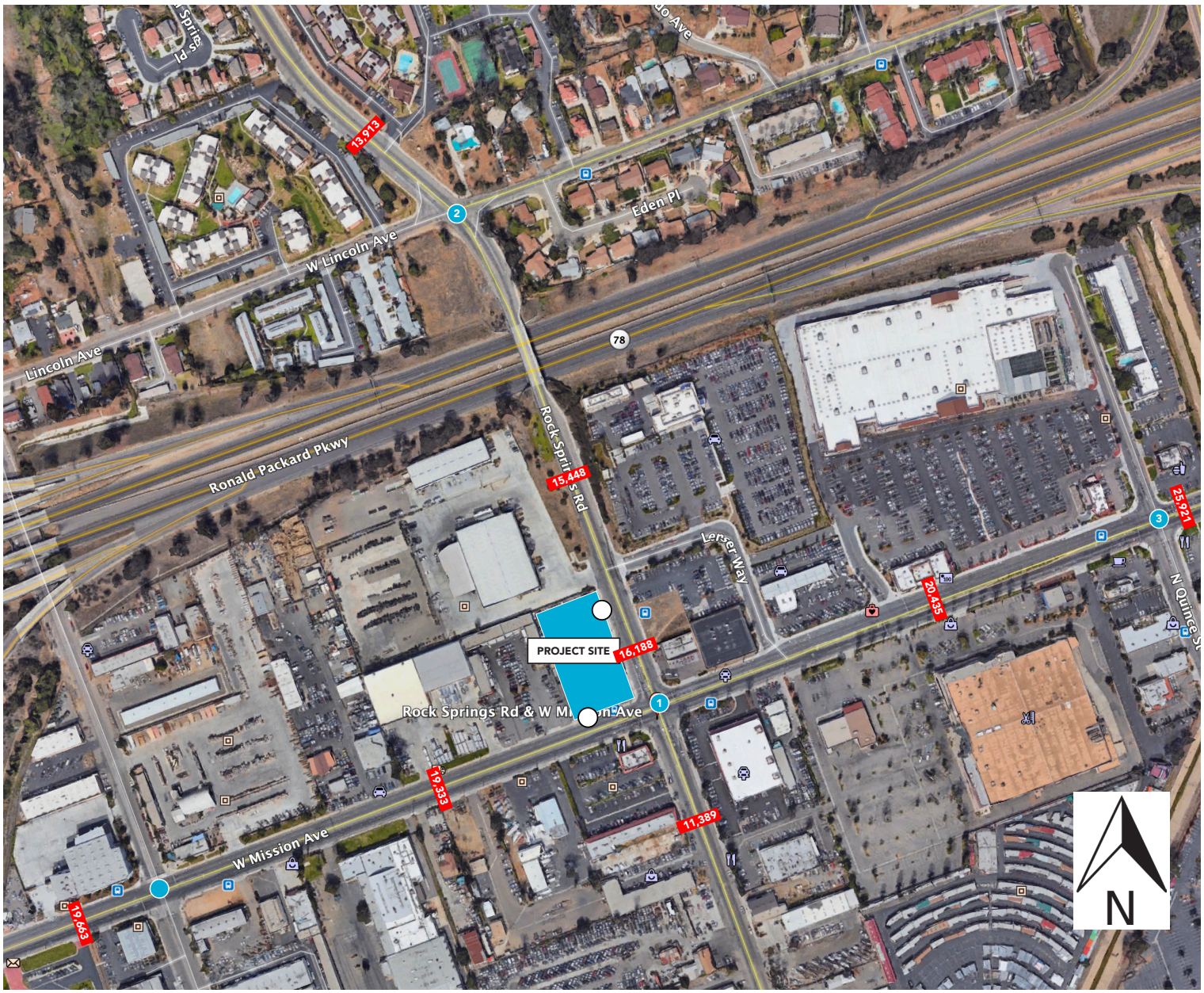
83 / 32	78 / 25	12 / 15
	Signalized	
10 / 27	235 / 150	19 / 41
409 / 1112		
60 / 112		50 / 84

12 / 8
997 / 459
185 / 69

LEGEND (#) Intersection (#) Project Driveway Roadway Segment

INTEGRATED ENGINEERING GROUP
TRANSPORTATION PLANNING AND ENGINEERING

7-11 Mission Ave & Rock Springs Gas Station
Opening Year
ADT & AM/PM Peak Hour Volumes
Figure 4-1



1 Rock Springs Rd and W Mission Ave

249 / 42	423 / 304	208 / 95
149 / 184	933 / 447	62 / 63
Signalized		
89 / 251	63 / 62	256 / 551	21 / 45
350 / 874		
61 / 121		

2 Rock Springs Rd and W Lincoln Ave

67 / 26	682 / 366	61 / 73
122 / 70	41 / 11	167 / 76
TWSC		
16 / 15	23 / 44	402 / 793	82 / 309
9 / 15		
28 / 29		

3 N Quince St and W Mission Ave

24 / 13	20 / 48	37 / 133
46 / 97	1193 / 610	170 / 88
Signalized		
17 / 31	140 / 101	27 / 28	86 / 173
434 / 1001		
124 / 89		

4 Metcalf St and W Mission Ave

83 / 32	78 / 25	12 / 15
21 / 12	1013 / 466	188 / 70
Signalized		
10 / 27	235 / 150	19 / 41	53 / 86
424 / 1120		
60 / 112		

LEGEND (#) Intersection (#) Project Driveway Roadway Segment

INTEGRATED ENGINEERING GROUP
TRANSPORTATION PLANNING AND ENGINEERING

7-11 Mission Ave & Rock Springs Gas Station
Opening Year with Project
ADT & AM/PM Peak Hour Volumes
Figure 4-2

5.0 Future Conditions (2035)

This section documents the circulation network conditions within the project study area under Future Conditions without and with Project scenarios. The Future Conditions (2035) without Project traffic volumes were developed utilizing the SANDAG Series 12 Transportation Model. The SANDAG Series 12 model provides base year 2008 and forecast year 2035 average daily flow volumes. For the purpose of this analysis, the Future Conditions peak hour intersection turning movement volumes were developed using NCHRP's "Directional Volume Forecast" methodology from the National Cooperative Highway Research Program (NCHRP) 255 – Highway Traffic Data for Urbanized Area Project Planning and Design, Chapter 8. This method utilizes existing intersection peak hour turning movements along with existing and forecasted average daily flow volumes to calculate the Future Conditions intersection turning movements. Existing peak hour intersection turning movements and existing average daily flow volumes are obtained from the existing counts. Future Conditions average daily flow volumes were developed by calculating the annual growth between SANDAG Series 12 base year 2008 and year 2035 forecasted volumes. This annual growth was then applied to the existing counts to develop the adjusted 2035 average daily flow volumes. Future intersection turning volumes were then developed using the NCHRP iterative process that balances the inflows and outflows for each approach. The SANDAG Series 12 forecasts and supporting worksheets are included in **Appendix F.**

Project traffic volumes are then added to the Future Conditions without Project traffic volumes to develop Future Conditions with Project traffic volumes. This section also documents potential Project related traffic impacts on the City of Escondido General Plan circulation network.

ANALYSIS RESULTS

Tables 5-1 and **5-2** show Future Conditions intersection operation and roadway segment capacity analysis results.

Table 5-1
Future Conditions (2035) Intersection Operation Analysis

Intersection	Control Type	Future 2035 without Project		Future 2035 with Project		Δ Delay	Impact?
		Delay[(a)]	LOS[(b)]	Delay[(a)]	LOS[(b)]		
AM/PM Peak Hour							
1. W. Mission Avenue and Rock Springs Road	Signalized	29.9/27.9	C/C	31.5/28.1	C/C	1.6/0.2	N/N
2. Rock Springs Road and W. Lincoln Avenue	SSSC	>180/>180	**F/F**	>180/>180	**F/F**	95.2/39.2	**Y/Y**
3. W. Mission Avenue and N. Quince Street	Signalized	29.4/37.4	C/**D**	29.9/37.5	C/**D**	0.5/0.1	N/N
4. W. Mission Avenue and Metcalf Street	Signalized	21.1/14.0	C/B	21.2/14.0	B/B	0.1/0.0	N/N

Notes:
***Bold** values indicate intersections operating at LOS D, E or F.*
SSSC indicates side street stop-controlled intersection
(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At unsignalized intersections with side street stop control, delay refers to the worst movement.
(b) LOS calculations are based on the methodology outlined in the Highway Capacity Manual 6th Edition and performed using Synchro 10

Per the analysis results shown in **Table 5-1**, all analyzed intersections are operating at an acceptable LOS under Future Conditions, except for the following:

- Rock Springs Road and W Lincoln Avenue
- W Mission Avenue and N Quince Street

Table 5-2
Future Conditions (2035) Roadway Segment Capacity Analysis

Roadway Segment	Classification	LOS E Capacity	Future 2035 without Project			Future 2035 with Project			Δ v/c	Impact?
			ADT	v/c ratio	LOS	ADT	v/c ratio	LOS		
Rock Springs Road										
North of W. Lincoln Avenue	4-lane Collector, NP	34,200	13,900	0.406	B	14,070	0.411	B	0.005	N
W. Lincoln Avenue to Lesner Way	4-lane Collector, NP	34,200	15,500	0.453	B	15,670	0.458	B	0.005	N
Lesner Way to W. Mission Avenue	4-lane Collector, NP	34,200	15,500	0.453	B	16,410	0.480	B	0.027	N
South of W. Mission Avenue	4-lane Collector, NP	34,200	11,800	0.345	B	12,050	0.352	B	0.007	N
W Mission Avenue										
West of Metcalf Street	4-lane Major Road	37,000	22,200	0.600	C	22,530	0.609	C	0.009	N
Metcalf Street to Rock Springs Road	4-lane Major Road	37,000	19,600	0.530	B	20,1020	0.543	C	0.014	N
Rock Springs Road to N. Quince Street	4-lane Major Road	37,000	20,100	0.543	C	20,600	0.557	C	0.014	N
East of N. Quince Street	4-lane Major Road	37,000	26,700	0.722	C	27,030	0.731	C	0.009	N

Notes:
***Bold** values indicate intersections operating at LOS E or F.*

Per the analysis results shown in **Table 5-2**, all analyzed roadway segments are operating at an acceptable LOS under Future Conditions.

Table 5-3
Future with Project Conditions (2035) Queue Analysis Summary

Intersection	Movement	Stacking Distance (ft)	Queue (ft)		Excess Demand(ft)	
			AM	PM	AM	PM
1. W. Mission Avenue and Rock Springs Road	SBL	150	193	184	43	34

Per the analysis results shown in **Table 5-3**, there will be excess queue demand as the anticipated vehicular queues exceed the stacking area available at the analyzed location by 43 feet and 34 feet during the AM and PM peak hours, respectively. Project will be conditioned to construct physical improvement at the proposed driveway on Rock Springs Road to restrict access to right-in/right-out only. The existing configuration of Rock Springs currently provides the opportunity to extend the southbound left turn lane capacity at the intersection of W. Mission Avenue and Rock Springs Road up to 280 feet including the current southbound left turn pocket length and center two-way left turn lane that extends along the entire property frontage.

SIGNIFICANT IMPACTS AND RECOMMENDED IMPROVEMENTS

The proposed Project would have a significant Project related traffic impact under Future Conditions with Project at the following intersection:

- Rock Springs Road and W. Lincoln Avenue

The proposed Project would not have a significant Project related traffic impact under Future Conditions with Project at the analyzed roadway segments.

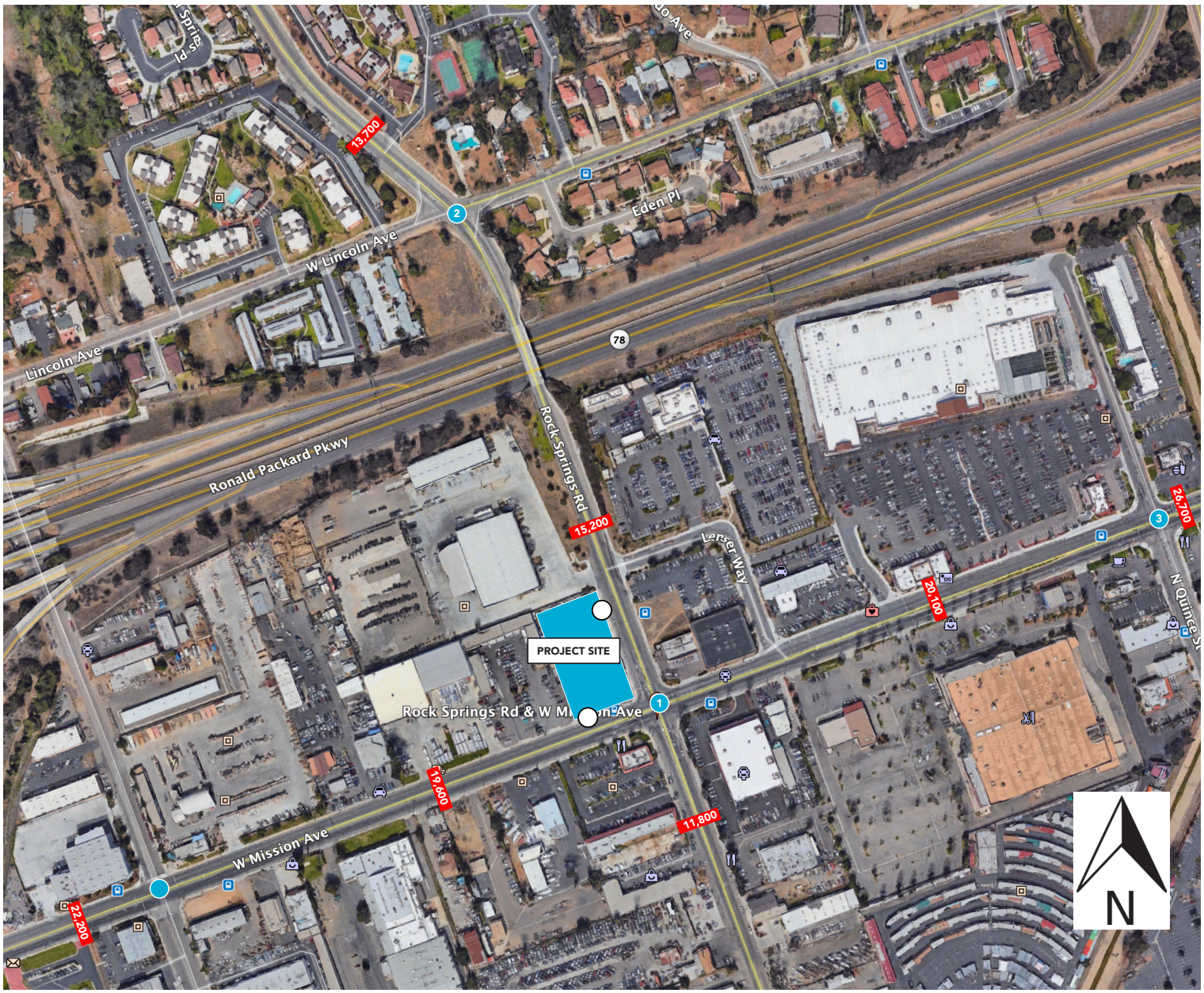
The following transportation improvements will mitigate the identified significant Project related traffic impacts to less than significant:

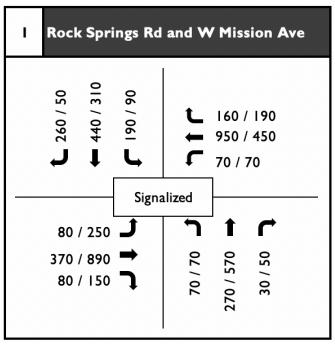
- Rock Springs Road and W. Lincoln Avenue – Signalize the intersection. Signal warrant at this location is satisfied under Existing Conditions and is included in **Appendix K**.

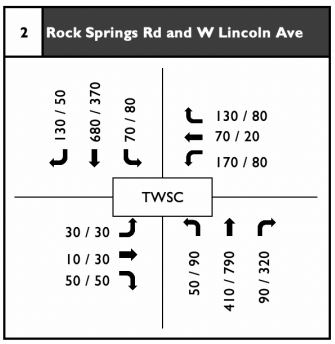
The Project will be conditioned to construct a signal at the intersection of Rock Springs Road and W. Lincoln Avenue. All proposed transportation improvements within the City of Escondido shall be constructed to the satisfaction of the City Engineer.

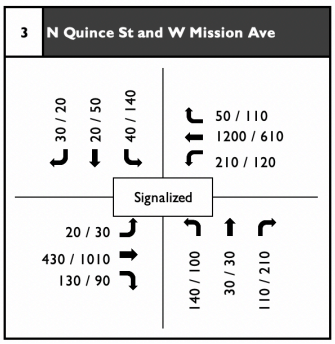
Figures 5-1 and 5-2 show Future Conditions without and with Project intersection turning movement volumes.

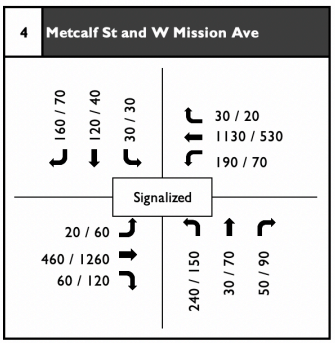
Future Conditions without and with Project peak hour analysis worksheets are provided in **Appendices G and H** respectively. Vehicular queue worksheets are provided in **Appendix I**.







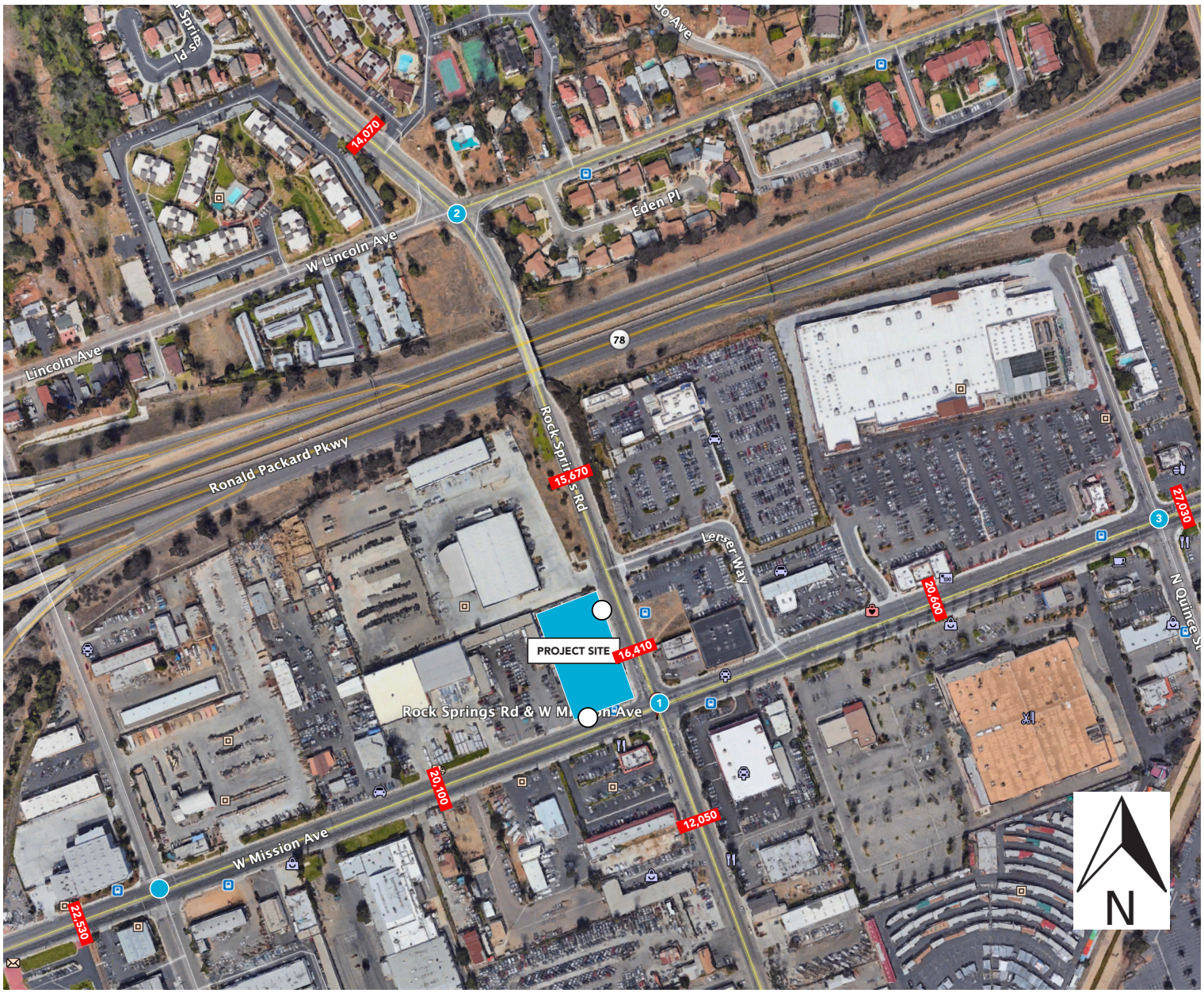


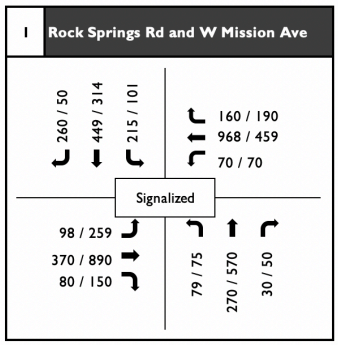


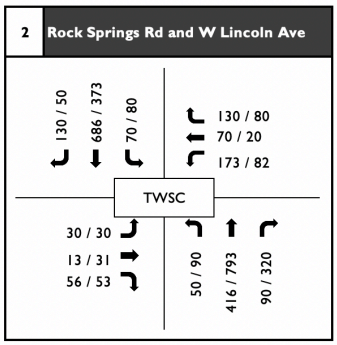
LEGEND # Intersection (#) Project Driveway Roadway Segment

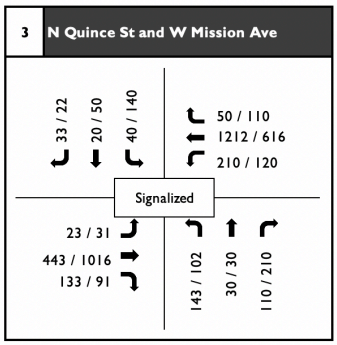
INTEGRATED ENGINEERING GROUP
TRANSPORTATION PLANNING AND ENGINEERING

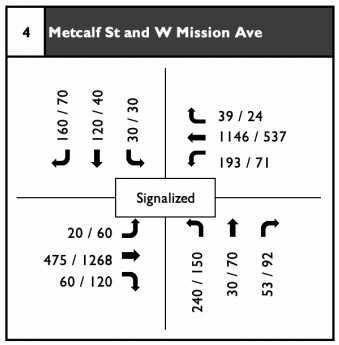
7-11 Mission Ave & Rock Springs Gas Station
Future Year (2035) ADT & AM/PM Peak Hour Volumes
Figure 5-1











LEGEND (#) Intersection (#) Project Driveway Roadway Segment

INTEGRATED ENGINEERING GROUP
TRANSPORTATION PLANNING AND ENGINEERING

7-11 Mission Ave & Rock Springs Gas Station
Future Year (2035) Plus Project ADT & AM/PM Peak Hour Volumes
Figure 5-2

6.0 POST-MITIGATION ANALYSIS

This section provides post mitigation analysis results after the implementation of the recommended mitigation measure at the impacted location under all analyzed scenarios discussed in this report. Post mitigation peak hour analysis worksheets are provided in **Appendix J**. Post mitigation peak hour vehicular queue worksheets are provided in **Appendix I**.

EXISTING CONDITIONS (2019)

Table 6-1 displays the analysis of significance under Existing Conditions and **Table 6-2** displays the intersection operation analysis results after the implementation of the following recommended mitigation measures or improvements:

- Rock Springs Road and W. Mission Avenue – Signal modification to provide protected phasing for northbound and southbound left turn movements. The City of Escondido performed a protected left turn phasing warrant analysis using HCM 6 Exhibit 31-40. As shown in Table 6-1, this intersection does not result in a significant impact under Existing Conditions with project scenario. Analysis worksheets are included in **Appendix L**
- Rock Springs Road and W. Lincoln Avenue – Signalize the intersection. The intersection satisfies a traffic signal warrant under Existing Conditions and is included in **Appendix K**.

Table 6-1
Existing Conditions (2019) Intersection Operation Analysis of Significance

Intersection	Existing Conditions without Project LOS[(a)]	Existing Conditions with Project LOS[(a)]	Impact?
1. W. Mission Avenue and Rock Springs Road	C/C	C/C	N – Includes signal mod with protected phasing for NB and SB left turn movements
2. Rock Springs Road and W. Lincoln Avenue	**F/F**	**F/F**	**Y – Improve to LOS equal to or better than without Project LOS**
3. W. Mission Avenue and N. Quince Street	C/C	C/C	N
4. W. Mission Avenue and Metcalf Street	B/B	B/B	N

Notes:
(a) ***Bold*** *values indicate intersections operating at LOS D, E or F.LOS calculations are based on the methodology outlined in the Highway Capacity Manual 6th Edition and performed using Synchro 10*

Table 6-2
Existing Conditions (2019) Intersection Operation Post-Mitigation Analysis

Intersection	Existing Without Project		Existing With Project		Existing Post Mitigation	
	Delay[(a)]	LOS[(b)]	Delay[(a)]	LOS[(b)]	Delay[(a)]	LOS[(b)]
AM/PM Peak Hour						
1. W. Mission Avenue and Rock Springs Road	28.2/27.3	C/C	29.2/27.5	C/C	29.8/27.9	C/C
2. Rock Springs Road and W. Lincoln Avenue	>180/>180	**F/F**	>180/>180	**F/F**	22.3/17.5	C/B

Notes:
Bold *values indicate intersections operating at LOS D, E or F.*
(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At unsignalized intersections with side street stop control, delay refers to the worst movement.
(b) LOS calculations are based on the methodology outlined in the Highway Capacity Manual 6th Edition and performed using Synchro 10

As shown in **Table 6-2**, the impacted location will be fully mitigated with the implementation of the proposed transportation improvements.

Table 6-3
Existing with Project Conditions (2019) Queue Analysis Summary

Intersection	Movement	Stacking Distance (ft)	Queue (ft)		Excess Demand (ft)	
			AM	PM	AM	PM
2. Rock Springs Road and W. Lincoln Avenue	NBL	120	65	106	--	--
	SBL	175	162	83	--	--

Per the queue analysis results shown in **Table 6-3**, there will be no excess queue demand as the anticipated vehicular queues do not exceed the stacking area available at the analyzed location during the AM and PM peak hours.

OPENING YEAR CONDITIONS (2021)

Table 6-4 displays the analysis of significance under Opening Year Conditions and **Table 6-5** displays the intersection operation analysis results after the implementation of the following recommended mitigation measure or improvements:

- Rock Springs Road and W. Mission Avenue – Signal modification to provide protected phasing for northbound and southbound left turn movements. The City of Escondido performed a protected left turn phasing warrant analysis using HCM 6 Exhibit 31-40. As shown in Table 6-4, this intersection does not result in a significant impact under Opening Year Conditions with project scenario. Analysis worksheets are included in **Appendix L**
- Rock Springs Road and W. Lincoln Avenue – Signalize the intersection. The intersection satisfies a traffic signal warrant under Existing Conditions and is included in **Appendix K**.

Table 6-4
Opening Year Conditions (2021) Intersection Operation Analysis of Significance

Intersection	Opening Year without Project LOS[(a)]	Opening Year with Project LOS[(a)]	Impact?
1. W. Mission Avenue and Rock Springs Road	C/C	C/C	N – Includes signal mod with protected phasing for NB and SB left turn movements
2. Rock Springs Road and W. Lincoln Avenue	**F/F**	**F/F**	**Y – Improve to LOS equal to or better than without Project LOS**
3. W. Mission Avenue and N. Quince Street	C/C	C/C	N
4. W. Mission Avenue and Metcalf Street	B/B	B/B	N

Notes:
***Bold** values indicate intersections operating at LOS D, E or F.*
(a) LOS calculations are based on the methodology outlined in the Highway Capacity Manual 6th Edition and performed using Synchro 10

Table 6-5
Opening Year Conditions (2021) Intersection Operation Post-Mitigation Analysis

Intersection	Opening Year Without Project		Opening Year With Project		Opening Year Post Mitigation	
	Delay[(a)]	LOS[(b)]	Delay[(a)]	LOS[(b)]	Delay[(a)]	LOS[(b)]
AM/PM Peak Hour						
1. W. Mission Avenue and Rock Springs Road	28.7/27.5	C/C	29.9/27.7	C/C	30.6/26.9	C/C
2. Rock Springs Road and W. Lincoln Avenue	>180/>180	**F/F**	>180/>180	**F/F**	25.8/19.9	C/B

Notes:
***Bold** values indicate intersections operating at LOS D, E or F.*
(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At unsignalized intersections with side street stop control, delay refers to the worst movement.
(b) LOS calculations are based on the methodology outlined in the Highway Capacity Manual 6th Edition and performed using Synchro 10

As shown in the above **Table 6-5**, the impacted location will be fully mitigated with the implementation of the proposed transportation improvement.

Table 6-6
Opening Year with Project Conditions (2021) Queue Analysis Summary

Intersection	Movement	Stacking Distance (ft)	Queue (ft)		Excess Demand (ft)	
			AM	PM	AM	PM
2. Rock Springs Road and W. Lincoln Avenue	NBL	120	79	125	--	5
	SBL	175	118	81	--	--

Per the queue analysis results shown in **Table 6-3**, there will be nominal excess queue demand as the anticipated vehicular queues exceed the stacking area available at the southbound left turn bay at the analyzed location by 5 ft during PM peak hours.

FUTURE CONDITIONS (2035)

Table 6-7 displays the analysis of significance under Future Conditions and **Table 6-8** displays the intersection operation analysis results after the implementation of the recommended mitigation measure discussed in the Future Conditions section:

- Rock Springs Road and W. Mission Avenue – Signal modification to provide protected phasing for northbound and southbound left turn movements. The City of Escondido performed a protected left turn phasing warrant analysis using HCM 6 Exhibit 31-40. As shown in Table 6-7, this intersection does not result in a significant impact under Future Conditions with project scenario. Analysis worksheets are included in **Appendix L**
- Rock Springs Road and W. Lincoln Avenue – Signalize the intersection. The intersection satisfies a traffic signal warrant under Existing Conditions and is included in **Appendix K**.

Table 6-7
Future Conditions (2035) Intersection Operation Analysis of Significance

Intersection	Future 2035 without Project LOS[(a)]	Future 2035 with Project LOS[(a)]	Impact?
1. W. Mission Avenue and Rock Springs Road	C/C	C/C	N – Includes signal mod with protected phasing for NB and SB left turn movements
2. Rock Springs Road and W. Lincoln Avenue	**F/F**	**F/F**	**Y – Improve to LOS equal to or better than without Project LOS**
3. W. Mission Avenue and N. Quince Street	C/**D**	C/**D**	N
4. W. Mission Avenue and Metcalf Street	C/B	B/B	N

Notes:
***Bold** values indicate intersections operating at LOS D, E or F.*
(a) LOS calculations are based on the methodology outlined in the Highway Capacity Manual 6th Edition and performed using Synchro 10

Table 6-8
Future Conditions (2035) Intersection Operation Post-Mitigation Analysis

Intersection	Future 2035 Without Project		Future 2035 With Project		Future 2035 Post Mitigation	
	Delay[(a)]	LOS[(b)]	Delay[(a)]	LOS[(b)]	Delay[(a)]	LOS[(b)]
AM/PM Peak Hour						
1. W. Mission Avenue and Rock Springs Road	29.9/27.9	C/C	31.5/28.1	C/C	36.8/29.3	D/C
2. Rock Springs Road and W. Lincoln Avenue	>180/>180	**F/F**	>180/>180	**F/F**	30.4/20.9	C/C

Notes:
***Bold** values indicate intersections operating at LOS D, E or F.*
(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At unsignalized intersections with side street stop control, delay refers to the worst movement.
(b) LOS calculations are based on the methodology outlined in the Highway Capacity Manual 6th Edition and performed using Synchro 10

As shown in the above table, the impacted location will be fully mitigated with the implementation of the proposed transportation improvement.

Table 6-9
Future Year with Project Conditions (2035) Queue Analysis Summary

Intersection	Movement	Stacking Distance (ft)	Queue (ft)		Excess Demand (ft)	
			AM	PM	AM	PM
2. Rock Springs Road and W. Lincoln Avenue	NBL	120	111	110	--	--
	SBL	175	127	83	--	--

Per the queue analysis results shown in **Table 6-9**, there will be no excess queue demand as the anticipated vehicular queues do not exceed the stacking area available at the analyzed location.

Table 6-10 shows the mitigation measure needed to address future growth and cumulative traffic impact within the City of Escondido identified under all analyzed scenarios.

Table 6-10
Recommended Improvements

Intersection	Recommended Improvements		
	Existing with Project	**Opening Year with Project**	**Future 2035 with Project**
1. W. Mission Avenue and Rock Springs Road	Protected NB and SB left turn phasing	Protected NB and SB left turn phasing	Signal modification including protected NB and SB left turn phasing
2. Rock Springs Road and W. Lincoln Avenue	Signalize the intersection	Signalize the intersection	Signalize the intersection

Post mitigation peak hour analysis worksheets are provided in **Appendix J**.

The Project will be conditioned to construct the improvements identified in Table 6-10 with the City of Escondido contributing up to $50,000 in the form of Traffic Impact Fee credit toward the cost of implementing the protected left turns at the intersection of at Rock Springs Rd. and Mission Ave.

APPENDIX A -

TRAFFIC COUNT DATA & EXISTING SIGNAL TIMING

Thursday, November 07, 2019 CITY: Escondido PROJECT: SC

ADT1 Rock Spring between Lincoln and Mission.

Suhsduhg#e|#Dlp WG#DOF#Whd#:47#586#;;;

AM Period	NB		SB		EB		WB			PM Period	NB		SB		EB		WB		
0:00	9		3		0		0			12:00	136		95		0		0		
0:15	10		3		0		0			12:15	124		102		0		0		
0:30	7		2		0		0			12:30	160		100		0		0		
0:45	4	30	3	11	0	0	0	0	41	12:45	153	573	110	407	0	0	0	0	980
1:00	4		2		0		0			13:00	126		141		0		0		
1:15	5		4		0		0			13:15	101		106		0		0		
1:30	0		2		0		0			13:30	117		95		0		0		
1:45	3	12	8	16	0	0	0	0	28	13:45	135	479	85	427	0	0	0	0	906
2:00	2		2		0		0			14:00	154		91		0		0		
2:15	4		1		0		0			14:15	139		96		0		0		
2:30	4		2		0		0			14:30	133		106		0		0		
2:45	1	11	3	8	0	0	0	0	19	14:45	151	577	97	390	0	0	0	0	967
3:00	5		3		0		0			15:00	188		109		0		0		
3:15	2		4		0		0			15:15	191		92		0		0		
3:30	3		6		0		0			15:30	222		105		0		0		
3:45	3	13	5	18	0	0	0	0	31	15:45	214	815	102	408	0	0	0	0	1223
4:00	6		10		0		0			16:00	265		94		0		0		
4:15	7		15		0		0			16:15	211		96		0		0		
4:30	3		21		0		0			16:30	223		96		0		0		
4:45	8	24	33	79	0	0	0	0	103	16:45	220	919	109	395	0	0	0	0	1314
5:00	16		30		0		0			17:00	286		108		0		0		
5:15	9		44		0		0			17:15	246		95		0		0		
5:30	12		73		0		0			17:30	209		78		0		0		
5:45	24	61	81	228	0	0	0	0	289	17:45	197	938	92	373	0	0	0	0	1311
6:00	38		101		0		0			18:00	185		81		0		0		
6:15	48		122		0		0			18:15	121		89		0		0		
6:30	38		144		0		0			18:30	117		71		0		0		
6:45	70	194	200	567	0	0	0	0	761	18:45	107	530	70	311	0	0	0	0	841
7:00	84		182		0		0			19:00	131		76		0		0		
7:15	100		179		0		0			19:15	84		67		0		0		
7:30	133		207		0		0			19:30	79		45		0		0		
7:45	111	428	218	786	0	0	0	0	1214	19:45	75	369	31	219	0	0	0	0	588
8:00	113		209		0		0			20:00	76		27		0		0		
8:15	83		140		0		0			20:15	72		34		0		0		
8:30	75		131		0		0			20:30	54		27		0		0		
8:45	93	364	92	572	0	0	0	0	936	20:45	64	266	30	118	0	0	0	0	384
9:00	65		91		0		0			21:00	57		28		0		0		
9:15	85		83		0		0			21:15	56		26		0		0		
9:30	99		94		0		0			21:30	47		30		0		0		
9:45	95	344	74	342	0	0	0	0	686	21:45	37	197	25	109	0	0	0	0	306
10:00	80		90		0		0			22:00	41		21		0		0		
10:15	92		89		0		0			22:15	24		14		0		0		
10:30	80		85		0		0			22:30	26		13		0		0		
10:45	96	348	91	355	0	0	0	0	703	22:45	13	104	14	62	0	0	0	0	166
11:00	109		85		0		0			23:00	21		12		0		0		
11:15	101		86		0		0			23:15	20		5		0		0		
11:30	100		90		0		0			23:30	13		4		0		0		
11:45	96	406	123	384	0	0	0	0	790	23:45	14	68	9	30	0	0	0	0	98
Total Vol.		2235		3366					**5601**			5835		3249					**9084**

Daily Totals

NB	SB	EB	WB	Combined
8070	6615			**14685**

	AM			PM		
Split %	39.9%	60.1%	**38.1%**	64.2%	35.8%	**61.9%**
Peak Hour	11:45	7:15	**7:15**	16:30	12:30	**16:30**
Volume	516	813	**1270**	975	457	**1383**
P.H.F.	0.81	0.93	**0.93**	0.89	0.81	**0.88**

cs@aimtd.com Tell. 714 253 7888

Thursday, November 07, 2019 CITY: Escondido PROJECT: SC

ADT2 Mission between Metcalf and Rock Spring.

Suhsduhg#e|#Dlp WG#DOF#Whd#:47#586#;;;

AM Period	NB		SB		EB		WB			PM Period	NB		SB		EB		WB		
0:00	0		0		7		5			12:00	0		0		195		152		
0:15	0		0		3		0			12:15	0		0		153		157		
0:30	0		0		6		4			12:30	0		0		181		148		
0:45	0	0	0	0	9	25	0	9	34	12:45	0	0	0	0	163	692	153	610	1302
1:00	0		0		5		4			13:00	0		0		139		136		
1:15	0		0		6		7			13:15	0		0		142		126		
1:30	0		0		4		4			13:30	0		0		136		133		
1:45	0	0	0	0	3	18	2	17	35	13:45	0	0	0	0	154	571	155	550	1121
2:00	0		0		4		3			14:00	0		0		173		141		
2:15	0		0		5		6			14:15	0		0		185		132		
2:30	0		0		4		5			14:30	0		0		217		117		
2:45	0	0	0	0	2	15	8	22	37	14:45	0	0	0	0	188	763	146	536	1299
3:00	0		0		5		6			15:00	0		0		269		147		
3:15	0		0		5		12			15:15	0		0		236		126		
3:30	0		0		4		19			15:30	0		0		293		138		
3:45	0	0	0	0	2	16	25	62	78	15:45	0	0	0	0	258	1056	135	546	1602
4:00	0		0		7		18			16:00	0		0		284		145		
4:15	0		0		5		20			16:15	0		0		292		149		
4:30	0		0		3		31			16:30	0		0		300		131		
4:45	0	0	0	0	6	21	33	102	123	16:45	0	0	0	0	303	1179	119	544	1723
5:00	0		0		7		44			17:00	0		0		294		117		
5:15	0		0		14		76			17:15	0		0		247		110		
5:30	0		0		11		119			17:30	0		0		198		97		
5:45	0	0	0	0	18	50	160	399	449	17:45	0	0	0	0	201	940	74	398	1338
6:00	0		0		47		145			18:00	0		0		147		84		
6:15	0		0		67		176			18:15	0		0		105		78		
6:30	0		0		56		289			18:30	0		0		84		79		
6:45	0	0	0	0	85	255	283	893	1148	18:45	0	0	0	0	70	406	43	284	690
7:00	0		0		79		260			19:00	0		0		66		40		
7:15	0		0		132		300			19:15	0		0		42		43		
7:30	0		0		117		314			19:30	0		0		55		37		
7:45	0	0	0	0	109	437	305	1179	1616	19:45	0	0	0	0	30	193	27	147	340
8:00	0		0		105		251			20:00	0		0		45		23		
8:15	0		0		94		226			20:15	0		0		38		21		
8:30	0		0		91		185			20:30	0		0		32		22		
8:45	0	0	0	0	112	402	177	839	1241	20:45	0	0	0	0	24	139	25	91	230
9:00	0		0		112		124			21:00	0		0		25		15		
9:15	0		0		126		169			21:15	0		0		32		22		
9:30	0		0		132		113			21:30	0		0		27		30		
9:45	0	0	0	0	140	510	135	541	1051	21:45	0	0	0	0	18	102	6	73	175
10:00	0		0		146		153			22:00	0		0		15		12		
10:15	0		0		143		123			22:15	0		0		17		9		
10:30	0		0		130		124			22:30	0		0		15		13		
10:45	0	0	0	0	147	566	124	524	1090	22:45	0	0	0	0	9	56	6	40	96
11:00	0		0		161		135			23:00	0		0		7		7		
11:15	0		0		150		142			23:15	0		0		5		6		
11:30	0		0		150		174			23:30	0		0		14		3		
11:45	0	0	0	0	163	624	159	610	1234	23:45	0	0	0	0	4	30	4	20	50

Total Vol.					2939		5197	**8136**							6127		3839	**9966**	

Daily Totals

	NB	SB	EB	WB	**Combined**
			9066	9036	**18102**

	AM			**PM**		
Split %	36.1%	63.9%	**44.9%**	61.5%	38.5%	**55.1%**
Peak Hour	11:45	7:00	**7:15**	16:15	12:00	**16:00**
Volume	692	1179	**1633**	1189	610	**1723**
P.H.F.	0.89	0.94	**0.95**	0.98	0.97	**0.98**

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Thursday, November 07, 2019 CITY: Escondido PROJECT: SC

ADT3 Mission between Rock Spring and Quince.

Suhsduhg#e|#Dlp WG#DOF#Whd#:47#586#;;;

AM Period	NB		SB		EB		WB			PM Period	NB		SB		EB		WB		
0:00	0		0		6		9			12:00	0		0		181		166		
0:15	0		0		7		4			12:15	0		0		158		180		
0:30	0		0		4		4			12:30	0		0		172		180		
0:45	0	0	0	0	10	27	1	18	45	12:45	0	0	0	0	162	673	188	714	1387
1:00	0		0		7		9			13:00	0		0		150		149		
1:15	0		0		9		10			13:15	0		0		138		136		
1:30	0		0		7		3			13:30	0		0		151		151		
1:45	0	0	0	0	6	29	4	26	55	13:45	0	0	0	0	134	573	181	617	1190
2:00	0		0		5		5			14:00	0		0		155		141		
2:15	0		0		4		7			14:15	0		0		177		162		
2:30	0		0		5		7			14:30	0		0		200		147		
2:45	0	0	0	0	3	17	7	26	43	14:45	0	0	0	0	168	700	161	611	1311
3:00	0		0		2		9			15:00	0		0		225		185		
3:15	0		0		4		11			15:15	0		0		196		156		
3:30	0		0		8		19			15:30	0		0		242		168		
3:45	0	0	0	0	2	16	24	63	79	15:45	0	0	0	0	212	875	171	680	1555
4:00	0		0		8		12			16:00	0		0		202		186		
4:15	0		0		6		21			16:15	0		0		232		176		
4:30	0		0		11		31			16:30	0		0		244		150		
4:45	0	0	0	0	20	45	43	107	152	16:45	0	0	0	0	244	922	159	671	1593
5:00	0		0		12		48			17:00	0		0		244		174		
5:15	0		0		24		72			17:15	0		0		216		152		
5:30	0		0		33		110			17:30	0		0		180		144		
5:45	0	0	0	0	42	111	159	389	500	17:45	0	0	0	0	189	829	114	584	1413
6:00	0		0		61		137			18:00	0		0		131		127		
6:15	0		0		80		171			18:15	0		0		116		111		
6:30	0		0		76		248			18:30	0		0		89		119		
6:45	0	0	0	0	114	331	258	814	1145	18:45	0	0	0	0	87	423	88	445	868
7:00	0		0		112		234			19:00	0		0		94		95		
7:15	0		0		137		265			19:15	0		0		63		80		
7:30	0		0		133		286			19:30	0		0		63		63		
7:45	0	0	0	0	125	507	282	1067	1574	19:45	0	0	0	0	36	256	55	293	549
8:00	0		0		137		249			20:00	0		0		45		48		
8:15	0		0		122		223			20:15	0		0		47		55		
8:30	0		0		118		181			20:30	0		0		39		45		
8:45	0	0	0	0	115	492	186	839	1331	20:45	0	0	0	0	30	161	53	201	362
9:00	0		0		112		140			21:00	0		0		32		33		
9:15	0		0		119		170			21:15	0		0		36		43		
9:30	0		0		135		136			21:30	0		0		35		36		
9:45	0	0	0	0	139	505	150	596	1101	21:45	0	0	0	0	22	125	23	135	260
10:00	0		0		139		154			22:00	0		0		24		27		
10:15	0		0		145		137			22:15	0		0		25		16		
10:30	0		0		132		145			22:30	0		0		21		21		
10:45	0	0	0	0	146	562	140	576	1138	22:45	0	0	0	0	16	86	12	76	162
11:00	0		0		165		152			23:00	0		0		13		10		
11:15	0		0		135		151			23:15	0		0		8		13		
11:30	0		0		143		187			23:30	0		0		15		11		
11:45	0	0	0	0	160	603	166	656	1259	23:45	0	0	0	0	8	44	11	45	89
Total Vol.						3245		5177	**8422**							5667		5072	**10739**

Daily Totals

NB	SB	EB	WB	Combined
		8912	10249	**19161**

	AM			PM		
Split %	38.5%	61.5%	**44.0%**	52.8%	47.2%	**56.0%**
Peak Hour	11:45	7:15	**7:15**	16:15	12:00	**16:15**
Volume	671	1082	**1614**	964	714	**1623**
P.H.F.	0.93	0.95	**0.96**	0.99	0.95	**0.97**

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Thursday, November 07, 2019 CITY: Escondido PROJECT: SC

ADT4 Rock Springs south of Mission.

Suhsduhg#e|#Dlp WG#DOF#Whd#:47#586#;;;

AM Period	NB		SB		EB		WB			PM Period	NB		SB		EB		WB		
0:00	2		1		0		0			12:00	94		81		0		0		
0:15	7		0		0		0			12:15	95		91		0		0		
0:30	4		1		0		0			12:30	101		82		0		0		
0:45	2	15	1	3	0	0	0	0	18	12:45	96	386	89	343	0	0	0	0	729
1:00	2		3		0		0			13:00	85		102		0		0		
1:15	2		1		0		0			13:15	68		87		0		0		
1:30	2		0		0		0			13:30	103		84		0		0		
1:45	0	6	4	8	0	0	0	0	14	13:45	81	337	77	350	0	0	0	0	687
2:00	2		3		0		0			14:00	121		76		0		0		
2:15	2		1		0		0			14:15	97		92		0		0		
2:30	2		1		0		0			14:30	94		114		0		0		
2:45	2	8	2	7	0	0	0	0	15	14:45	105	417	86	368	0	0	0	0	785
3:00	1		5		0		0			15:00	106		109		0		0		
3:15	2		4		0		0			15:15	132		103		0		0		
3:30	4		3		0		0			15:30	138		102		0		0		
3:45	4	11	5	17	0	0	0	0	28	15:45	136	512	106	420	0	0	0	0	932
4:00	6		3		0		0			16:00	167		119		0		0		
4:15	3		11		0		0			16:15	145		117		0		0		
4:30	5		15		0		0			16:30	153		101		0		0		
4:45	4	18	25	54	0	0	0	0	72	16:45	138	603	126	463	0	0	0	0	1066
5:00	7		20		0		0			17:00	192		121		0		0		
5:15	9		30		0		0			17:15	167		89		0		0		
5:30	11		41		0		0			17:30	156		90		0		0		
5:45	16	43	48	139	0	0	0	0	182	17:45	132	647	79	379	0	0	0	0	1026
6:00	25		66		0		0			18:00	118		73		0		0		
6:15	37		93		0		0			18:15	81		71		0		0		
6:30	27		72		0		0			18:30	70		59		0		0		
6:45	48	137	124	355	0	0	0	0	492	18:45	60	329	51	254	0	0	0	0	583
7:00	66		105		0		0			19:00	78		50		0		0		
7:15	71		110		0		0			19:15	49		48		0		0		
7:30	92		122		0		0			19:30	48		32		0		0		
7:45	83	312	151	488	0	0	0	0	800	19:45	49	224	27	157	0	0	0	0	381
8:00	72		134		0		0			20:00	45		21		0		0		
8:15	59		85		0		0			20:15	38		25		0		0		
8:30	60		85		0		0			20:30	29		18		0		0		
8:45	73	264	78	382	0	0	0	0	646	20:45	36	148	24	88	0	0	0	0	236
9:00	44		86		0		0			21:00	32		14		0		0		
9:15	65		71		0		0			21:15	33		20		0		0		
9:30	54		69		0		0			21:30	32		13		0		0		
9:45	67	230	62	288	0	0	0	0	518	21:45	17	114	18	65	0	0	0	0	179
10:00	60		78		0		0			22:00	28		14		0		0		
10:15	66		75		0		0			22:15	17		6		0		0		
10:30	58		82		0		0			22:30	15		4		0		0		
10:45	68	252	80	315	0	0	0	0	567	22:45	6	66	6	30	0	0	0	0	96
11:00	86		75		0		0			23:00	17		5		0		0		
11:15	59		68		0		0			23:15	13		2		0		0		
11:30	67		77		0		0			23:30	5		3		0		0		
11:45	65	277	102	322	0	0	0	0	599	23:45	6	41	4	14	0	0	0	0	55
Total Vol.	1573		2378						**3951**		3824		2931						**6755**

Daily Totals

NB	SB	EB	WB	Combined
5397	5309			**10706**

	AM			PM		
Split %	39.8%	60.2%	**36.9%**	56.6%	43.4%	**63.1%**
Peak Hour	11:45	7:15	**7:15**	16:45	16:15	**16:15**
Volume	355	517	**835**	653	465	**1093**
P.H.F.	0.88	0.86	**0.89**	0.86	0.92	**0.87**

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Thursday, November 07, 2019 CITY: Escondido PROJECT: SC

ADT5 Rock Springs north of Lincoln.

Suhsduhg#e|#Dlp WG#DOF#Whd#:47#586#;;;

AM Period	NB		SB		EB		WB			PM Period	NB		SB		EB		WB		
0:00	10		4		0		0			12:00	114		92		0		0		
0:15	5		2		0		0			12:15	105		82		0		0		
0:30	5		3		0		0			12:30	120		95		0		0		
0:45	3	23	4	13	0	0	0	0	36	12:45	142	481	85	354	0	0	0	0	835
1:00	2		2		0		0			13:00	109		169		0		0		
1:15	1		2		0		0			13:15	83		104		0		0		
1:30	0		1		0		0			13:30	99		85		0		0		
1:45	0	3	3	8	0	0	0	0	11	13:45	112	403	71	429	0	0	0	0	832
2:00	1		2		0		0			14:00	116		80		0		0		
2:15	2		1		0		0			14:15	111		85		0		0		
2:30	3		1		0		0			14:30	109		102		0		0		
2:45	1	7	3	7	0	0	0	0	14	14:45	143	479	81	348	0	0	0	0	827
3:00	0		2		0		0			15:00	154		94		0		0		
3:15	3		4		0		0			15:15	166		117		0		0		
3:30	5		3		0		0			15:30	163		104		0		0		
3:45	4	12	4	13	0	0	0	0	25	15:45	193	676	102	417	0	0	0	0	1093
4:00	3		4		0		0			16:00	214		102		0		0		
4:15	6		9		0		0			16:15	195		102		0		0		
4:30	5		16		0		0			16:30	182		100		0		0		
4:45	7	21	30	59	0	0	0	0	80	16:45	163	754	125	429	0	0	0	0	1183
5:00	12		19		0		0			17:00	235		102		0		0		
5:15	14		35		0		0			17:15	260		117		0		0		
5:30	22		44		0		0			17:30	180		98		0		0		
5:45	24	72	72	170	0	0	0	0	242	17:45	179	854	96	413	0	0	0	0	1267
6:00	31		72		0		0			18:00	157		120		0		0		
6:15	56		96		0		0			18:15	128		66		0		0		
6:30	53		115		0		0			18:30	95		79		0		0		
6:45	70	210	194	477	0	0	0	0	687	18:45	80	460	64	329	0	0	0	0	789
7:00	73		154		0		0			19:00	94		68		0		0		
7:15	112		152		0		0			19:15	93		44		0		0		
7:30	157		204		0		0			19:30	53		44		0		0		
7:45	144	486	222	732	0	0	0	0	1218	19:45	60	300	45	201	0	0	0	0	501
8:00	100		195		0		0			20:00	62		33		0		0		
8:15	101		146		0		0			20:15	53		32		0		0		
8:30	89		126		0		0			20:30	48		34		0		0		
8:45	74	364	89	556	0	0	0	0	920	20:45	53	216	29	128	0	0	0	0	344
9:00	52		82		0		0			21:00	40		29		0		0		
9:15	70		66		0		0			21:15	44		25		0		0		
9:30	84		70		0		0			21:30	42		16		0		0		
9:45	83	289	67	285	0	0	0	0	574	21:45	26	152	26	96	0	0	0	0	248
10:00	75		74		0		0			22:00	32		23		0		0		
10:15	80		66		0		0			22:15	20		13		0		0		
10:30	81		76		0		0			22:30	16		11		0		0		
10:45	86	322	92	308	0	0	0	0	630	22:45	11	79	21	68	0	0	0	0	147
11:00	96		70		0		0			23:00	14		10		0		0		
11:15	79		68		0		0			23:15	8		7		0		0		
11:30	75		74		0		0			23:30	10		6		0		0		
11:45	72	322	98	310	0	0	0	0	632	23:45	10	42	9	32	0	0	0	0	74
Total Vol.		2131		2938					**5069**			4896		3244					**8140**

Daily Totals

NB	SB	EB	WB	Combined
7027	6182			**13209**

	AM			PM		
Split %	42.0%	58.0%	**38.4%**	60.1%	39.9%	**61.6%**
Peak Hour	7:15	7:15	**7:15**	17:00	12:30	**16:30**
Volume	513	773	**1286**	854	453	**1284**
P.H.F.	0.82	0.87	**0.88**	0.82	0.67	**0.85**

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Thursday, November 07, 2019 CITY: Escondido PROJECT: SC

ADT6 Mission west of Metcalf.

Suhsduhg#e|#Dlp WG#DOF#Whd#:47#586#;;;

AM Period	NB		SB		EB		WB			PM Period	NB		SB		EB		WB		
0:00	0		0		8		6			12:00	0		0		196		154		
0:15	0		0		4		1			12:15	0		0		151		155		
0:30	0		0		4		3			12:30	0		0		191		159		
0:45	0	0	0	0	9	25	0	10	35	12:45	0	0	0	0	152	690	162	630	1320
1:00	0		0		4		4			13:00	0		0		139		142		
1:15	0		0		4		6			13:15	0		0		140		142		
1:30	0		0		2		5			13:30	0		0		138		137		
1:45	0	0	0	0	5	15	2	17	32	13:45	0	0	0	0	153	570	162	583	1153
2:00	0		0		3		2			14:00	0		0		154		164		
2:15	0		0		6		6			14:15	0		0		168		139		
2:30	0		0		0		4			14:30	0		0		216		140		
2:45	0	0	0	0	2	11	7	19	30	14:45	0	0	0	0	187	725	165	608	1333
3:00	0		0		5		3			15:00	0		0		255		164		
3:15	0		0		8		11			15:15	0		0		234		137		
3:30	0		0		2		7			15:30	0		0		290		156		
3:45	0	0	0	0	4	19	12	33	52	15:45	0	0	0	0	270	1049	159	616	1665
4:00	0		0		7		15			16:00	0		0		252		168		
4:15	0		0		8		14			16:15	0		0		275		158		
4:30	0		0		5		30			16:30	0		0		301		173		
4:45	0	0	0	0	7	27	39	98	125	16:45	0	0	0	0	309	1137	138	637	1774
5:00	0		0		9		36			17:00	0		0		318		147		
5:15	0		0		17		72			17:15	0		0		238		130		
5:30	0		0		26		116			17:30	0		0		222		126		
5:45	0	0	0	0	35	87	160	384	471	17:45	0	0	0	0	193	971	90	493	1464
6:00	0		0		48		154			18:00	0		0		128		85		
6:15	0		0		68		181			18:15	0		0		103		77		
6:30	0		0		58		264			18:30	0		0		96		57		
6:45	0	0	0	0	84	258	291	890	1148	18:45	0	0	0	0	102	429	57	276	705
7:00	0		0		95		273			19:00	0		0		70		52		
7:15	0		0		120		296			19:15	0		0		49		37		
7:30	0		0		117		317			19:30	0		0		56		41		
7:45	0	0	0	0	112	444	341	1227	1671	19:45	0	0	0	0	35	210	24	154	364
8:00	0		0		112		295			20:00	0		0		46		24		
8:15	0		0		83		238			20:15	0		0		36		17		
8:30	0		0		93		212			20:30	0		0		31		28		
8:45	0	0	0	0	108	396	202	947	1343	20:45	0	0	0	0	26	139	26	95	234
9:00	0		0		109		156			21:00	0		0		23		15		
9:15	0		0		129		160			21:15	0		0		29		20		
9:30	0		0		127		123			21:30	0		0		26		24		
9:45	0	0	0	0	141	506	125	564	1070	21:45	0	0	0	0	21	99	8	67	166
10:00	0		0		149		163			22:00	0		0		14		6		
10:15	0		0		143		121			22:15	0		0		19		9		
10:30	0		0		122		116			22:30	0		0		15		12		
10:45	0	0	0	0	142	556	120	520	1076	22:45	0	0	0	0	9	57	10	37	94
11:00	0		0		148		128			23:00	0		0		9		7		
11:15	0		0		148		137			23:15	0		0		5		7		
11:30	0		0		155		149			23:30	0		0		15		9		
11:45	0	0	0	0	164	615	166	580	1195	23:45	0	0	0	0	5	34	5	28	62

Total Vol.					2959		5289	**8248**							6110		4224	**10334**	

	Daily Totals				
	NB	SB	EB	WB	**Combined**
			9069	9513	**18582**

	AM			**PM**		
Split %	35.9%	64.1%	**44.4%**	59.1%	40.9%	**55.6%**
Peak Hour	11:45	7:15	**7:15**	16:15	15:45	**16:15**
Volume	702	1249	**1710**	1203	658	**1819**
P.H.F.	0.90	0.92	**0.94**	0.95	0.95	**0.96**

cs@aimtd.com Tell. 714 253 7888

Thursday, November 07, 2019 CITY: Escondido PROJECT: SC

ADT7 Mission east of Quince.

Suhsduhg#e|#Dlp WG#DOF#Whd#:47#586#;;;

AM Period	NB		SB		EB		WB			PM Period	NB		SB		EB		WB		
0:00	0		0		12		10			12:00	0		0		242		226		
0:15	0		0		10		10			12:15	0		0		217		221		
0:30	0		0		9		4			12:30	0		0		222		253		
0:45	0	0	0	0	9	40	8	32	72	12:45	0	0	0	0	217	898	242	942	1840
1:00	0		0		8		10			13:00	0		0		202		217		
1:15	0		0		12		16			13:15	0		0		196		202		
1:30	0		0		11		9			13:30	0		0		195		215		
1:45	0	0	0	0	6	37	5	40	77	13:45	0	0	0	0	198	791	200	834	1625
2:00	0		0		10		3			14:00	0		0		199		215		
2:15	0		0		8		10			14:15	0		0		223		190		
2:30	0		0		6		10			14:30	0		0		247		201		
2:45	0	0	0	0	3	27	8	31	58	14:45	0	0	0	0	225	894	199	805	1699
3:00	0		0		5		6			15:00	0		0		241		202		
3:15	0		0		6		16			15:15	0		0		256		195		
3:30	0		0		10		25			15:30	0		0		232		207		
3:45	0	0	0	0	3	24	27	74	98	15:45	0	0	0	0	274	1003	197	801	1804
4:00	0		0		11		26			16:00	0		0		281		198		
4:15	0		0		12		21			16:15	0		0		304		199		
4:30	0		0		20		47			16:30	0		0		340		165		
4:45	0	0	0	0	23	66	58	152	218	16:45	0	0	0	0	293	1218	191	753	1971
5:00	0		0		15		65			17:00	0		0		313		204		
5:15	0		0		37		98			17:15	0		0		282		183		
5:30	0		0		29		114			17:30	0		0		269		179		
5:45	0	0	0	0	33	114	176	453	567	17:45	0	0	0	0	242	1106	153	719	1825
6:00	0		0		65		196			18:00	0		0		184		146		
6:15	0		0		78		243			18:15	0		0		129		150		
6:30	0		0		90		252			18:30	0		0		136		148		
6:45	0	0	0	0	99	332	285	976	1308	18:45	0	0	0	0	142	591	110	554	1145
7:00	0		0		114		294			19:00	0		0		131		140		
7:15	0		0		119		302			19:15	0		0		104		85		
7:30	0		0		126		334			19:30	0		0		101		92		
7:45	0	0	0	0	130	489	368	1298	1787	19:45	0	0	0	0	81	417	83	400	817
8:00	0		0		149		338			20:00	0		0		84		61		
8:15	0		0		131		269			20:15	0		0		75		81		
8:30	0		0		152		265			20:30	0		0		66		56		
8:45	0	0	0	0	152	584	247	1119	1703	20:45	0	0	0	0	59	284	56	254	538
9:00	0		0		181		195			21:00	0		0		55		58		
9:15	0		0		170		220			21:15	0		0		53		67		
9:30	0		0		181		186			21:30	0		0		50		45		
9:45	0	0	0	0	178	710	206	807	1517	21:45	0	0	0	0	45	203	38	208	411
10:00	0		0		179		180			22:00	0		0		42		39		
10:15	0		0		179		177			22:15	0		0		45		30		
10:30	0		0		189		173			22:30	0		0		37		28		
10:45	0	0	0	0	176	723	204	734	1457	22:45	0	0	0	0	23	147	21	118	265
11:00	0		0		197		191			23:00	0		0		14		14		
11:15	0		0		190		186			23:15	0		0		19		21		
11:30	0		0		212		249			23:30	0		0		22		18		
11:45	0	0	0	0	210	809	222	848	1657	23:45	0	0	0	0	16	71	14	67	138

Total Vol.					3955		6564	**10519**							7623		6455	**14078**	

Daily Totals

	NB	SB	EB	WB	**Combined**
			11578	13019	**24597**

	AM			**PM**		
Split %	37.6%	62.4%	**42.8%**	54.1%	45.9%	**57.2%**
Peak Hour	11:45	7:15	**7:15**	16:15	12:00	**16:15**
Volume	891	1342	**1866**	1250	942	**2009**
P.H.F.	0.92	0.91	**0.94**	0.92	0.93	**0.97**

cs@aimtd.com Tell. 714 253 7888

INTERSECTION TURNING MOVEMENT COUNTS

T218

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

DATE: Thu, Nov 7, 19

LOCATION: Escondido
NORTH & SOUTH: Rock Springs
EAST & WEST: Mission

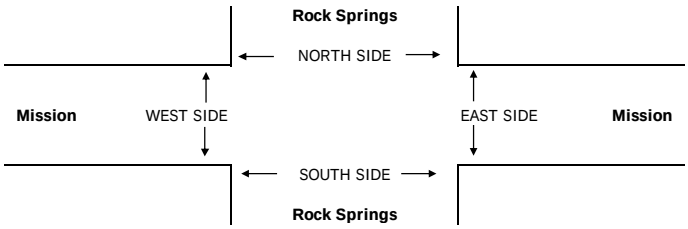
PROJECT #: SC
LOCATION #: 1
CONTROL: SIGNAL

NOTES:

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

Add U-Turns to Left Turns

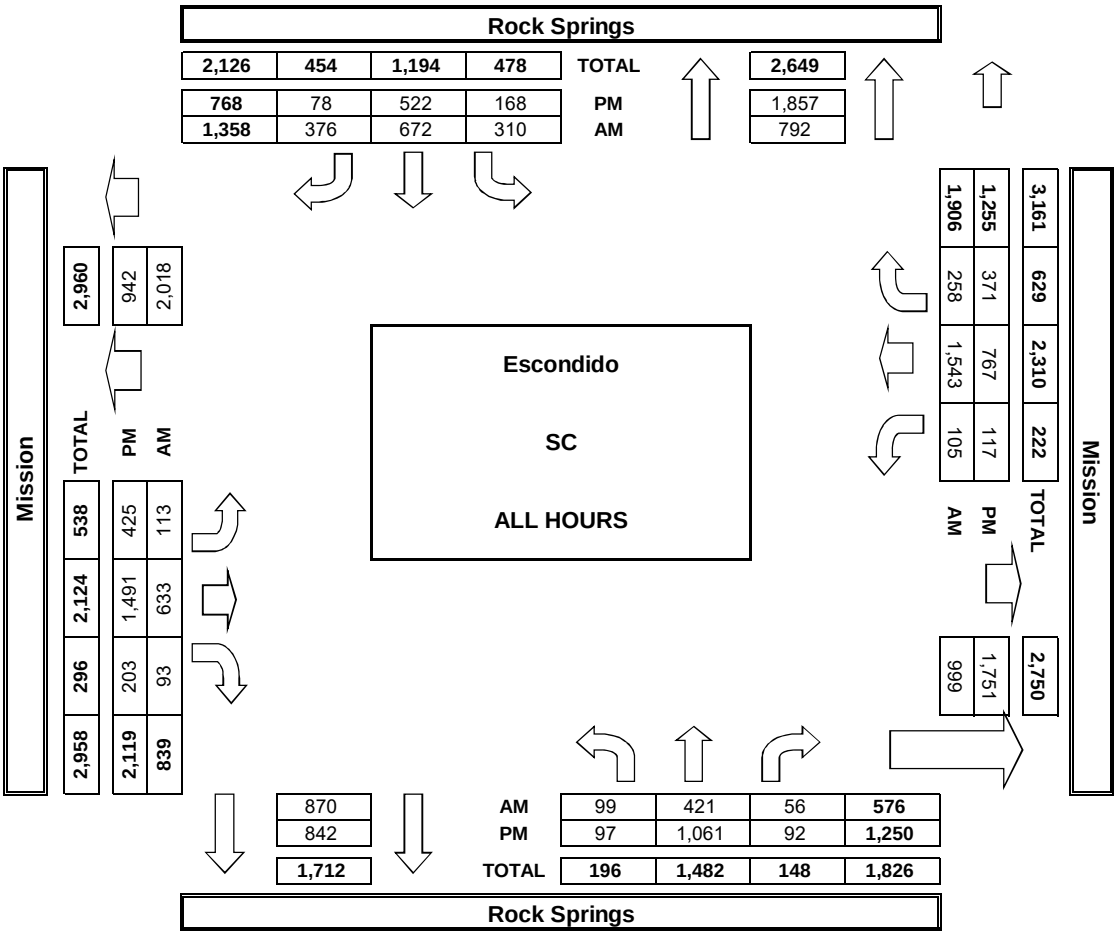
		NORTHBOUND Rock Springs			SOUTHBOUND Rock Springs			EASTBOUND Mission			WESTBOUND Mission				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 1	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	11	49	6	46	85	51	12	60	7	13	198	23	561	0	0	0	0	0
AM	7:15 AM	11	54	6	33	84	62	19	98	15	11	227	27	647	0	0	0	0	0
AM	7:30 AM	14	75	3	44	104	59	18	86	13	5	241	40	702	0	0	0	0	0
AM	7:45 AM	15	61	7	48	105	65	21	70	18	28	225	29	692	0	0	0	0	0
AM	8:00 AM	12	56	4	51	105	53	10	82	13	16	186	47	635	0	0	0	0	0
AM	8:15 AM	7	38	14	32	66	42	10	76	8	11	177	35	516	0	0	0	0	0
AM	8:30 AM	14	39	7	33	67	31	9	78	4	14	140	27	463	0	0	0	0	0
AM	8:45 AM	15	49	9	23	56	13	14	83	15	7	149	30	463	0	0	0	0	0
AM	VOLUMES	99	421	56	310	672	376	113	633	93	105	1,543	258	4,679	0	0	0	0	0
AM	APPROACH %	17%	73%	10%	23%	49%	28%	13%	75%	11%	6%	81%	14%						
AM	APP/DEPART	576	/	792	1,358	/	870	839	/	999	1,906	/	2,018	0					
AM	BEGIN PEAK HR		7:15 AM																
AM	VOLUMES	52	246	20	176	398	239	68	336	59	60	879	143	2,676					
AM	APPROACH %	16%	77%	6%	22%	49%	29%	15%	73%	13%	6%	81%	13%						
AM	PEAK HR FACTOR		0.864			0.932			0.877			0.946		0.953					
AM	APP/DEPART	318	/	457	813	/	517	463	/	532	1,082	/	1,170	0					
PM	4:00 PM	12	146	9	19	60	15	71	174	39	20	118	48	731	0	0	0	0	0
PM	4:15 PM	13	119	13	16	70	10	51	203	38	9	126	41	709	0	0	0	0	0
PM	4:30 PM	20	121	12	21	65	10	68	211	21	15	101	34	699	0	0	0	0	0
PM	4:45 PM	12	117	9	25	71	13	56	210	37	18	94	47	709	0	0	0	0	0
PM	5:00 PM	10	173	9	19	82	7	58	216	20	19	100	55	768	0	0	0	0	0
PM	5:15 PM	11	141	15	24	63	8	52	177	18	8	91	53	661	0	0	0	0	0
PM	5:30 PM	13	128	15	19	54	5	35	146	17	19	79	46	576	0	0	0	0	0
PM	5:45 PM	6	116	10	25	57	10	34	154	13	9	58	47	539	0	0	0	0	0
PM	VOLUMES	97	1,061	92	168	522	78	425	1,491	203	117	767	371	5,392	0	0	0	0	0
PM	APPROACH %	8%	85%	7%	22%	68%	10%	20%	70%	10%	9%	61%	30%						
PM	APP/DEPART	1,250	/	1,857	768	/	842	2,119	/	1,751	1,255	/	942	0					
PM	BEGIN PEAK HR		4:15 PM																
PM	VOLUMES	55	530	43	81	288	40	233	840	116	61	421	177	2,885					
PM	APPROACH %	9%	84%	7%	20%	70%	10%	20%	71%	10%	9%	64%	27%						
PM	PEAK HR FACTOR		0.818			0.938			0.981			0.936		0.939					
PM	APP/DEPART	628	/	940	409	/	465	1,189	/	964	659	/	516	0					

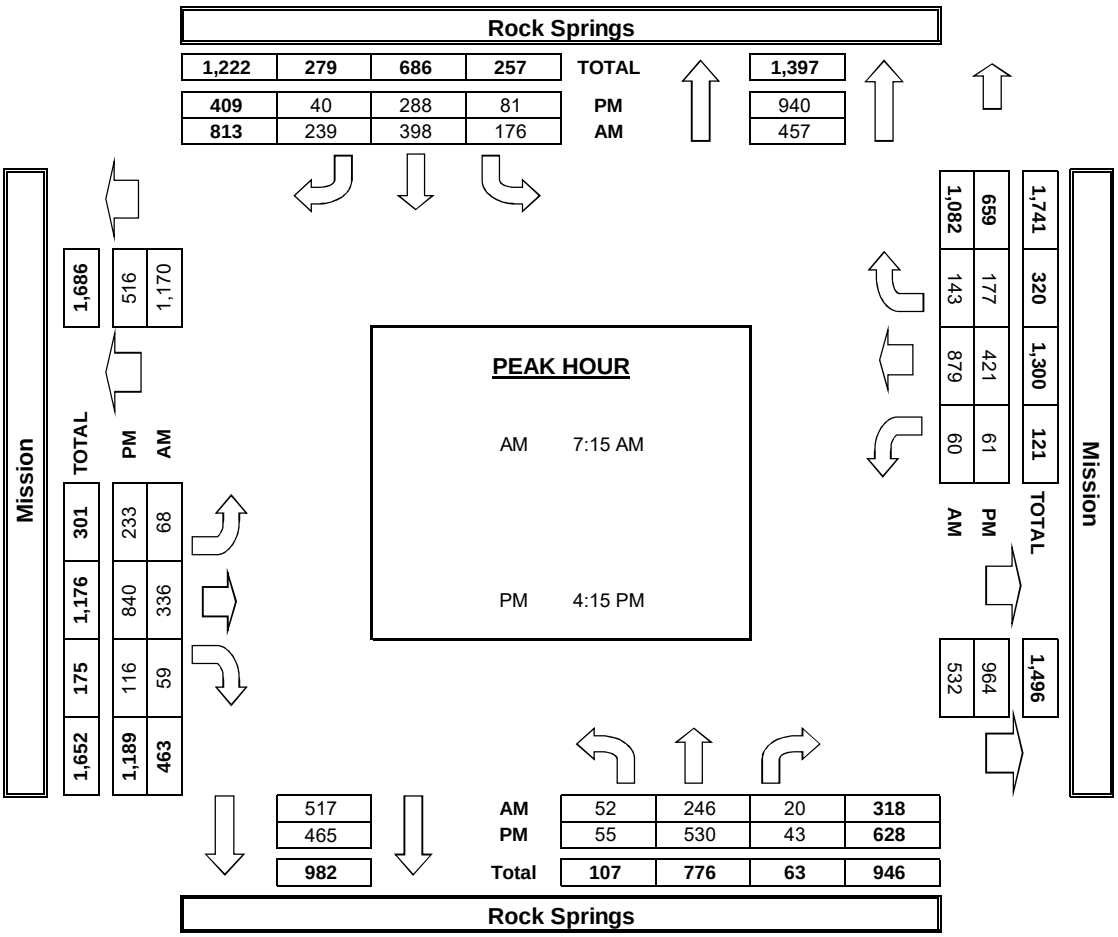


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0
AM	7:15 AM	5	1	3	0	9	5	1	3	0	9	0	0	0	0	0
AM	7:30 AM	0	1	2	1	4	0	1	1	1	3	0	0	1	0	1
AM	7:45 AM	2	4	3	0	9	2	4	3	0	9	0	0	0	0	0
AM	8:00 AM	3	1	1	0	5	3	1	1	0	5	0	0	0	0	0
AM	8:15 AM	1	1	3	0	5	1	0	3	0	4	0	1	0	0	1
AM	8:30 AM	5	4	3	1	13	3	4	3	1	11	2	0	0	0	2
AM	8:45 AM	1	1	5	2	9	0	0	5	2	7	1	1	0	0	2
AM	TOTAL	18	13	20	4	55	15	11	19	4	49	3	2	1	0	6
	AM BEGIN PEAK HR			7:15 AM			10	7	8	1	26					
PM	4:00 PM	2	3	1	0	6	2	3	1	0	6	0	0	0	0	0
PM	4:15 PM	1	0	1	1	3	1	0	1	1	3	0	0	0	0	0
PM	4:30 PM	6	1	2	2	11	6	1	2	2	11	0	0	0	0	0
PM	4:45 PM	3	2	2	0	7	3	1	2	0	6	0	1	0	0	1
PM	5:00 PM	8	1	4	4	17	6	1	4	4	15	2	0	0	0	2
PM	5:15 PM	2	2	1	1	6	1	1	1	1	4	1	1	0	0	2
PM	5:30 PM	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1
PM	5:45 PM	1	4	0	0	5	0	3	0	0	3	1	1	0	0	2
PM	TOTAL	23	15	11	8	57	19	11	11	8	49	4	4	0	0	8
	PM BEGIN PEAK HR			4:15 PM			16	3	9	7	35					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T218

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

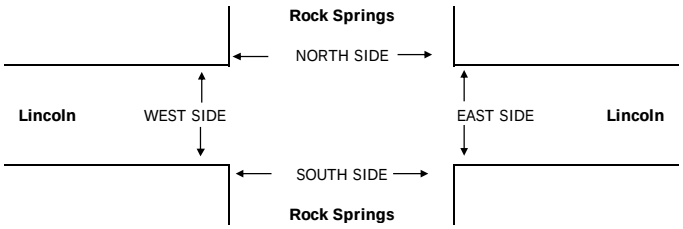
DATE:	LOCATION:	Escondido	PROJECT #:	SC
Thu, Nov 7, 19	NORTH & SOUTH:	Rock Springs	LOCATION #:	2
	EAST & WEST:	Lincoln	CONTROL:	STOP E/W

NOTES:

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

■ Add U-Turns to Left Turns

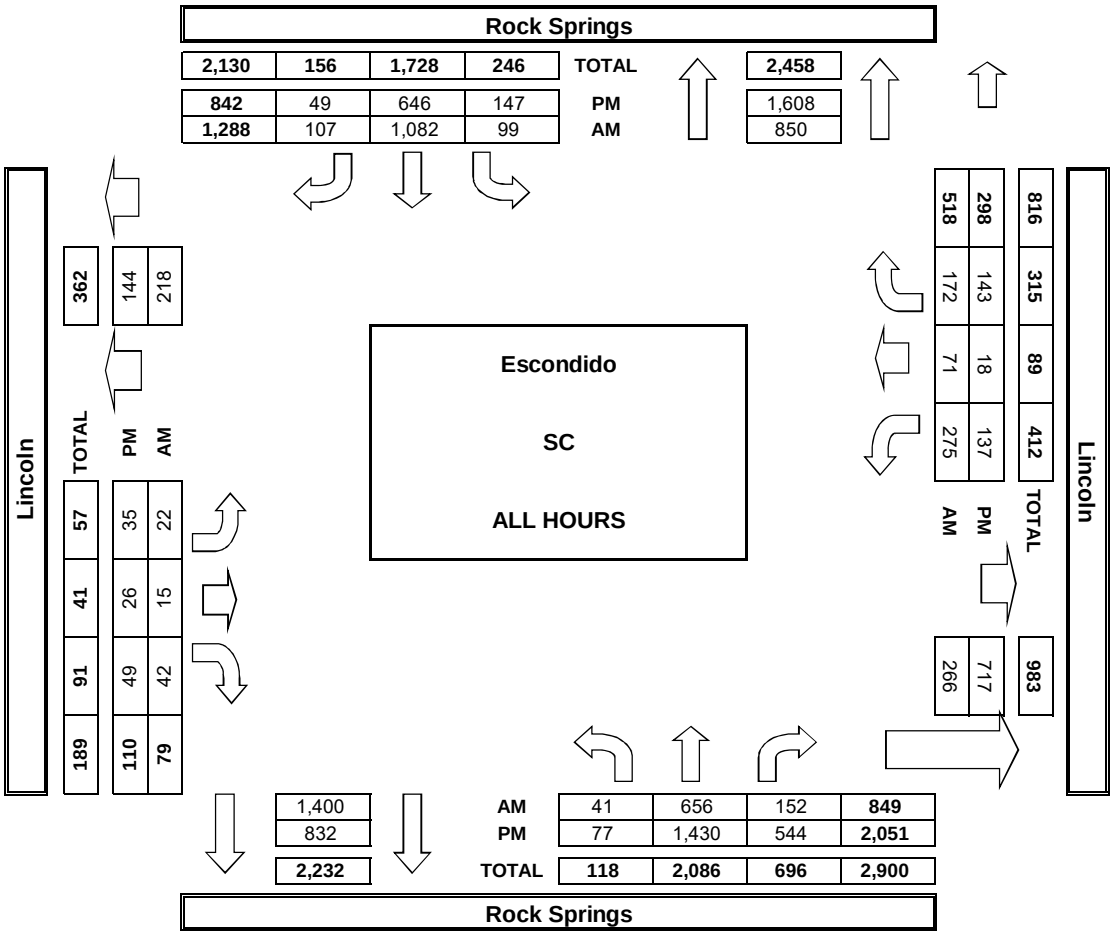
		NORTHBOUND Rock Springs			SOUTHBOUND Rock Springs			EASTBOUND Lincoln			WESTBOUND Lincoln				U-TURNS				
	LANES:	NL 1	NT 1	NR 1	SL 1	ST 1	SR 1	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	4	57	24	16	126	12	1	5	8	45	12	15	325	0	0	0	0	0
	7:15 AM	1	81	19	12	133	7	5	5	1	56	14	26	360	0	0	0	0	0
	7:30 AM	5	107	19	6	179	19	2	1	6	32	13	48	437	1	0	0	0	1
	7:45 AM	8	101	21	21	175	26	6	0	9	36	6	37	446	0	0	0	0	0
	8:00 AM	8	92	20	20	163	12	2	0	5	34	6	6	368	0	0	0	0	0
	8:15 AM	9	80	13	9	125	12	3	0	5	29	9	18	312	0	0	0	0	0
	8:30 AM	3	72	15	9	105	12	2	3	6	18	6	15	266	0	0	0	0	0
	8:45 AM	3	66	21	6	76	7	1	1	2	25	5	7	220	0	0	0	0	0
	VOLUMES	41	656	152	99	1,082	107	22	15	42	275	71	172	2,734	1	0	0	0	1
	APPROACH %	5%	77%	18%	8%	84%	8%	28%	19%	53%	53%	14%	33%						
	APP/DEPART	849	/	850	1,288	/	1,400	79	/	266	518	/	218	0					
	BEGIN PEAK HR		7:15 AM																
	VOLUMES	22	381	79	59	650	64	15	6	21	158	39	117	1,611					
	APPROACH %	5%	79%	16%	8%	84%	8%	36%	14%	50%	50%	12%	37%						
	PEAK HR FACTOR		0.920			0.870			0.700			0.818		0.903					
	APP/DEPART	482	/	513	773	/	830	42	/	144	314	/	124	0					
PM	4:00 PM	12	191	72	17	76	9	4	4	10	14	3	19	431	0	0	0	0	0
	4:15 PM	7	175	65	21	77	4	5	4	5	21	1	15	400	0	0	0	0	0
	4:30 PM	14	167	69	15	77	8	7	4	6	23	6	8	404	0	0	0	0	0
	4:45 PM	8	147	72	22	99	4	3	5	5	19	2	13	399	0	0	0	0	0
	5:00 PM	9	220	81	15	81	6	0	2	8	18	1	15	456	0	0	0	0	0
	5:15 PM	11	225	75	18	92	7	4	2	6	11	2	31	484	0	0	0	0	0
	5:30 PM	10	151	65	18	74	6	7	2	6	10	2	22	373	0	0	0	0	0
	5:45 PM	6	154	45	21	70	5	5	3	3	21	1	20	354	0	0	0	0	0
	VOLUMES	77	1,430	544	147	646	49	35	26	49	137	18	143	3,301	0	0	0	0	0
	APPROACH %	4%	70%	27%	17%	77%	6%	32%	24%	45%	46%	6%	48%						
	APP/DEPART	2,051	/	1,608	842	/	832	110	/	717	298	/	144	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	42	759	297	70	349	25	14	13	25	71	11	67	1,743					
	APPROACH %	4%	69%	27%	16%	79%	6%	27%	25%	48%	48%	7%	45%						
	PEAK HR FACTOR		0.883			0.888			0.765			0.847		0.900					
	APP/DEPART	1,098	/	840	444	/	445	52	/	380	149	/	78	0					

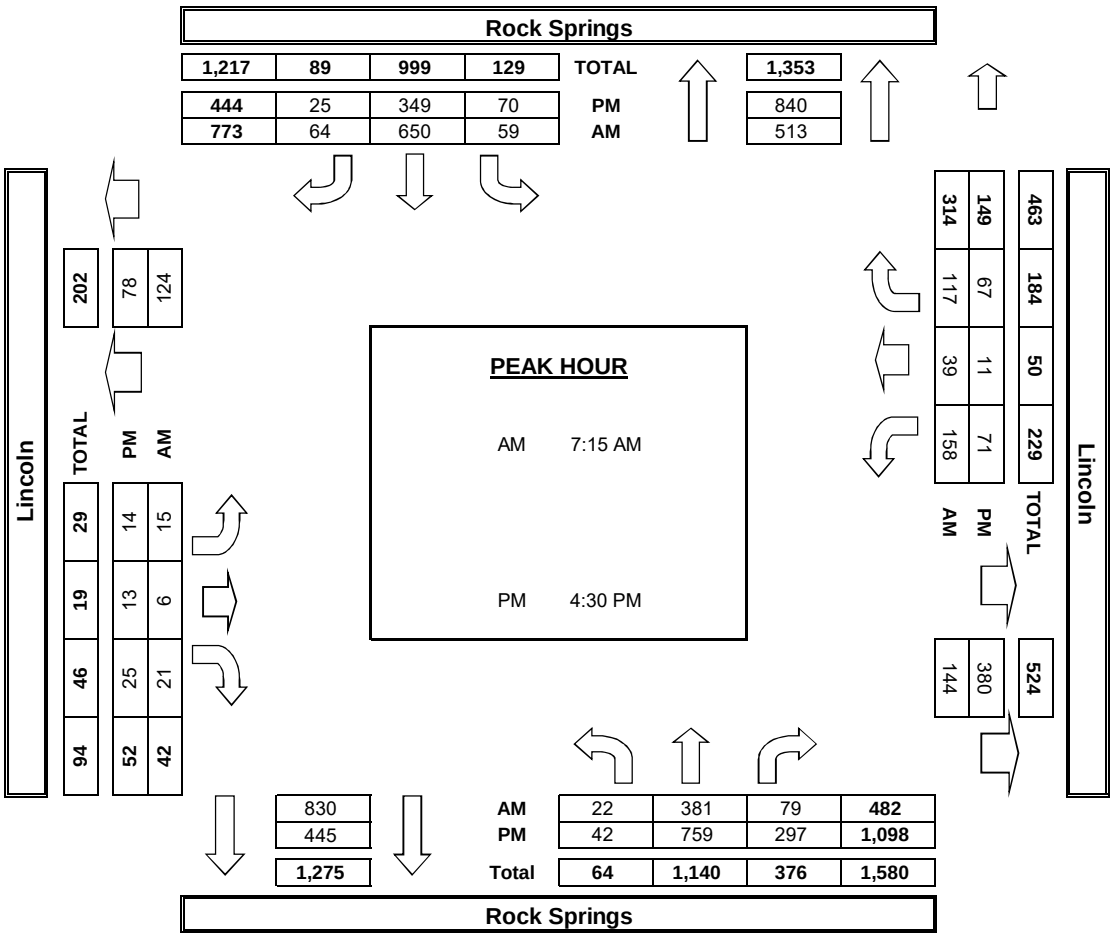


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	2	0	7	0	9	2	0	7	0	9	0	0	0	0	0
	7:15 AM	0	0	2	0	2	0	0	2	0	2	0	0	0	0	0
	7:30 AM	0	1	7	0	8	0	1	6	0	7	0	0	1	0	1
	7:45 AM	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0
	8:00 AM	1	0	2	0	3	1	0	2	0	3	0	0	0	0	0
	8:15 AM	0	0	3	0	3	0	0	3	0	3	0	0	0	0	0
	8:30 AM	2	0	7	0	9	2	0	7	0	9	0	0	0	0	0
	8:45 AM	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0
	TOTAL	5	1	30	0	36	5	1	29	0	35	0	0	1	0	1
	AM BEGIN PEAK HR			7:15 AM			1	1	11	0	13					
PM	4:00 PM	5	1	6	0	12	5	1	6	0	12	0	0	0	0	0
	4:15 PM	0	0	3	0	3	0	0	2	0	2	0	0	1	0	1
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	3	0	3	0	0	2	0	2	0	0	1	0	1
	5:00 PM	1	0	6	0	7	0	0	4	0	4	1	0	2	0	3
	5:15 PM	0	0	2	0	2	0	0	2	0	2	0	0	0	0	0
	5:30 PM	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0
	5:45 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1
	TOTAL	6	1	21	1	29	5	1	17	0	23	1	0	4	1	6
	PM BEGIN PEAK HR			4:30 PM			0	0	8	0	8					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T218

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

DATE:	LOCATION:	Escondido	PROJECT #:	SC
Thu, Nov 7, 19	NORTH & SOUTH:	Quince	LOCATION #:	3
	EAST & WEST:	Mission	CONTROL:	SIGNAL

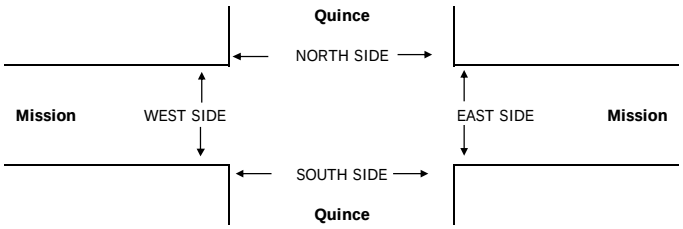
NOTES:

Queue EB PM

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

■ Add U-Turns to Left Turns

		NORTHBOUND Quince			SOUTHBOUND Quince			EASTBOUND Mission			WESTBOUND Mission				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	36	6	21	7	8	6	4	86	21	44	236	14	489	0	0	0	0	0
AM	7:15 AM	36	6	23	10	5	4	6	86	26	38	255	9	504	0	0	0	0	0
AM	7:30 AM	30	9	17	8	5	7	4	101	28	39	279	16	543	0	0	0	0	0
AM	7:45 AM	39	4	24	9	5	6	0	97	29	46	312	10	581	0	0	0	0	0
AM	8:00 AM	27	7	19	9	4	3	3	121	33	40	289	9	564	0	0	1	0	1
AM	8:15 AM	31	4	21	14	5	4	3	96	18	38	215	16	465	0	0	0	0	0
AM	8:30 AM	26	10	27	20	4	1	2	105	16	43	201	21	476	0	0	0	0	0
AM	8:45 AM	26	7	29	23	6	7	5	100	15	29	196	22	465	0	0	0	0	0
AM	VOLUMES	251	53	181	100	42	38	27	792	186	317	1,983	117	4,087	0	0	1	0	1
AM	APPROACH %	52%	11%	37%	56%	23%	21%	3%	79%	19%	13%	82%	5%						
AM	APP/DEPART	485	/	196	180	/	545	1,005	/	1,073	2,417	/	2,273	0					
AM	BEGIN PEAK HR		7:15 AM																
AM	VOLUMES	132	26	83	36	19	20	13	405	116	163	1,135	44	2,192					
AM	APPROACH %	55%	11%	34%	48%	25%	27%	2%	76%	22%	12%	85%	3%						
AM	PEAK HR FACTOR		0.899			0.938			0.850			0.912		0.943					
AM	APP/DEPART	241	/	82	75	/	298	534	/	524	1,342	/	1,288	0					
PM	4:00 PM	27	9	32	34	7	5	5	215	21	20	164	14	553	0	0	0	0	0
PM	4:15 PM	27	8	47	38	7	2	11	219	15	26	150	23	573	0	0	3	0	3
PM	4:30 PM	24	5	40	42	19	3	3	258	26	16	130	19	585	0	0	1	0	1
PM	4:45 PM	17	5	31	21	12	1	9	241	22	12	151	28	550	0	0	1	0	1
PM	5:00 PM	27	9	48	27	8	5	6	238	22	31	150	23	594	0	0	2	0	2
PM	5:15 PM	23	14	44	27	9	6	9	211	28	24	132	27	554	0	0	1	0	1
PM	5:30 PM	18	11	34	22	15	5	5	213	18	17	138	24	520	0	0	0	0	0
PM	5:45 PM	16	5	38	36	10	6	8	168	13	24	109	20	453	0	0	0	0	0
PM	VOLUMES	179	66	314	247	87	33	56	1,763	165	170	1,124	178	4,382	0	0	8	0	8
PM	APPROACH %	32%	12%	56%	67%	24%	9%	3%	89%	8%	12%	76%	12%						
PM	APP/DEPART	559	/	292	367	/	422	1,984	/	2,324	1,472	/	1,344	0					
PM	BEGIN PEAK HR		4:15 PM																
PM	VOLUMES	95	27	166	128	46	11	29	956	85	85	581	93	2,302					
PM	APPROACH %	33%	9%	58%	69%	25%	6%	3%	89%	8%	11%	77%	12%						
PM	PEAK HR FACTOR		0.857			0.723			0.932			0.930		0.969					
PM	APP/DEPART	288	/	142	185	/	216	1,070	/	1,250	759	/	694	0					



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	2	0	5	4	11	2	0	4	4	10	0	0	1	0	1
AM	7:15 AM	3	6	7	5	21	2	6	5	5	18	1	0	2	0	3
AM	7:30 AM	0	3	6	3	12	0	2	5	2	9	0	1	1	1	3
AM	7:45 AM	1	3	6	4	14	1	3	6	2	12	0	0	0	2	2
AM	8:00 AM	6	4	4	5	19	4	4	2	4	14	2	0	2	1	5
AM	8:15 AM	5	3	7	6	21	5	3	7	5	20	0	0	0	1	1
AM	8:30 AM	7	5	5	6	23	5	5	4	6	20	2	0	1	0	3
AM	8:45 AM	10	2	11	11	34	9	2	11	10	32	1	0	0	1	2
AM	TOTAL	34	26	51	44	155	28	25	44	38	135	6	1	7	6	20
	AM BEGIN PEAK HR			7:15 AM			7	15	18	13	53					
PM	4:00 PM	4	4	0	5	13	4	4	0	2	10	0	0	0	3	3
PM	4:15 PM	4	2	5	7	18	4	2	3	5	14	0	0	2	2	4
PM	4:30 PM	1	3	7	8	19	1	3	6	5	15	0	0	1	3	4
PM	4:45 PM	8	7	7	7	29	7	7	7	6	27	1	0	0	1	2
PM	5:00 PM	3	2	4	3	12	2	2	4	3	11	1	0	0	0	1
PM	5:15 PM	10	6	2	3	21	8	1	2	1	12	2	5	0	2	9
PM	5:30 PM	9	5	0	7	21	7	3	0	4	14	2	2	0	3	7
PM	5:45 PM	7	0	1	5	13	6	0	1	5	12	1	0	0	0	1
PM	TOTAL	46	29	26	45	146	39	22	23	31	115	7	7	3	14	31
	PM BEGIN PEAK HR			4:15 PM			14	14	20	19	67					

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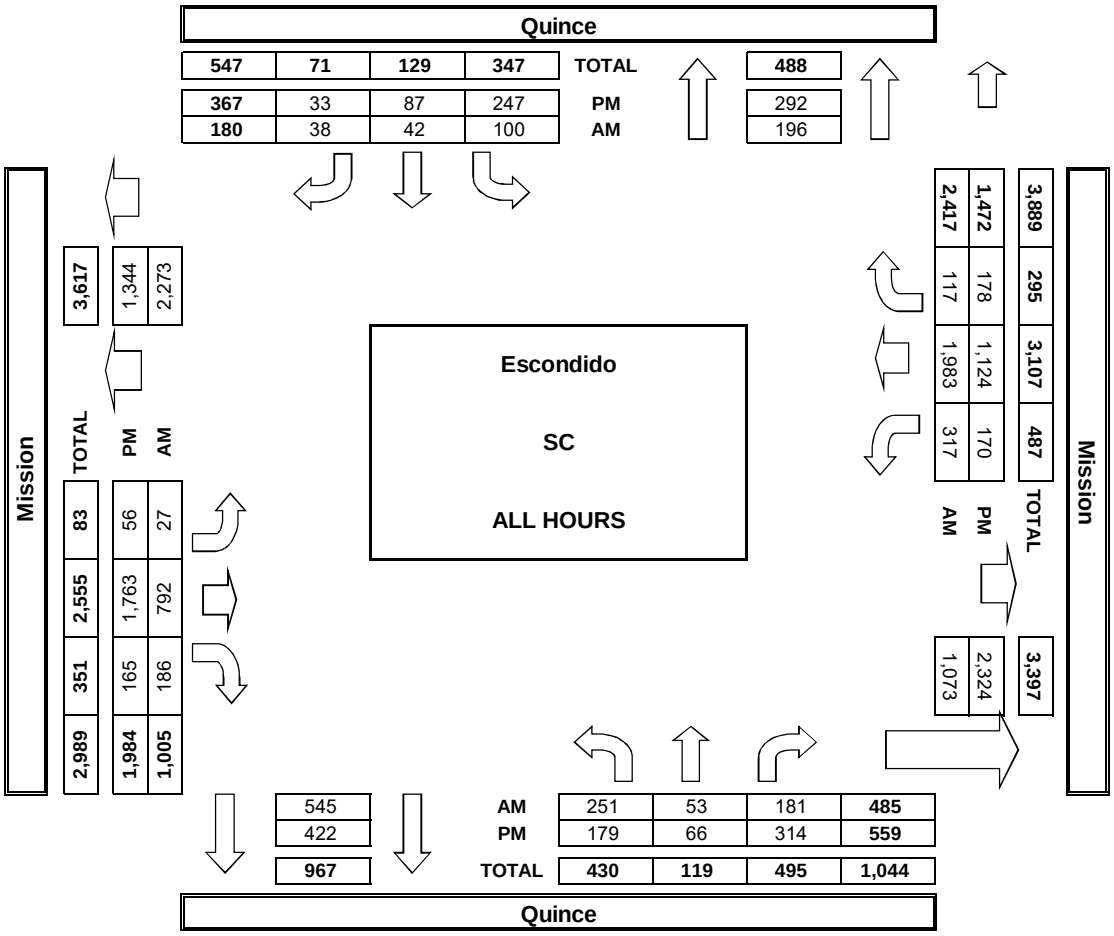
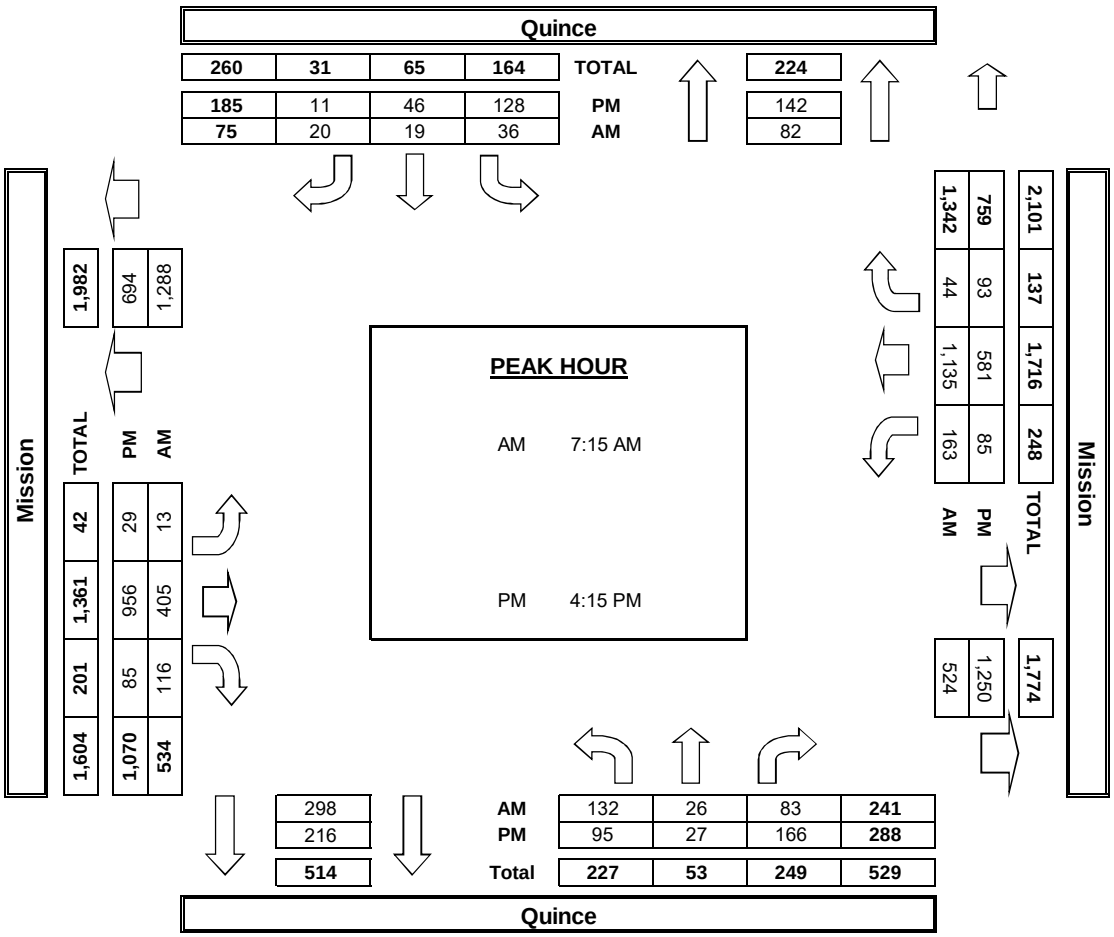
TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T218

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

DATE: Thu, Nov 7, 19

LOCATION: Escondido
NORTH & SOUTH: Metcalf
EAST & WEST: Mission

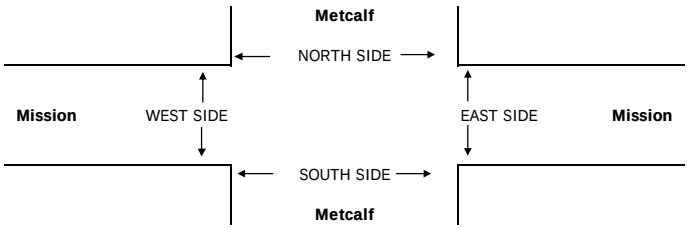
PROJECT #: SC
LOCATION #: 4
CONTROL: SIGNAL

NOTES:

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

Add U-Turns to Left Turns

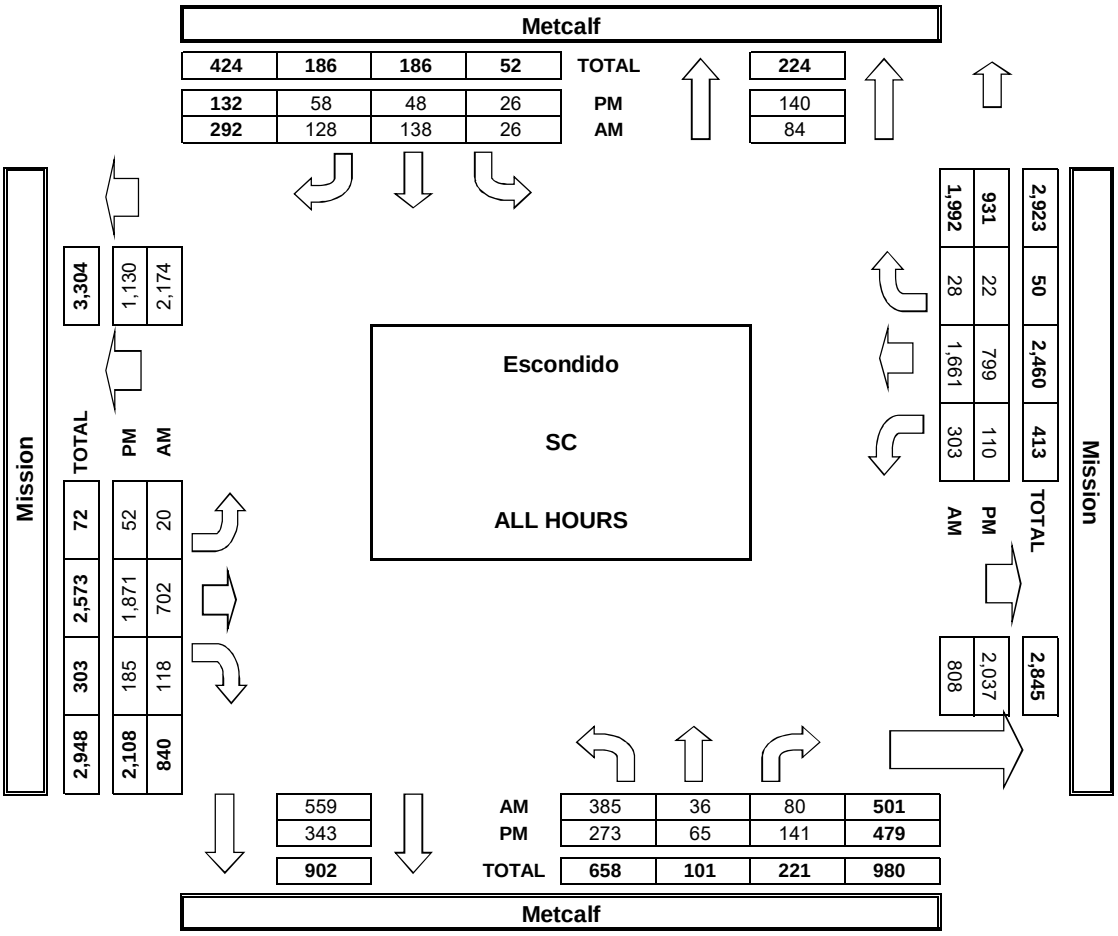
		NORTHBOUND (Metcalf)			SOUTHBOUND (Metcalf)			EASTBOUND (Mission)			WESTBOUND (Mission)				U-TURNS				
	LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	40	6	5	2	25	17	2	73	20	49	216	5	460	0	0	0	0	0
AM	7:15 AM	48	4	10	3	27	13	1	109	10	49	240	2	516	0	0	0	0	0
AM	7:30 AM	57	5	12	6	17	22	4	98	15	52	243	5	536	0	0	0	0	0
AM	7:45 AM	58	5	13	2	14	29	2	95	15	39	259	2	533	0	0	0	0	0
AM	8:00 AM	63	4	13	1	17	16	3	91	18	38	216	3	483	0	0	0	0	0
AM	8:15 AM	45	5	12	4	12	15	2	74	7	32	173	6	387	0	0	0	0	0
AM	8:30 AM	37	2	7	5	16	8	1	75	17	27	162	4	361	0	0	0	0	0
AM	8:45 AM	37	5	8	3	10	8	5	87	16	17	152	1	349	0	0	0	0	0
AM	VOLUMES	385	36	80	26	138	128	20	702	118	303	1,661	28	3,625	0	0	0	0	0
AM	APPROACH %	77%	7%	16%	9%	47%	44%	2%	84%	14%	15%	83%	1%						
AM	APP/DEPART	501	/	84	292	/	559	840	/	808	1,992	/	2,174	0					
AM	BEGIN PEAK HR		7:15 AM																
AM	VOLUMES	226	18	48	12	75	80	10	393	58	178	958	12	2,068					
AM	APPROACH %	77%	6%	16%	7%	45%	48%	2%	85%	13%	16%	83%	1%						
AM	PEAK HR FACTOR		0.913			0.928			0.960			0.957		0.965					
AM	APP/DEPART	292	/	40	167	/	311	461	/	453	1,148	/	1,264	0					
PM	4:00 PM	37	10	13	6	9	11	4	227	21	18	120	4	480	0	0	0	0	0
PM	4:15 PM	32	9	22	3	3	7	8	242	25	20	119	3	493	0	0	0	0	0
PM	4:30 PM	47	11	18	5	8	10	6	268	27	20	116	2	538	0	0	0	0	0
PM	4:45 PM	29	9	16	0	6	8	2	285	22	11	101	0	489	0	0	0	0	0
PM	5:00 PM	36	10	25	6	7	6	10	274	34	15	105	3	531	0	0	0	0	0
PM	5:15 PM	43	7	14	1	8	6	4	209	25	13	81	2	413	0	0	0	0	0
PM	5:30 PM	32	5	19	3	3	5	13	193	16	6	89	4	388	0	1	0	0	1
PM	5:45 PM	17	4	14	2	4	5	5	173	15	7	68	4	318	0	0	0	0	0
PM	VOLUMES	273	65	141	26	48	58	52	1,871	185	110	799	22	3,650	0	1	0	0	1
PM	APPROACH %	57%	14%	29%	20%	36%	44%	2%	89%	9%	12%	86%	2%						
PM	APP/DEPART	479	/	140	132	/	343	2,108	/	2,037	931	/	1,130	0					
PM	BEGIN PEAK HR		4:15 PM																
PM	VOLUMES	144	39	81	14	24	31	26	1,069	108	66	441	8	2,051					
PM	APPROACH %	55%	15%	31%	20%	35%	45%	2%	89%	9%	13%	86%	2%						
PM	PEAK HR FACTOR		0.868			0.750			0.946			0.907		0.953					
PM	APP/DEPART	264	/	73	69	/	198	1,203	/	1,164	515	/	616	0					

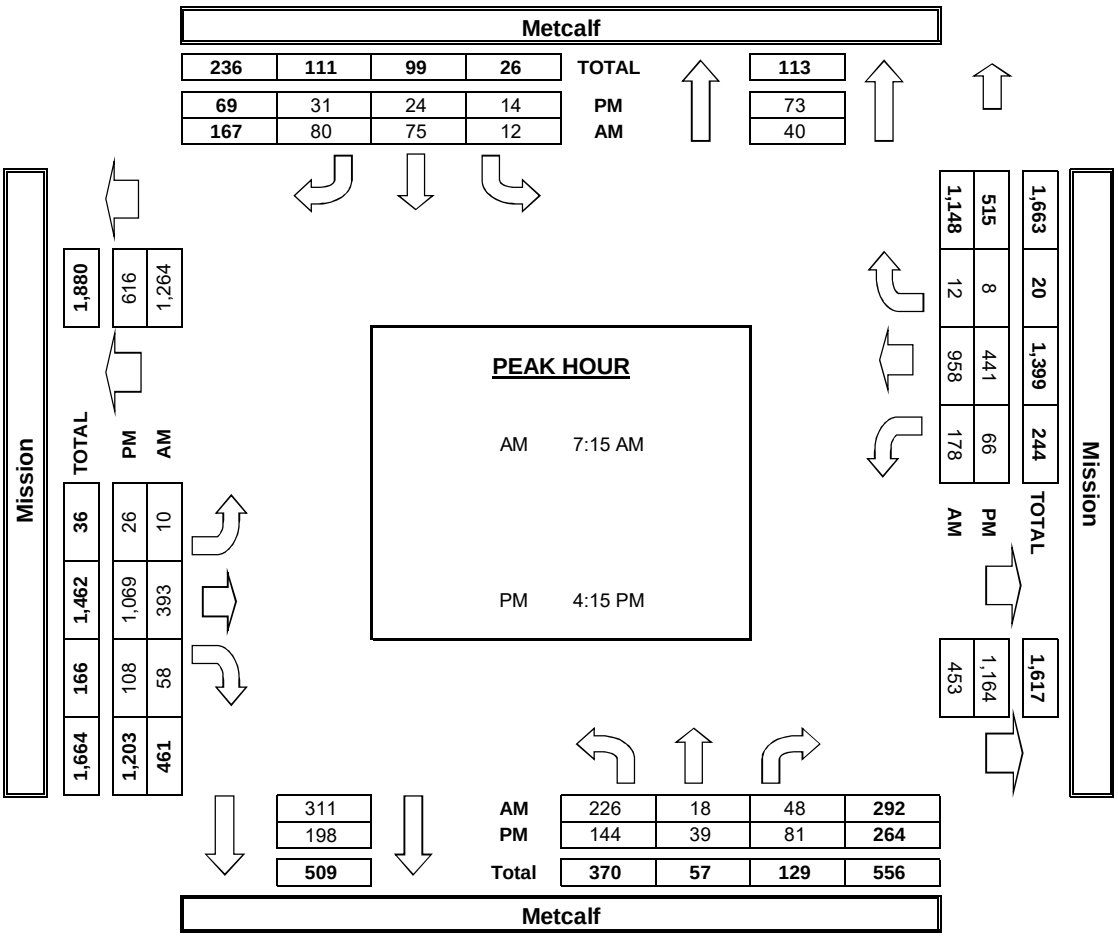


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	3	3	0	0	0	3	3	0	0	0	0	0
AM	7:15 AM	1	3	0	0	4	1	3	0	0	4	0	0	0	0	0
AM	7:30 AM	2	0	2	0	4	1	0	0	0	1	1	0	2	0	3
AM	7:45 AM	1	0	1	1	3	1	0	1	1	3	0	0	0	0	0
AM	8:00 AM	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0
AM	8:15 AM	2	0	0	1	3	1	0	0	1	2	1	0	0	0	1
AM	8:30 AM	1	1	0	0	2	0	1	0	0	1	1	0	0	0	1
AM	8:45 AM	1	3	0	1	5	1	2	0	0	3	0	1	0	1	2
AM	TOTAL	8	7	4	6	25	5	6	2	5	18	3	1	2	1	7
	AM BEGIN PEAK HR			7:15 AM			3	3	2	1	9					
PM	4:00 PM	0	0	2	0	2	0	0	2	0	2	0	0	0	0	0
PM	4:15 PM	1	1	1	0	3	0	1	0	0	1	1	0	1	0	2
PM	4:30 PM	1	0	1	0	2	1	0	1	0	2	0	0	0	0	0
PM	4:45 PM	0	1	1	0	2	0	0	1	0	1	0	1	0	0	1
PM	5:00 PM	2	1	0	1	4	0	0	0	1	1	2	1	0	0	3
PM	5:15 PM	1	1	1	1	4	1	0	1	0	2	0	1	0	1	2
PM	5:30 PM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2
PM	5:45 PM	0	3	0	0	3	0	2	0	0	2	0	1	0	0	1
PM	TOTAL	5	9	6	2	22	2	3	5	1	11	3	6	1	1	11
	PM BEGIN PEAK HR			4:15 PM			1	1	2	1	5					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION: Metcalf & Mission

Group Assignment: **4023**
Field Master Assignment: **NONE**
System Reference Number: **31**

N/S Street Name: **Metcalf**
E/W Street Name: **Mission**

Last Database Change: **5/14/2013 11:27**

Change Record					
Change	By	Date	Change	By	Date

Notes:

Drop Number	**4**	<C+0+0>
Zone Number		<C+0+1>
Area Number	**0**	<C+0+2>
Area Address	**31**	<C+0+3>
QuicNet Channel	**COM101:**	(QuicNet)

Communication Addresses

Manual Plan		<C+A+1>
Manual Offset		<C+B+1>

Manual Selection

Max Initial	**20**	<F+0+E>
Red Revert	**2.0**	<F+0+F>
All Red Start	**5.0**	<F+C+0>

Start / Revert Times

Row	Column Numbers ---->	Phase 1	2	3	4	5	6	7	8
	Phase Names ----->								
0	Ped Walk	0	8	0	8	0	8	0	8
1	Ped FDW	0	15	0	15	0	15	0	15
2	Min Green	3	4	3	4	3	4	3	4
3	Type 3 Limit	0	99	0	99	0	99	0	99
4	Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Veh Extension	0.5	2.5	0.5	2.5	0.5	2.5	0.5	2.5
6	Max Gap	0.5	2.5	0.5	2.5	0.5	2.5	0.5	2.5
7	Min Gap	0.5	2.5	0.5	2.5	0.5	2.5	0.5	2.5
8	Max Limit	17	40	17	40	17	40	17	40
9	Max Limit 2	30	70	30	70	30	70	30	70
A	- - - - - -	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0
D	Reduce Every	1.0	0.0	1.0	0.0	1.0	0.0	1.0	0.0
E	Yellow Change	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
F	Red Clear	0.0	0.5	0.0	0.5	0.0	0.5	0.0	0.5

Phase Timing - Bank 1 <F Page>

Row	E	
0	RR-1 Delay	0
1	RR-1 Clear	10
2	EV-A Delay	0
3	EV-A Clear	1
4	EV-B Delay	0
5	EV-B Clear	1
6	EV-C Delay	0
7	EV-C Clear	1
8	EV-D Delay	0
9	EV-D Clear	1
A	RR-2 Delay	0
B	RR-2 Clear	10
C	*View EV Delay*	- - -
D	*View EV Clear*	- - -
E	*View RR Delay*	- - -
F	*View RR Clear*	- - -

Preempt Timing

Row	F	
0	Permit	_2_4_6_8
1	Red Lock	_____
2	Yellow Lock	_____
3	Min Recall	_____
4	Ped Recall	_____
5	*View Set Peds*	- - - - -
6	Rest In Walk	_____
7	Red Rest	_____
8	Dual Entry	_2_4_6_8
9	Max Recall	_____
A	Soft Recall	_2___6__
B	Max 2	_____
C	Cond. Service	_____
D	Man Cntrl Calls	_____
E	Yellow Start	___4___8
F	First Phases	_2___6__

Phase Functions <F Page>

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Row	Column Numbers ----> / Plan Name ---->	Plan 1	2	3	4	5	6	7	8	9	Row
0	Cycle Length	100	120	85	100	0	0	0	0	0	0
1	Phase 1 - ForceOff	0	0	0	0	0	0	0	0	0	1
2	Phase 2 - ForceOff	0	0	0	0	0	0	0	0	0	2
3	Phase 3 - ForceOff	0	0	0	0	0	0	0	0	0	3
4	Phase 4 - ForceOff	53	38	20	34	0	0	0	0	0	4
5	Phase 5 - ForceOff	0	0	0	0	0	0	0	0	0	5
6	Phase 6 - ForceOff	0	0	0	0	0	0	0	0	0	6
7	Phase 7 - ForceOff	0	0	0	0	0	0	0	0	0	7
8	Phase 8 - ForceOff	53	38	20	34	0	0	0	0	0	8
9	Ring Offset	0	0	0	0	0	0	0	0	0	9
A	Offset 1	9	90	57	69	0	0	0	0	0	A
B	Offset 2	0	0	0	0	0	0	0	0	0	B
C	Offset 3	0	0	0	0	0	0	0	0	0	C
D	Permissive	12	12	12	12	0	0	0	0	0	D
E	Hold Release	255	255	255	255	0	0	0	0	0	E
F	Zone Offset	0	0	0	0	0	0	0	0	0	F

(* = Coordination Recall)

Row		E	Row
0			0
1	Plan 1 - Sync	_2___6__	1
2	Plan 2 - Sync	_2___6__	2
3	Plan 3 - Sync	_2___6__	3
4	Plan 4 - Sync	_2___6__	4
5	Plan 5 - Sync	_2___6__	5
6	Plan 6 - Sync	_2___6__	6
7	Plan 7 - Sync	_2___6__	7
8	Plan 8 - Sync	_2___6__	8
9	Plan 9 - Sync	_____	9
A	Coord Ped *	_____	A
B	NEMA Hold	_____	B
C			C
D			D
E			E
F			F

Sync Phases <C Page>

Row	Column Numbers ---->	E	Row
0	Exclusive Phases	_____	0
1	RR-1 Clear Phases	_____	1
2	RR-2 Clear Phases	_____	2
3	RR-2 Limited Service	_____	3
4	Prot / Perm Phases	_____	4
5	Overlap A - Green Omit	_____	5
6	Overlap B - Green Omit	_____	6
7	Overlap C - Green Omit	_____	7
8	Overlap D - Green Omit	_____	8
9	Overlap Yellow Flash	_____	9
A	EV-A Phases	_2_____	A
B	EV-B Phases	_____	B
C	EV-C Phases	___4____	C
D	EV-D Phases	_____	D
E	Extra 1 Config. Bits	1_3_____	E
F	IC Select (Interconnect)	_2_____	F

Configuration <E Page>

Coordination <C Page>

	F
RR Overlap A - Phases	_____
RR Overlap B - Phases	_____
RR Overlap C - Phases	_____
RR Overlap D - Phases	_____
Ped 2P	_2_____
Ped 6P	_____
Ped 4P	___4____
Ped 8P	_____
Yellow Flash Phases	_____
Overlap A - Phases	_____
Overlap B - Phases	_____
Overlap C - Phases	_____
Overlap D - Phases	_____
Restricted Phases	_____
Assign 5 Outputs	_____

Configuration <E Page>

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 =
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

Assign 5 Outputs
(Ped Loadswitch Yellows)
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Force-Off Adjust	0

Coord Force-Off Adjust for Ped Service <C+D+F>

Transition Type	1

TBC Transition <C+D+D>

Transition Type
0 = Shortway
Non-zero = Lengthen

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Row		F	Row
0	Free Lag	_2_4_6_8	0
1	Plan 1 - Lag	_2_4_6_8	1
2	Plan 2 - Lag	_2_4_6_8	2
3	Plan 3 - Lag	_2_4_6_8	3
4	Plan 4 - Lag	_2_4_6_8	4
5	Plan 5 - Lag	_2_4_6_8	5
6	Plan 6 - Lag	_2_4_6_8	6
7	Plan 7 - Lag	_2_4_6_8	7
8	Plan 8 - Lag	_2_4_6_8	8
9	Plan 9 - Lag	_2_4_6_8	9
A	Coord Max *	_____	A
B	Coord Lag *	_____	B
C			C
D			D
E			E
F			F

Lag Phases <C Page>

TOD Coordination
<9 Key with C+D+9=0>

Row	Time	Plan	Offset	Day of Week
0	06:30	1	A	_23456_
1	09:00	E	A	_23456_
2	11:00	4	A	_23456_
3	14:00	2	A	_23456_
4	19:00	E	A	_23456_
5	00:00	0	0	_____
6	00:00	0	A	_____
7	00:00	0	A	_____
8	00:00	0	A	_____
9	00:00	0	A	_____
A	00:00	0	A	_____
B	00:00	0	A	_____
C	00:00	0	A	_____
D	00:00	0	A	_____
E	00:00	0	A	_____
F	00:00	0	A	_____

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Offset Select
A = Offset A
B = Offset B
C = Offset C

TOD Function
<7 Key>

Time	Funct.	Day of Week
00:00	E	1234567
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Column F Phases/Bits
_____78
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

<D Page>

Holiday # 1
TOD Coordination
<9 Key with C+D+9=1>

Time	Plan	Offset	Day of Week
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____

Month Select
1 = January
2 = February
3 = March
4 = April
5 = May
6 = June
7 = July
8 = August
9 = September
A = October
B = November
C = December

Holiday # 2
TOD Coordination
<9 Key with C+D+9=2>

Time	Plan	Offset	Day of Week
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____

Holiday # 3
TOD Coordination
<9 Key with C+D+9=3>

Time	Plan	Offset	Day of Week	Row
00:00	0	0	_____	0
00:00	0	0	_____	1
00:00	0	0	_____	2
00:00	0	0	_____	3
00:00	0	0	_____	4
00:00	0	0	_____	5
00:00	0	0	_____	6
00:00	0	0	_____	7
00:00	0	0	_____	8
00:00	0	0	_____	9
00:00	0	0	_____	A
00:00	0	0	_____	B
00:00	0	0	_____	C
00:00	0	0	_____	D
00:00	0	0	_____	E
00:00	0	0	_____	F

Holiday Dates
<8 Key>

Row		Day	Year	Month	Day of Week
A	Holiday # 1 Date	0	0	0	_____
B	Holiday # 2 Date	0	0	0	_____
C	Holiday # 3 Date	0	0	0	_____

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		I-1	14
1	0.0	0.0		I-2U	1
2	0.0	0.0		I-2L	5
3	0.0	0.0		I-3U	21
4	0.0	0.0		I-3L	25
5	0.0	0.0		I-4	9
6	0.0	0.0		I-5	16
7	0.0	0.0		I-6U	3
8	0.0	0.0		I-6L	7
9	0.0	0.0		I-7U	23
A	0.0	0.0		I-7L	27
B	0.0	0.0		I-8	11
C	0.0	0.0		I-9U	18
D	0.0	0.0		I-9L	20
E	- - -	- - -	- - -	- - -	- - -
F	- - -	- - -	- - -	- - -	- - -

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		J-1	13
1	0.0	0.0		J-2U	2
2	0.0	0.0		J-2L	6
3	0.0	0.0		J-3U	22
4	0.0	0.0		J-3L	26
5	0.0	0.0		J-4	10
6	0.0	0.0		J-5	15
7	0.0	0.0		J-6U	4
8	0.0	0.0		J-6L	8
9	0.0	0.0		J-7U	24
A	0.0	0.0		J-7L	28
B	0.0	0.0		J-8	12
C	0.0	0.0		J-9U	17
D	0.0	0.0		J-9L	19
E	- - -	- - -	- - -	- - -	- - -
F	- - -	- - -	- - -	- - -	- - -

Detector Delay & Carryover <D Page>

Row		9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
A	Overlap A	0.0	0.0	0.0	0
B	Overlap B	0.0	0.0	0.0	0
C	Overlap C	0.0	0.0	0.0	0
D	Overlap D	0.0	0.0	0.0	0

Overlap Timing <F Page> <D Page>

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Note: Initialized data is for all detectors to be active (ie, all flag bits set). A Detector which is "not flagged", will not be active as a Phase Detector, and WILL NOT call or extend its associated phase. It will still function as a System Detector.

Row		0 Detector Number
0		
1	System Det. # 1	1
2	System Det. # 2	21
3	System Det. # 3	2
4	System Det. # 4	22
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (minutes)	5	<D+A+E>
Max OFF (minutes)	60	<D+A+F>

Detector Failure Monitor

Phase Number	0	<F+C+1>
Time Before Yellow	0.0	<F+C+3>

Advance Warning Beacon - Sign 1

Phase Number	0	<F+D+1>
Time Before Yellow	0.0	<F+D+3>

Advance Warning Beacon - Sign 2

Long Failure	0.0	<F+0+6>
Short Failure	0.0	<F+0+7>

Power Cycle Correction (Default = 0.5)

Disable Parity	0	<D+B+0>

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Row	Column Numbers ---->	Phase 1	2	3	4	5	6	7	8	Row
	Phase Names ---->									
0	Ped Walk	0	7	0	7	0	7	0	7	0
1	Ped FDW	0	10	0	10	0	10	0	10	1
2	Min Green	3	7	3	7	3	7	3	7	2
3	Type 3 Limit	0	0	0	0	0	0	0	0	3
4	Added Initial	0.0	1.2	0.0	1.2	0.0	1.2	0.0	1.2	4
5	Veh Extension	0.5	3.5	0.5	3.5	0.5	3.5	0.5	3.5	5
6	Max Gap	0.5	5.0	0.5	5.0	0.5	5.0	0.5	5.0	6
7	Min Gap	0.5	2.0	0.5	2.0	0.5	2.0	0.5	2.0	7
8	Max Limit	17	40	17	40	17	40	17	40	8
9	Max Limit 2	30	70	30	70	30	70	30	70	9
A	- - - - - -	0	0	0	0	0	0	0	0	A
B	Call To Phase	0	0	0	0	0	0	0	0	B
C	Reduce By	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	C
D	Reduce Every	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	D
E	Yellow Change	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0	E
F	Red Clear	0.0	0.5	0.0	1.0	0.0	0.5	0.0	1.0	F

Row	Column Numbers ---->	Phase 1	2	3	4	5	6	7	8	Row
	Phase Names ---->									
0	Ped Walk	0	7	0	7	0	7	0	7	0
1	Ped FDW	0	10	0	10	0	10	0	10	1
2	Min Green	3	7	3	7	3	7	3	7	2
3	Type 3 Limit	0	0	0	0	0	0	0	0	3
4	Added Initial	0.0	1.2	0.0	1.2	0.0	1.2	0.0	1.2	4
5	Veh Extension	0.5	3.5	0.5	3.5	0.5	3.5	0.5	3.5	5
6	Max Gap	0.5	5.0	0.5	5.0	0.5	5.0	0.5	5.0	6
7	Min Gap	0.5	2.0	0.5	2.0	0.5	2.0	0.5	2.0	7
8	Max Limit	17	40	17	40	17	40	17	40	8
9	Max Limit 2	30	70	30	70	30	70	30	70	9
A	- - - - - -	0	0	0	0	0	0	0	0	A
B	Call To Phase	0	0	0	0	0	0	0	0	B
C	Reduce By	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	C
D	Reduce Every	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	D
E	Yellow Change	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0	E
F	Red Clear	0.0	0.5	0.0	1.0	0.0	0.5	0.0	1.0	F

Phase Timing - Bank 2 <F Page>

Phase Timing - Bank 3 <F Page>

Row		7 Time	8 Dwell	9 Hold	A Advance	B Force Off	C Vehicle Call	D Permit Phases	E Ped Omit	F Output	Row
0	Delay Only --->	0	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	0
1		0	0								1
2		0	0								2
3		0	0								3
4		0	0								4
5		0	0								5
6		0	0								6
7		0	0								7
8		0	0								8
9	Limited Service	0	0								9
A	Int. --->	- - -	0								A
B		0	0								B
C		0	0								C
D		0	0								D
E		0	0								E
F		0	0								F

<--- Limited Service Interval
(Set Dwell = 255)

Special Event Schedule <C Page with F+9+F=22>

INTERSECTION: Mission & Quince

Group Assignment: **4001**
Field Master Assignment: **NONE**
System Reference Number: **37**

N/S Street Name: **Quince**
E/W Street Name: **Mission**

Last Database Change: **12/14/2019 11:51**

Change Record					
Change	By	Date	Change	By	Date

Notes:

Drop Number	**6**	<C+0+0>
Zone Number		<C+0+1>
Area Number	**0**	<C+0+2>
Area Address	**37**	<C+0+3>
QuicNet Channel	**COM101:**	(QuicNet)

Communication Addresses

Manual Plan		<C+A+1>
Manual Offset		<C+B+1>

Manual Selection

Max Initial	**20**	<F+0+E>
Red Revert	**2.0**	<F+0+F>
All Red Start	**5.0**	<F+C+0>

Start / Revert Times

Row	Column Numbers ----> / Phase Names ---->	Phase 1	2	3	4	5	6	7	8
0	Ped Walk	0	7	0	6	0	7	0	7
1	Ped FDW	0	20	0	24	0	14	0	20
2	Min Green	7	7	8	8	8	6	8	8
3	Type 3 Limit	0	99	0	99	0	99	0	99
4	Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Veh Extension	3.5	5.0	3.5	3.5	3.5	5.0	3.5	3.5
6	Max Gap	3.5	5.0	3.5	3.5	3.5	5.0	3.5	3.5
7	Min Gap	3.5	5.0	3.5	3.5	3.5	5.0	3.5	3.5
8	Max Limit	40	75	30	45	20	85	35	40
9	Max Limit 2	30	85	30	40	30	85	30	40
A	- - - - - -	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D	Reduce Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	Yellow Change	3.6	4.4	3.6	4.1	3.6	4.4	3.6	4.1
F	Red Clear	1.0	1.0	0.5	1.0	0.5	1.0	0.5	1.0

Phase Timing - Bank 1 <F Page>

Row	E	
0	RR-1 Delay	0
1	RR-1 Clear	10
2	EV-A Delay	0
3	EV-A Clear	1
4	EV-B Delay	0
5	EV-B Clear	1
6	EV-C Delay	0
7	EV-C Clear	1
8	EV-D Delay	0
9	EV-D Clear	1
A	RR-2 Delay	0
B	RR-2 Clear	10
C	*View EV Delay*	- - -
D	*View EV Clear*	- - -
E	*View RR Delay*	- - -
F	*View RR Clear*	- - -

Preempt Timing

Row	F	
0	Permit	**12345678**
1	Red Lock	**1_3_5_7_**
2	Yellow Lock	_____
3	Min Recall	_____
4	Ped Recall	_____
5	*View Set Peds*	**- - - - -**
6	Rest In Walk	_____
7	Red Rest	_____
8	Dual Entry	_____
9	Max Recall	_____
A	Soft Recall	**_2___6__**
B	Max 2	_____
C	Cond. Service	_____
D	Man Cntrl Calls	_____
E	Yellow Start	**___4___8**
F	First Phases	**_2___6__**

Phase Functions <F Page>

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

INTERSECTION: Mission & Quince

(* = Coordination Recall)

Row	Column Numbers ---->	Plan 1	2	3	4	5	6	7	8	9	Row		E	Row
	Plan Name ---->													
0	Cycle Length	0	120	135	160	120	135	135	160	120	0			0
1	Phase 1 - ForceOff	0	87	87	98	81	78	83	88	76	1	Plan 1 - Sync	6	1
2	Phase 2 - ForceOff	0	0	0	0	0	0	0	0	0	2	Plan 2 - Sync	2 6	2
3	Phase 3 - ForceOff	0	23	20	26	19	25	27	30	20	3	Plan 3 - Sync	2 6	3
4	Phase 4 - ForceOff	0	58	55	61	61	60	62	65	55	4	Plan 4 - Sync	2 6	4
5	Phase 5 - ForceOff	0	71	69	78	75	76	80	83	76	5	Plan 5 - Sync	2 6	5
6	Phase 6 - ForceOff	0	0	0	0	0	0	0	0	0	6	Plan 6 - Sync	2 6	6
7	Phase 7 - ForceOff	0	21	17	24	27	28	31	33	23	7	Plan 7 - Sync	2 6	7
8	Phase 8 - ForceOff	0	58	55	61	61	60	62	65	55	8	Plan 8 - Sync	2 6	8
9	Ring Offset	0	0	0	0	0	0	0	0	0	9	Plan 9 - Sync	2 6	9
A	Offset 1	0	87	81	109	99	78	115	90	84	A	Coord Ped *		A
B	Offset 2	0	0	0	0	0	0	0	0	0	B	NEMA Hold		B
C	Offset 3	0	0	0	0	0	0	0	0	0	C			C
D	Permissive	0	10	10	10	10	10	10	10	12	D			D
E	Hold Release	0	255	255	255	255	255	255	255	255	E			E
F	Zone Offset	0	0	0	0	0	0	0	0	0	F			F

Coordination <C Page>

Row	Column Numbers ---->	E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4 7
C	EV-C Phases	1 6
D	EV-D Phases	3 8
E	Extra 1 Config. Bits	1 3
F	IC Select (Interconnect)	2

Configuration <E Page>

	F
RR Overlap A - Phases	
RR Overlap B - Phases	
RR Overlap C - Phases	
RR Overlap D - Phases	
Ped 2P	2
Ped 6P	6
Ped 4P	4
Ped 8P	8
Yellow Flash Phases	
Overlap A - Phases	
Overlap B - Phases	
Overlap C - Phases	
Overlap D - Phases	
Restricted Phases	
Assign 5 Outputs	

Configuration <E Page>

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 =
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

Assign 5 Outputs
(Ped Loadswitch Yellows)
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Force-Off Adjust	0

Coord Force-Off Adjust for Ped Service <C+D+F>

Transition Type	0

TBC Transition <C+D+D>

Transition Type
0 = Shortway
Non-zero = Lengthen

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Sync Phases <C Page>

Row		F	Row
0	Free Lag	2 4 6 8	0
1	Plan 1 - Lag	2 4 6 8	1
2	Plan 2 - Lag	2 4 6 8	2
3	Plan 3 - Lag	2 4 6 8	3
4	Plan 4 - Lag	2 4 6 8	4
5	Plan 5 - Lag	2 4 6 8	5
6	Plan 6 - Lag	2 4 6 8	6
7	Plan 7 - Lag	2 4 6 8	7
8	Plan 8 - Lag	2 4 6 8	8
9	Plan 9 - Lag	2 4 6 8	9
A	Coord Max *		A
B	Coord Lag *		B
C			C
D			D
E			E
F			F

Lag Phases <C Page>

TOD Coordination
<9 Key with C+D+9=0>

Row	Time	Plan	Offset	Day of Week
0	06:30	2	A	_23456_
1	09:00	5	A	_23456_
2	13:00	5	A	_23456_
3	16:00	6	A	_23456_
4	21:30	E	A	_23456_
5	08:00	5	A	1_____
6	18:00	E	A	1_____
7	07:30	5	A	_____7
8	17:00	E	A	_____7
9	00:00	0	A	_____
A	00:00	0	A	_____
B	00:00	0	A	_____
C	00:00	0	A	_____
D	00:00	0	A	_____
E	00:00	0	A	_____
F	00:00	0	A	_____

TOD Function
<7 Key>

Time	Funct.	Day of Week
00:00	E	1234567
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____

<D Page>

Column F Phases/Bits
_____78
_____
_____
_____
_____
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_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Holiday # 1
TOD Coordination
<9 Key with C+D+9=1>

Time	Plan	Offset	Day of Week
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____

Holiday # 2
TOD Coordination
<9 Key with C+D+9=2>

Time	Plan	Offset	Day of Week
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____

Holiday # 3
TOD Coordination
<9 Key with C+D+9=3>

Time	Plan	Offset	Day of Week	Row
00:00	0	0	_____	0
00:00	0	0	_____	1
00:00	0	0	_____	2
00:00	0	0	_____	3
00:00	0	0	_____	4
00:00	0	0	_____	5
00:00	0	0	_____	6
00:00	0	0	_____	7
00:00	0	0	_____	8
00:00	0	0	_____	9
00:00	0	0	_____	A
00:00	0	0	_____	B
00:00	0	0	_____	C
00:00	0	0	_____	D
00:00	0	0	_____	E
00:00	0	0	_____	F

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Offset Select
A = Offset A
B = Offset B
C = Offset C

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Month Select
1 = January
2 = February
3 = March
4 = April
5 = May
6 = June
7 = July
8 = August
9 = September
A = October
B = November
C = December

Row		Day	Year	Month	Day of Week
A	Holiday # 1 Date	0	0	0	_____
B	Holiday # 2 Date	0	0	0	_____
C	Holiday # 3 Date	0	0	0	_____

Holiday Dates
<8 Key>

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		I-1	14
1	0.0	0.0		I-2U	1
2	0.0	0.0		I-2L	5
3	0.0	0.0		I-3U	21
4	0.0	0.0		I-3L	25
5	0.0	0.0		I-4	9
6	0.0	0.0		I-5	16
7	0.0	0.0		I-6U	3
8	0.0	0.0		I-6L	7
9	0.0	0.0		I-7U	23
A	0.0	0.0		I-7L	27
B	0.0	0.0		I-8	11
C	0.0	0.0		I-9U	18
D	0.0	0.0		I-9L	20
E	- - -	- - -	- - -	- - -	- - -
F	- - -	- - -	- - -	- - -	- - -

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		J-1	13
1	0.0	0.0		J-2U	2
2	0.0	0.0		J-2L	6
3	0.0	0.0		J-3U	22
4	0.0	0.0		J-3L	26
5	0.0	0.0		J-4	10
6	0.0	0.0		J-5	15
7	0.0	0.0		J-6U	4
8	0.0	0.0		J-6L	8
9	0.0	0.0		J-7U	24
A	0.0	0.0		J-7L	28
B	0.0	0.0		J-8	12
C	0.0	0.0		J-9U	17
D	0.0	0.0		J-9L	19
E	- - -	- - -	- - -	- - -	- - -
F	- - -	- - -	- - -	- - -	- - -

Detector Delay & Carryover <D Page>

Row		9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
A	Overlap A	0.0	0.0	0.0	0
B	Overlap B	0.0	0.0	0.0	0
C	Overlap C	0.0	0.0	0.0	0
D	Overlap D	0.0	0.0	0.0	0

Overlap Timing <F Page> <D Page>

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Note: Initialized data is for all detectors to be active (ie, all flag bits set). A Detector which is "not flagged", will not be active as a Phase Detector, and WILL NOT call or extend its associated phase. It will still function as a System Detector.

Row		0 Detector Number
0		
1	System Det. # 1	1
2	System Det. # 2	21
3	System Det. # 3	2
4	System Det. # 4	22
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (minutes)	5	<D+A+E>
Max OFF (minutes)	60	<D+A+F>

Detector Failure Monitor

Phase Number	0	<F+C+1>
Time Before Yellow	0.0	<F+C+3>

Advance Warning Beacon - Sign 1

Phase Number	0	<F+D+1>
Time Before Yellow	0.0	<F+D+3>

Advance Warning Beacon - Sign 2

Long Failure	0.0	<F+0+6>
Short Failure	0.0	<F+0+7>

Power Cycle Correction (Default = 0.5)

Disable Parity	0	<D+B+0>

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

		Phase							
Row	*Column Numbers ---->*	1	2	3	4	5	6	7	8
	Phase Names ---->								
0	Ped Walk	0	0	0	0	0	0	0	0
1	Ped FDW	0	0	0	0	0	0	0	0
2	Min Green	0	0	0	0	0	0	0	0
3	Type 3 Limit	0	0	0	0	0	0	0	0
4	Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Veh Extension	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	Max Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	Max Limit	0	0	0	0	0	0	0	0
9	Max Limit 2	0	0	0	0	0	0	0	0
A	- - - - - -	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D	Reduce Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	Yellow Change	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
F	Red Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

		Phase							
Column Numbers ---->		1	2	3	4	5	6	7	8
Phase Names ---->	Row								
Ped Walk	0	0	0	0	0	0	0	0	0
Ped FDW	1	0	0	0	0	0	0	0	0
Min Green	2	0	0	0	0	0	0	0	0
Type 3 Limit	3	0	0	0	0	0	0	0	0
Added Initial	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Veh Extension	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Gap	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Limit	8	0	0	0	0	0	0	0	0
Max Limit 2	9	0	0	0	0	0	0	0	0
- - - - - -	A	0	0	0	0	0	0	0	0
Call To Phase	B	0	0	0	0	0	0	0	0
Reduce By	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Every	D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow Change	E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	F	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phase Timing - Bank 2 <F Page>

Phase Timing - Bank 3 <F Page>

		7	8	9	A	B	C	D	E	F	
Row		Time	Dwell	Hold	Advance	Force Off	Vehicle Call	Permit Phases	Ped Omit	Output	Row
0	Delay Only --->	0	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	0
1		0	0								1
2		0	0								2
3		0	0								3
4		0	0								4
5		0	0								5
6		0	0								6
7		0	0								7
8		0	0								8
9	Limited Service	0	0								9
A	Int. --->	- - -	0								A
B		0	0								B
C		0	0								C
D		0	0								D
E		0	0								E
F		0	0								F

<--- Limited Service Interval
(Set Dwell = 255)

Special Event Schedule

<C Page with F+9+F=22>

INTERSECTION: Mission & Rock Springs

Group Assignment: **4023**
Field Master Assignment: **NONE**
System Reference Number: **34**

N/S Street Name: **Rock Springs**
E/W Street Name: **Mission**

Last Database Change: **1/3/2019 13:37**

Change Record					
Change	By	Date	Change	By	Date

Notes:

Drop Number	**5**	<C+0+0>
Zone Number		<C+0+1>
Area Number	**0**	<C+0+2>
Area Address	**34**	<C+0+3>
QuicNet Channel	**COM101:**	(QuicNet)

Communication Addresses

Manual Plan		<C+A+1>
Manual Offset		<C+B+1>

Manual Selection

Max Initial	**20**	<F+0+E>
Red Revert	**2.0**	<F+0+F>
All Red Start	**5.0**	<F+C+0>

Start / Revert Times

Row	Column Numbers ----> / Phase Names ---->	Phase 1	2	3	4	5	6	7	8
0	Ped Walk	0	6	0	6	0	6	0	6
1	Ped FDW	0	18	0	18	0	18	0	18
2	Min Green	4	4	0	4	4	4	0	4
3	Type 3 Limit	0	99	0	99	0	99	0	99
4	Added Initial	0.0	1.5	0.0	0.0	0.0	1.5	0.0	0.0
5	Veh Extension	2.0	3.5	0.0	2.5	2.0	3.5	0.0	2.5
6	Max Gap	2.0	5.0	0.0	2.5	2.0	5.0	0.0	2.5
7	Min Gap	2.0	2.5	0.0	2.5	2.0	2.5	0.0	2.5
8	Max Limit	20	50	0	40	20	50	0	40
9	Max Limit 2	30	70	0	70	30	70	0	70
A	- - - - - -	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D	Reduce Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	Yellow Change	3.5	4.0	0.0	4.0	3.5	4.0	0.0	4.0
F	Red Clear	0.5	0.5	0.0	0.5	0.5	0.5	0.0	0.5

Phase Timing - Bank 1 <F Page>

Row	E	
0	RR-1 Delay	0
1	RR-1 Clear	10
2	EV-A Delay	0
3	EV-A Clear	1
4	EV-B Delay	0
5	EV-B Clear	1
6	EV-C Delay	0
7	EV-C Clear	1
8	EV-D Delay	0
9	EV-D Clear	1
A	RR-2 Delay	0
B	RR-2 Clear	10
C	*View EV Delay*	- - -
D	*View EV Clear*	- - -
E	*View RR Delay*	- - -
F	*View RR Clear*	- - -

Preempt Timing

Row	F	
0	Permit	12_456_8
1	Red Lock	1___5___
2	Yellow Lock	_____
3	Min Recall	_____
4	Ped Recall	_____
5	*View Set Peds*	- - - - -
6	Rest In Walk	_____
7	Red Rest	_____
8	Dual Entry	___4___8
9	Max Recall	_____
A	Soft Recall	_2___6__
B	Max 2	_____
C	Cond. Service	_____
D	Man Cntrl Calls	_____
E	Yellow Start	___4___8
F	First Phases	_2___6__

Phase Functions <F Page>

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

INTERSECTION: Mission & Rock Springs

(* = Coordination Recall)

Row	Column Numbers ---->	Plan 1	2	3	4	5	6	7	8	9	Row
	Plan Name ---->										
0	Cycle Length	100	120	85	100	0	0	0	0	120	0
1	Phase 1 - ForceOff	14	17	14	20	0	0	0	0	20	1
2	Phase 2 - ForceOff	0	0	0	0	0	0	0	0	0	2
3	Phase 3 - ForceOff	0	0	0	0	0	0	0	0	0	3
4	Phase 4 - ForceOff	53	63	39	57	0	0	0	0	50	4
5	Phase 5 - ForceOff	66	92	54	75	0	0	0	0	70	5
6	Phase 6 - ForceOff	14	17	14	20	0	0	0	0	19	6
7	Phase 7 - ForceOff	0	0	0	0	0	0	0	0	0	7
8	Phase 8 - ForceOff	53	63	39	57	0	0	0	0	50	8
9	Ring Offset	0	0	0	0	0	0	0	0	0	9
A	Offset 1	93	117	4	4	0	0	0	0	101	A
B	Offset 2	0	0	0	0	0	0	0	0	0	B
C	Offset 3	0	0	0	0	0	0	0	0	0	C
D	Permissive	16	16	16	17	12	0	0	0	21	D
E	Hold Release	255	255	255	255	255	0	0	0	255	E
F	Zone Offset	0	0	0	0	0	0	0	0	0	F

Row		E	Row
			0
1	Plan 1 - Sync	_2___6__	1
2	Plan 2 - Sync	_2___6__	2
3	Plan 3 - Sync	_2___6__	3
4	Plan 4 - Sync	_2_____	4
5	Plan 5 - Sync	_2___6__	5
6	Plan 6 - Sync	_2___6__	6
7	Plan 7 - Sync	_2___6__	7
8	Plan 8 - Sync	_2___6__	8
9	Plan 9 - Sync	_2___6__	9
A	Coord Ped *	_____	A
B	NEMA Hold	_____	B
C			C
D			D
E			E
F			F

Sync Phases <C Page>

Row	Column Numbers ---->	E
0	Exclusive Phases	_____
1	RR-1 Clear Phases	_____
2	RR-2 Clear Phases	_____
3	RR-2 Limited Service	_____
4	Prot / Perm Phases	_____
5	Overlap A - Green Omit	_____
6	Overlap B - Green Omit	_____
7	Overlap C - Green Omit	_____
8	Overlap D - Green Omit	_____
9	Overlap Yellow Flash	_____
A	EV-A Phases	_2__5___
B	EV-B Phases	___4___8
C	EV-C Phases	1____6__
D	EV-D Phases	___4___8
E	Extra 1 Config. Bits	1_3_____
F	IC Select (Interconnect)	_2_____

Configuration <E Page>

	F
RR Overlap A - Phases	_____
RR Overlap B - Phases	_____
RR Overlap C - Phases	_____
RR Overlap D - Phases	_____
Ped 2P	_2_____
Ped 6P	_____6__
Ped 4P	___4____
Ped 8P	_____8
Yellow Flash Phases	_____
Overlap A - Phases	_____
Overlap B - Phases	_____
Overlap C - Phases	_____
Overlap D - Phases	_____
Restricted Phases	_____
Assign 5 Outputs	_____

Configuration <E Page>

Coordination <C Page>

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 =
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

Assign 5 Outputs
(Ped Loadswitch Yellows)
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Force-Off Adjust	0

Coord Force-Off Adjust for Ped Service <C+D+F>

Transition Type	1

TBC Transition <C+D+D>

Transition Type
0 = Shortway
Non-zero = Lengthen

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Row		F	Row
0	Free Lag	_2_4_6_8	0
1	Plan 1 - Lag	1__4_6_8	1
2	Plan 2 - Lag	1__4_6_8	2
3	Plan 3 - Lag	1__4_6_8	3
4	Plan 4 - Lag	1__4_6_8	4
5	Plan 5 - Lag	_2_4_6_8	5
6	Plan 6 - Lag	_2_4_6_8	6
7	Plan 7 - Lag	1__4_6_8	7
8	Plan 8 - Lag	_2_4_6_8	8
9	Plan 9 - Lag	1__4_6_8	9
A	Coord Max *	_____	A
B	Coord Lag *	_____	B
C			C
D			D
E			E
F			F

Lag Phases <C Page>

TOD Coordination
<9 Key with C+D+9=0>

Row	Time	Plan	Offset	Day of Week
0	06:30	1	A	_23456_
1	09:00	E	A	_23456_
2	11:00	4	A	_23456_
3	14:00	2	A	_23456_
4	19:00	E	A	_23456_
5	00:00	0	0	_____
6	00:00	0	A	_____
7	00:00	0	A	_____
8	00:00	0	A	_____
9	00:00	0	A	_____
A	00:00	0	A	_____
B	00:00	0	A	_____
C	00:00	0	A	_____
D	00:00	0	A	_____
E	00:00	0	A	_____
F	00:00	0	A	_____

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Offset Select
A = Offset A
B = Offset B
C = Offset C

TOD Function
<7 Key>

Time	Funct.	Day of Week
00:00	E	1234567
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____
00:00	0	_____

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Column F Phases/Bits
_____78
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

<D Page>

Holiday # 1
TOD Coordination
<9 Key with C+D+9=1>

Time	Plan	Offset	Day of Week
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____

Month Select
1 = January
2 = February
3 = March
4 = April
5 = May
6 = June
7 = July
8 = August
9 = September
A = October
B = November
C = December

Holiday # 2
TOD Coordination
<9 Key with C+D+9=2>

Time	Plan	Offset	Day of Week
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____
00:00	0	0	_____

Holiday # 3
TOD Coordination
<9 Key with C+D+9=3>

Time	Plan	Offset	Day of Week	Row
00:00	0	0	_____	0
00:00	0	0	_____	1
00:00	0	0	_____	2
00:00	0	0	_____	3
00:00	0	0	_____	4
00:00	0	0	_____	5
00:00	0	0	_____	6
00:00	0	0	_____	7
00:00	0	0	_____	8
00:00	0	0	_____	9
00:00	0	0	_____	A
00:00	0	0	_____	B
00:00	0	0	_____	C
00:00	0	0	_____	D
00:00	0	0	_____	E
00:00	0	0	_____	F

Holiday Dates
<8 Key>

Row		Day	Year	Month	Day of Week
A	Holiday # 1 Date	0	0	0	_____
B	Holiday # 2 Date	0	0	0	_____
C	Holiday # 3 Date	0	0	0	_____

INTERSECTION: Mission & Rock Springs

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		I-1	14
1	0.0	0.0		I-2U	1
2	0.0	0.0		I-2L	5
3	0.0	0.0		I-3U	21
4	0.0	0.0		I-3L	25
5	0.0	0.0		I-4	9
6	0.0	0.0		I-5	16
7	0.0	0.0		I-6U	3
8	0.0	0.0		I-6L	7
9	0.0	0.0		I-7U	23
A	0.0	0.0		I-7L	27
B	0.0	0.0		I-8	11
C	0.0	0.0		I-9U	18
D	0.0	0.0		I-9L	20
E	- - -	- - -	- - -	- - -	- - -
F	- - -	- - -	- - -	- - -	- - -

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		J-1	13
1	0.0	0.0		J-2U	2
2	0.0	0.0		J-2L	6
3	0.0	0.0		J-3U	22
4	0.0	0.0		J-3L	26
5	0.0	0.0		J-4	10
6	0.0	0.0		J-5	15
7	0.0	0.0		J-6U	4
8	0.0	0.0		J-6L	8
9	0.0	0.0		J-7U	24
A	0.0	0.0		J-7L	28
B	0.0	0.0		J-8	12
C	0.0	0.0		J-9U	17
D	0.0	0.0		J-9L	19
E	- - -	- - -	- - -	- - -	- - -
F	- - -	- - -	- - -	- - -	- - -

Detector Delay & Carryover <D Page>

Row		9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
A	Overlap A	0.0	0.0	0.0	0
B	Overlap B	0.0	0.0	0.0	0
C	Overlap C	0.0	0.0	0.0	0
D	Overlap D	0.0	0.0	0.0	0

Overlap Timing <F Page> <D Page>

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Note: Initialized data is for all detectors to be active (ie, all flag bits set). A Detector which is "not flagged", will not be active as a Phase Detector, and WILL NOT call or extend its associated phase. It will still function as a System Detector.

Row		0 Detector Number
0		
1	System Det. # 1	1
2	System Det. # 2	21
3	System Det. # 3	2
4	System Det. # 4	22
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (minutes)	5	<D+A+E>
Max OFF (minutes)	60	<D+A+F>

Detector Failure Monitor

Phase Number	0	<F+C+1>
Time Before Yellow	0.0	<F+C+3>

Advance Warning Beacon - Sign 1

Phase Number	0	<F+D+1>
Time Before Yellow	0.0	<F+D+3>

Advance Warning Beacon - Sign 2

Long Failure	0.0	<F+0+6>
Short Failure	0.0	<F+0+7>

Power Cycle Correction (Default = 0.5)

Disable Parity	0	<D+B+0>

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Row	Column Numbers ---->	Phase 1	2	3	4	5	6	7	8	Row
	Phase Names ----->									
0	Ped Walk	0	0	0	0	0	0	0	0	0
1	Ped FDW	0	0	0	0	0	0	0	0	1
2	Min Green	0	0	0	0	0	0	0	0	2
3	Type 3 Limit	0	0	0	0	0	0	0	0	3
4	Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
5	Veh Extension	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5
6	Max Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6
7	Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
8	Max Limit	0	0	0	0	0	0	0	0	8
9	Max Limit 2	0	0	0	0	0	0	0	0	9
A	- - - - - -	0	0	0	0	0	0	0	0	A
B	Call To Phase	0	0	0	0	0	0	0	0	B
C	Reduce By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C
D	Reduce Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	D
E	Yellow Change	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	E
F	Red Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	F

Row	Column Numbers ---->	Phase 1	2	3	4	5	6	7	8	Row
	Phase Names ----->									
0	Ped Walk	0	0	0	0	0	0	0	0	0
1	Ped FDW	0	0	0	0	0	0	0	0	1
2	Min Green	0	0	0	0	0	0	0	0	2
3	Type 3 Limit	0	0	0	0	0	0	0	0	3
4	Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
5	Veh Extension	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5
6	Max Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6
7	Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
8	Max Limit	0	0	0	0	0	0	0	0	8
9	Max Limit 2	0	0	0	0	0	0	0	0	9
A	- - - - - -	0	0	0	0	0	0	0	0	A
B	Call To Phase	0	0	0	0	0	0	0	0	B
C	Reduce By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C
D	Reduce Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	D
E	Yellow Change	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	E
F	Red Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	F

Phase Timing - Bank 2 <F Page>

Phase Timing - Bank 3 <F Page>

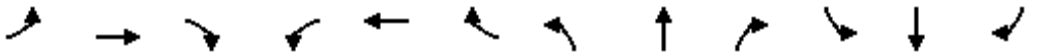
Row		7 Time	8 Dwell	9 Hold	A Advance	B Force Off	C Vehicle Call	D Permit Phases	E Ped Omit	F Output	Row
0	Delay Only --->	0	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	0
1		0	0								1
2		0	0								2
3		0	0								3
4		0	0								4
5		0	0								5
6		0	0								6
7		0	0								7
8		0	0								8
9	Limited Service	0	0								9
A	Int. --->	- - -	0								A
B		0	0								B
C		0	0								C
D		0	0								D
E		0	0								E
F		0	0								F

<--- Limited Service Interval
(Set Dwell = 255)

Special Event Schedule <C Page with F+9+F=22>

APPENDIX B -

EXISTING CONDITIONS PEAK HOUR INTERSECTION ANALYSIS WORKSHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	336	59	60	879	143	52	246	20	176	398	239
Future Volume (veh/h)	68	336	59	60	879	143	52	246	20	176	398	239
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	72	354	62	63	925	151	55	259	21	185	419	252
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	93	1300	225	249	1580	258	147	998	80	335	562	472
Arrive On Green	0.02	0.14	0.14	0.14	0.52	0.52	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1781	3024	524	1781	3053	498	766	3325	267	1094	1870	1572
Grp Volume(v), veh/h	72	206	210	63	538	538	55	137	143	185	419	252
Grp Sat Flow(s),veh/h/ln	1781	1777	1772	1781	1777	1775	766	1777	1816	1094	1870	1572
Q Serve(g_s), s	4.0	10.4	10.6	3.2	21.0	21.0	7.0	5.9	6.0	15.4	20.2	13.4
Cycle Q Clear(g_c), s	4.0	10.4	10.6	3.2	21.0	21.0	27.2	5.9	6.0	21.4	20.2	13.4
Prop In Lane	1.00		0.30	1.00		0.28	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	93	764	762	249	919	918	147	534	545	335	562	472
V/C Ratio(X)	0.77	0.27	0.28	0.25	0.59	0.59	0.37	0.26	0.26	0.55	0.75	0.53
Avail Cap(c_a), veh/h	160	764	762	249	919	918	182	613	626	384	645	542
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.5	28.9	29.0	38.4	16.7	16.7	43.8	26.5	26.6	34.7	31.5	29.2
Incr Delay (d2), s/veh	12.5	0.9	0.9	0.5	2.7	2.7	1.6	0.3	0.3	1.4	4.1	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	4.9	5.0	1.4	8.5	8.5	1.4	2.5	2.6	4.1	9.4	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.0	29.8	29.9	38.9	19.4	19.4	45.4	26.8	26.8	36.1	35.6	30.1
LnGrp LOS	E	C	C	D	B	B	D	C	C	D	D	C
Approach Vol, veh/h		488			1139			335			856	
Approach Delay, s/veh		34.4			20.5			29.8			34.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.5	47.0		34.5	9.2	56.2		34.5				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.0	4.5		4.5				
Max Green Setting (Gmax), s	9.5	43.0		34.5	9.0	43.5		34.5				
Max Q Clear Time (g_c+I1), s	5.2	12.6		29.2	6.0	23.0		23.4				
Green Ext Time (p_c), s	0.0	2.4		0.9	0.0	6.9		3.3				

Intersection Summary			
HCM 6th Ctrl Delay		28.2	
HCM 6th LOS		C	

Intersection	
Int Delay, s/veh	128.3

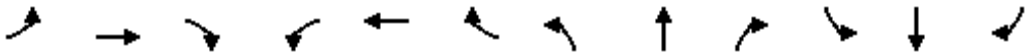
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	6	21	158	39	117	22	381	79	59	650	64
Future Vol, veh/h	15	6	21	158	39	117	22	381	79	59	650	64
Conflicting Peds, #/hr	1	0	1	1	0	1	0	0	11	11	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	Free
Storage Length	-	-	-	-	-	-	75	-	170	70	-	135
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	7	23	176	43	130	24	423	88	66	722	71

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1413	1336	723	1352	1336	435	722	0	-	434	0	0
Stage 1	854	854	-	482	482	-	-	-	-	-	-	-
Stage 2	559	482	-	870	854	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	115	153	426	~ 127	153	621	880	-	0	1126	-	0
Stage 1	353	375	-	565	553	-	-	-	0	-	-	0
Stage 2	513	553	-	346	375	-	-	-	0	-	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	65	139	426	~ 107	139	614	880	-	-	1114	-	-
Mov Cap-2 Maneuver	65	139	-	~ 107	139	-	-	-	-	-	-	-
Stage 1	343	353	-	544	533	-	-	-	-	-	-	-
Stage 2	361	533	-	302	353	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	47.4	$ 591.2	0.5	0.7
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	880	-	130	161	1114	-
HCM Lane V/C Ratio	0.028	-	0.359	2.167	0.059	-
HCM Control Delay (s)	9.2	-	47.4	$ 591.2	8.4	-
HCM Lane LOS	A	-	E	F	A	-
HCM 95th %tile Q(veh)	0.1	-	1.5	28.1	0.2	-

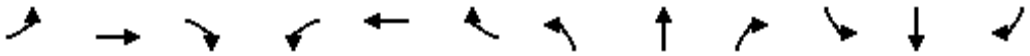
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	405	116	163	1135	44	132	26	83	36	19	20
Future Volume (veh/h)	13	405	116	163	1135	44	132	26	83	36	19	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.95	1.00		0.94
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	431	123	173	1207	47	140	28	88	38	20	21
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	44	1388	392	205	2111	82	169	308	248	75	93	98
Arrive On Green	0.02	0.51	0.51	0.11	0.61	0.61	0.09	0.16	0.16	0.04	0.12	0.12
Sat Flow, veh/h	1781	2711	765	1781	3484	136	1781	1870	1505	1781	805	845
Grp Volume(v), veh/h	14	281	273	173	615	639	140	28	88	38	0	41
Grp Sat Flow(s),veh/h/ln	1781	1777	1700	1781	1777	1843	1781	1870	1505	1781	0	1649
Q Serve(g_s), s	0.9	11.0	11.2	11.4	25.0	25.1	9.3	1.5	6.2	2.5	0.0	2.7
Cycle Q Clear(g_c), s	0.9	11.0	11.2	11.4	25.0	25.1	9.3	1.5	6.2	2.5	0.0	2.7
Prop In Lane	1.00		0.45	1.00		0.07	1.00		1.00	1.00		0.51
Lane Grp Cap(c), veh/h	44	909	870	205	1077	1117	169	308	248	75	0	192
V/C Ratio(X)	0.32	0.31	0.31	0.85	0.57	0.57	0.83	0.09	0.35	0.51	0.00	0.21
Avail Cap(c_a), veh/h	132	909	870	362	1077	1117	251	461	371	273	0	434
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.5	17.0	17.0	52.1	14.2	14.3	53.4	42.5	44.5	56.3	0.0	48.1
Incr Delay (d2), s/veh	4.8	0.9	0.9	10.8	2.2	2.1	15.2	0.3	1.8	6.3	0.0	1.2
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	0.5	4.5	4.4	5.6	9.9	10.2	4.8	0.7	2.4	1.3	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.3	17.9	18.0	62.9	16.5	16.4	68.5	42.8	46.3	62.6	0.0	49.2
LnGrp LOS	E	B	B	E	B	B	E	D	D	E	A	D
Approach Vol, veh/h		568			1427			256			79	
Approach Delay, s/veh		19.0			22.1			58.1			55.7	
Approach LOS		B			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.4	66.8	9.6	25.2	7.1	78.1	15.5	19.3
Change Period (Y+Rc), s	4.6	5.4	4.6	5.4	4.1	5.4	4.1	5.4
Max Green Setting (Gmax), s	24.4	27.6	18.4	29.6	8.9	43.6	16.9	31.6
Max Q Clear Time (g_c+I1), s	13.4	13.2	4.5	8.2	2.9	27.1	11.3	4.7
Green Ext Time (p_c), s	0.4	4.8	0.1	0.8	0.0	11.6	0.2	0.3

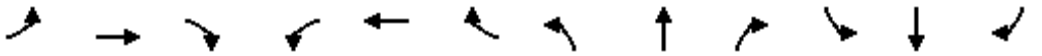
Intersection Summary	
HCM 6th Ctrl Delay	26.4
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	393	58	178	958	12	226	18	48	12	75	80
Future Volume (veh/h)	10	393	58	178	958	12	226	18	48	12	75	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	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	409	60	185	998	12	235	19	50	12	78	83
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	307	1929	281	591	2230	27	336	132	347	416	238	253
Arrive On Green	0.62	0.62	0.62	0.42	0.42	0.42	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	558	3111	453	923	3595	43	1224	455	1197	1330	822	875
Grp Volume(v), veh/h	10	232	237	185	493	517	235	0	69	12	0	161
Grp Sat Flow(s),veh/h/ln	558	1777	1787	923	1777	1861	1224	0	1652	1330	0	1697
Q Serve(g_s), s	1.1	5.7	5.8	14.4	19.9	19.9	18.7	0.0	3.1	0.7	0.0	7.4
Cycle Q Clear(g_c), s	21.0	5.7	5.8	20.2	19.9	19.9	26.1	0.0	3.1	3.8	0.0	7.4
Prop In Lane	1.00		0.25	1.00		0.02	1.00		0.72	1.00		0.52
Lane Grp Cap(c), veh/h	307	1102	1109	591	1102	1154	336	0	479	416	0	492
V/C Ratio(X)	0.03	0.21	0.21	0.31	0.45	0.45	0.70	0.00	0.14	0.03	0.00	0.33
Avail Cap(c_a), veh/h	307	1102	1109	591	1102	1154	574	0	801	676	0	823
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.80	0.80	0.80	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.1	8.3	8.3	19.1	16.9	16.9	38.1	0.0	26.3	27.7	0.0	27.9
Incr Delay (d2), s/veh	0.2	0.4	0.4	1.1	1.1	1.0	2.0	0.0	0.1	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	0.1	2.1	2.1	3.4	8.8	9.2	5.6	0.0	1.2	0.2	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.3	8.7	8.8	20.2	18.0	17.9	40.1	0.0	26.4	27.7	0.0	28.1
LnGrp LOS	B	A	A	C	B	B	D	A	C	C	A	C
Approach Vol, veh/h		479			1195			304			173	
Approach Delay, s/veh		8.9			18.3			37.0			28.1	
Approach LOS		A			B			D			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		66.5		33.5		66.5		33.5				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		42.5		48.5		42.5		48.5				
Max Q Clear Time (g_c+I1), s		23.0		28.1		22.2		9.4				
Green Ext Time (p_c), s		2.1		0.9		5.9		0.9				

Intersection Summary												
HCM 6th Ctrl Delay			19.6									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	233	840	116	61	421	177	55	530	43	81	288	40
Future Volume (veh/h)	233	840	116	61	421	177	55	530	43	81	288	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	248	894	123	65	448	188	59	564	46	86	306	43
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	272	1381	190	304	1112	462	202	928	76	166	522	438
Arrive On Green	0.30	0.88	0.88	0.17	0.46	0.46	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1781	3127	430	1781	2416	1003	1030	3325	271	810	1870	1570
Grp Volume(v), veh/h	248	508	509	65	328	308	59	301	309	86	306	43
Grp Sat Flow(s),veh/h/ln	1781	1777	1781	1781	1777	1642	1030	1777	1819	810	1870	1570
Q Serve(g_s), s	16.1	9.3	9.3	3.8	14.7	14.9	6.3	17.6	17.7	12.4	16.9	2.4
Cycle Q Clear(g_c), s	16.1	9.3	9.3	3.8	14.7	14.9	23.2	17.6	17.7	30.1	16.9	2.4
Prop In Lane	1.00		0.24	1.00		0.61	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	272	785	787	304	818	756	202	496	507	166	522	438
V/C Ratio(X)	0.91	0.65	0.65	0.21	0.40	0.41	0.29	0.61	0.61	0.52	0.59	0.10
Avail Cap(c_a), veh/h	371	785	787	304	818	756	271	614	629	221	647	543
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.9	4.5	4.5	42.8	21.4	21.5	47.3	37.5	37.6	50.6	37.3	32.1
Incr Delay (d2), s/veh	16.9	3.7	3.7	0.1	1.5	1.6	0.6	0.9	0.9	1.8	0.8	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	7.0	2.5	2.5	1.6	6.2	5.9	1.6	7.7	7.9	2.6	7.8	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.9	8.1	8.1	42.9	22.9	23.1	47.9	38.4	38.5	52.5	38.1	32.1
LnGrp LOS	E	A	A	D	C	C	D	D	D	D	D	C
Approach Vol, veh/h		1265			701			669			435	
Approach Delay, s/veh		17.9			24.9			39.3			40.3	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	25.0	57.0		38.0	22.3	59.7		38.0				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.0	4.5		4.5				
Max Green Setting (Gmax), s	12.5	53.0		41.5	25.0	40.5		41.5				
Max Q Clear Time (g_c+I1), s	5.8	11.3		25.2	18.1	16.9		32.1				
Green Ext Time (p_c), s	0.0	9.5		2.9	0.2	4.7		1.4				

Intersection Summary			
HCM 6th Ctrl Delay		27.3	
HCM 6th LOS		C	

Intersection	
Int Delay, s/veh	31

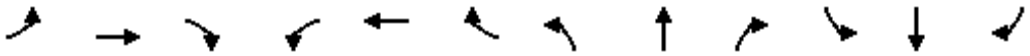
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↰	↑	↱	↰	↑	↱
Traffic Vol, veh/h	14	13	25	71	11	67	42	759	297	70	349	25
Future Vol, veh/h	14	13	25	71	11	67	42	759	297	70	349	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	8	8	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	Free
Storage Length	-	-	-	-	-	-	75	-	170	70	-	135
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	14	28	79	12	74	47	843	330	78	388	28

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1524	1489	388	1510	1489	851	388	0	-	851	0	0
Stage 1	544	544	-	945	945	-	-	-	-	-	-	-
Stage 2	980	945	-	565	544	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	97	124	660	99	124	360	1170	-	0	788	-	0
Stage 1	523	519	-	314	340	-	-	-	0	-	-	0
Stage 2	301	340	-	510	519	-	-	-	0	-	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	63	106	660	~ 76	106	357	1170	-	-	782	-	-
Mov Cap-2 Maneuver	63	106	-	~ 76	106	-	-	-	-	-	-	-
Stage 1	502	467	-	299	324	-	-	-	-	-	-	-
Stage 2	220	324	-	426	467	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	49.7	271.3	0.4	1.7
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	1170	-	136	122	782	-
HCM Lane V/C Ratio	0.04	-	0.425	1.357	0.099	-
HCM Control Delay (s)	8.2	-	49.7	271.3	10.1	-
HCM Lane LOS	A	-	E	F	B	-
HCM 95th %tile Q(veh)	0.1	-	1.9	11.1	0.3	-

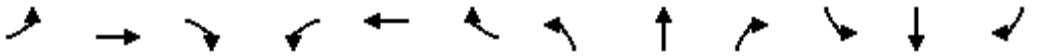
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	956	85	85	581	93	95	27	166	128	46	11
Future Volume (veh/h)	29	956	85	85	581	93	95	27	166	128	46	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.95	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	30	986	88	88	599	96	98	28	171	132	47	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	71	1811	162	110	1759	281	123	296	237	158	258	60
Arrive On Green	0.04	0.55	0.55	0.06	0.58	0.58	0.07	0.16	0.16	0.09	0.18	0.18
Sat Flow, veh/h	1781	3296	294	1781	3059	489	1781	1870	1501	1781	1448	339
Grp Volume(v), veh/h	30	532	542	88	347	348	98	28	171	132	0	58
Grp Sat Flow(s),veh/h/ln	1781	1777	1813	1781	1777	1771	1781	1870	1501	1781	0	1787
Q Serve(g_s), s	2.2	25.9	26.0	6.6	13.9	14.0	7.3	1.7	14.6	9.8	0.0	3.7
Cycle Q Clear(g_c), s	2.2	25.9	26.0	6.6	13.9	14.0	7.3	1.7	14.6	9.8	0.0	3.7
Prop In Lane	1.00		0.16	1.00		0.28	1.00		1.00	1.00		0.19
Lane Grp Cap(c), veh/h	71	977	996	110	1022	1018	123	296	237	158	0	318
V/C Ratio(X)	0.42	0.54	0.54	0.80	0.34	0.34	0.80	0.09	0.72	0.83	0.00	0.18
Avail Cap(c_a), veh/h	157	977	996	177	1022	1018	315	416	334	276	0	357
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	63.3	19.5	19.5	62.5	15.1	15.2	61.9	48.6	54.0	60.5	0.0	47.1
Incr Delay (d2), s/veh	4.7	2.2	2.1	14.6	0.9	0.9	13.2	0.2	5.3	12.6	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	1.1	10.9	11.1	3.4	5.7	5.7	3.7	0.8	5.8	5.0	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.0	21.7	21.7	77.1	16.0	16.1	75.1	48.7	59.3	73.1	0.0	47.5
LnGrp LOS	E	C	C	E	B	B	E	D	E	E	A	D
Approach Vol, veh/h		1104			783			297			190	
Approach Delay, s/veh		22.9			22.9			63.5			65.3	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	79.6	16.1	26.3	9.5	83.0	13.4	29.0
Change Period (Y+Rc), s	4.6	5.4	4.1	5.0	4.1	5.4	4.1	5.0
Max Green Setting (Gmax), s	13.4	51.6	20.9	30.0	11.9	53.6	23.9	27.0
Max Q Clear Time (g_c+I1), s	8.6	28.0	11.8	16.6	4.2	16.0	9.3	5.7
Green Ext Time (p_c), s	0.1	12.9	0.3	0.7	0.0	9.4	0.2	0.2

Intersection Summary	
HCM 6th Ctrl Delay	31.4
HCM 6th LOS	C



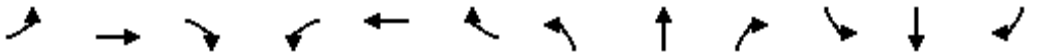
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	1069	108	66	441	8	144	39	81	14	24	31
Future Volume (veh/h)	26	1069	108	66	441	8	144	39	81	14	24	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	1125	114	69	464	8	152	41	85	15	25	33
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	760	2470	250	344	2715	47	242	89	183	181	120	159
Arrive On Green	0.76	0.76	0.76	1.00	1.00	1.00	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	921	3251	329	449	3573	62	1341	536	1112	1262	730	963
Grp Volume(v), veh/h	27	614	625	69	231	241	152	0	126	15	0	58
Grp Sat Flow(s),veh/h/ln	921	1777	1803	449	1777	1858	1341	0	1648	1262	0	1693
Q Serve(g_s), s	0.9	15.2	15.3	3.9	0.0	0.0	13.3	0.0	8.3	1.3	0.0	3.6
Cycle Q Clear(g_c), s	0.9	15.2	15.3	19.2	0.0	0.0	16.8	0.0	8.3	9.6	0.0	3.6
Prop In Lane	1.00		0.18	1.00		0.03	1.00		0.67	1.00		0.57
Lane Grp Cap(c), veh/h	760	1350	1370	344	1350	1412	242	0	272	181	0	279
V/C Ratio(X)	0.04	0.45	0.46	0.20	0.17	0.17	0.63	0.00	0.46	0.08	0.00	0.21
Avail Cap(c_a), veh/h	760	1350	1370	344	1350	1412	395	0	460	325	0	473
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.93	0.93	0.93	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	3.6	5.3	5.3	1.6	0.0	0.0	50.6	0.0	45.3	49.6	0.0	43.3
Incr Delay (d2), s/veh	0.1	1.1	1.1	1.2	0.3	0.2	2.0	0.0	0.9	0.1	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	0.1	4.8	4.9	0.2	0.1	0.1	4.5	0.0	3.4	0.4	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.6	6.4	6.4	2.8	0.3	0.2	52.6	0.0	46.2	49.8	0.0	43.6
LnGrp LOS	A	A	A	A	A	A	D	A	D	D	A	D
Approach Vol, veh/h		1266			541			278			73	
Approach Delay, s/veh		6.3			0.6			49.7			44.9	
Approach LOS		A			A			D			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		95.7		24.3		95.7		24.3				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		77.5		33.5		77.5		33.5				
Max Q Clear Time (g_c+I1), s		17.3		18.8		21.2		11.6				
Green Ext Time (p_c), s		8.2		0.8		3.3		0.2				

Intersection Summary												
HCM 6th Ctrl Delay			11.8									
HCM 6th LOS			B									

APPENDIX C -

EXISTING CONDITIONS WITH PROJECT PEAK HOUR INTERSECTION ANALYSIS WORKSHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	336	59	60	897	143	61	246	20	201	407	239
Future Volume (veh/h)	86	336	59	60	897	143	61	246	20	201	407	239
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	91	354	62	63	944	151	64	259	21	212	428	252
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	117	1300	225	227	1506	241	155	1040	84	350	585	492
Arrive On Green	0.02	0.14	0.14	0.13	0.49	0.49	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1781	3024	524	1781	3063	490	760	3325	267	1095	1870	1573
Grp Volume(v), veh/h	91	206	210	63	547	548	64	137	143	212	428	252
Grp Sat Flow(s),veh/h/ln	1781	1777	1772	1781	1777	1776	760	1777	1816	1095	1870	1573
Q Serve(g_s), s	5.1	10.4	10.6	3.2	22.6	22.7	8.2	5.8	5.9	17.9	20.4	13.1
Cycle Q Clear(g_c), s	5.1	10.4	10.6	3.2	22.6	22.7	28.6	5.8	5.9	23.8	20.4	13.1
Prop In Lane	1.00		0.30	1.00		0.28	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	117	764	762	227	874	873	155	556	568	350	585	492
V/C Ratio(X)	0.78	0.27	0.28	0.28	0.63	0.63	0.41	0.25	0.25	0.61	0.73	0.51
Avail Cap(c_a), veh/h	160	764	762	227	874	873	179	613	626	386	645	543
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.2	28.9	29.0	39.5	18.7	18.7	43.4	25.6	25.6	34.5	30.6	28.1
Incr Delay (d2), s/veh	15.2	0.9	0.9	0.7	3.4	3.4	1.8	0.2	0.2	2.3	3.8	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	2.8	4.9	5.0	1.4	9.4	9.4	1.6	2.4	2.5	4.9	9.5	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.4	29.8	29.9	40.1	22.1	22.1	45.1	25.8	25.9	36.8	34.5	28.9
LnGrp LOS	E	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		507			1158			344			892	
Approach Delay, s/veh		35.8			23.0			29.4			33.4	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.2	47.0		35.8	10.5	53.7		35.8				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.0	4.5		4.5				
Max Green Setting (Gmax), s	9.5	43.0		34.5	9.0	43.5		34.5				
Max Q Clear Time (g_c+I1), s	5.2	12.6		30.6	7.1	24.7		25.8				
Green Ext Time (p_c), s	0.0	2.4		0.7	0.0	6.8		3.0				

Intersection Summary			
HCM 6th Ctrl Delay		29.2	
HCM 6th LOS		C	

Intersection	
Int Delay, s/veh	142.5

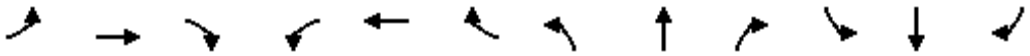
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	9	27	161	39	117	22	387	79	59	656	64
Future Vol, veh/h	15	9	27	161	39	117	22	387	79	59	656	64
Conflicting Peds, #/hr	1	0	1	1	0	1	0	0	11	11	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	Free
Storage Length	-	-	-	-	-	-	75	-	170	70	-	135
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	10	30	179	43	130	24	430	88	66	729	71

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1427	1350	730	1371	1350	442	729	0	-	441	0	0
Stage 1	861	861	-	489	489	-	-	-	-	-	-	-
Stage 2	566	489	-	882	861	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	113	150	422	~ 123	150	615	875	-	0	1119	-	0
Stage 1	350	372	-	561	549	-	-	-	0	-	-	0
Stage 2	509	549	-	341	372	-	-	-	0	-	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	63	136	422	~ 100	136	608	875	-	-	1107	-	-
Mov Cap-2 Maneuver	63	136	-	~ 100	136	-	-	-	-	-	-	-
Stage 1	341	350	-	540	529	-	-	-	-	-	-	-
Stage 2	357	529	-	289	350	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	48.2	$ 660.5	0.5	0.7
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	875	-	138	152	1107	-
HCM Lane V/C Ratio	0.028	-	0.411	2.317	0.059	-
HCM Control Delay (s)	9.2	-	48.2	$ 660.5	8.5	-
HCM Lane LOS	A	-	E	F	A	-
HCM 95th %tile Q(veh)	0.1	-	1.8	29.5	0.2	-

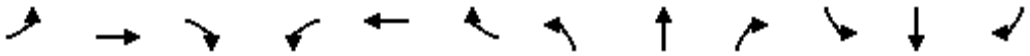
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	418	119	163	1147	44	135	26	83	36	19	23
Future Volume (veh/h)	16	418	119	163	1147	44	135	26	83	36	19	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.95	1.00		0.94
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	17	445	127	173	1220	47	144	28	88	38	20	24
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	51	1381	390	205	2090	80	173	312	252	75	86	104
Arrive On Green	0.03	0.51	0.51	0.11	0.60	0.60	0.10	0.17	0.17	0.04	0.12	0.12
Sat Flow, veh/h	1781	2711	766	1781	3486	134	1781	1870	1506	1781	744	893
Grp Volume(v), veh/h	17	290	282	173	622	645	144	28	88	38	0	44
Grp Sat Flow(s),veh/h/ln	1781	1777	1700	1781	1777	1843	1781	1870	1506	1781	0	1637
Q Serve(g_s), s	1.1	11.5	11.7	11.4	25.8	25.9	9.5	1.5	6.2	2.5	0.0	2.9
Cycle Q Clear(g_c), s	1.1	11.5	11.7	11.4	25.8	25.9	9.5	1.5	6.2	2.5	0.0	2.9
Prop In Lane	1.00		0.45	1.00		0.07	1.00		1.00	1.00		0.55
Lane Grp Cap(c), veh/h	51	905	866	205	1066	1105	173	312	252	75	0	190
V/C Ratio(X)	0.33	0.32	0.33	0.85	0.58	0.58	0.83	0.09	0.35	0.51	0.00	0.23
Avail Cap(c_a), veh/h	132	905	866	362	1066	1105	251	461	371	273	0	431
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.1	17.3	17.3	52.1	14.8	14.8	53.2	42.3	44.2	56.3	0.0	48.2
Incr Delay (d2), s/veh	4.5	0.9	1.0	10.8	2.3	2.3	16.0	0.3	1.8	6.3	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	4.7	4.6	5.6	10.3	10.6	5.0	0.7	2.4	1.3	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.6	18.2	18.3	62.9	17.1	17.1	69.2	42.5	46.0	62.6	0.0	49.5
LnGrp LOS	E	B	B	E	B	B	E	D	D	E	A	D
Approach Vol, veh/h		589			1440			260			82	
Approach Delay, s/veh		19.5			22.6			58.5			55.6	
Approach LOS		B			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.4	66.5	9.6	25.4	7.6	77.4	15.7	19.3
Change Period (Y+Rc), s	4.6	5.4	4.6	5.4	4.1	5.4	4.1	5.4
Max Green Setting (Gmax), s	24.4	27.6	18.4	29.6	8.9	43.6	16.9	31.6
Max Q Clear Time (g_c+I1), s	13.4	13.7	4.5	8.2	3.1	27.9	11.5	4.9
Green Ext Time (p_c), s	0.4	4.9	0.1	0.8	0.0	11.3	0.2	0.3

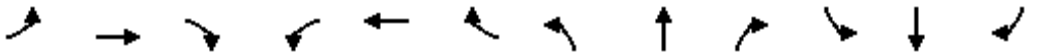
Intersection Summary	
HCM 6th Ctrl Delay	26.9
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	408	58	181	974	21	226	18	51	12	75	80
Future Volume (veh/h)	10	408	58	181	974	21	226	18	51	12	75	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	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	425	60	189	1015	22	235	19	53	12	78	83
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	297	1940	272	581	2204	48	336	126	352	413	238	254
Arrive On Green	0.62	0.62	0.62	0.42	0.42	0.42	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	544	3128	439	910	3554	77	1224	435	1214	1326	822	875
Grp Volume(v), veh/h	10	240	245	189	507	530	235	0	72	12	0	161
Grp Sat Flow(s),veh/h/ln	544	1777	1790	910	1777	1854	1224	0	1649	1326	0	1697
Q Serve(g_s), s	1.1	5.9	6.0	15.1	20.6	20.6	18.6	0.0	3.2	0.7	0.0	7.4
Cycle Q Clear(g_c), s	21.7	5.9	6.0	21.1	20.6	20.6	26.1	0.0	3.2	3.9	0.0	7.4
Prop In Lane	1.00		0.25	1.00		0.04	1.00		0.74	1.00		0.52
Lane Grp Cap(c), veh/h	297	1102	1110	581	1102	1150	336	0	478	413	0	492
V/C Ratio(X)	0.03	0.22	0.22	0.33	0.46	0.46	0.70	0.00	0.15	0.03	0.00	0.33
Avail Cap(c_a), veh/h	297	1102	1110	581	1102	1150	574	0	800	672	0	823
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.79	0.79	0.79	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.5	8.3	8.4	19.5	17.1	17.1	38.1	0.0	26.4	27.8	0.0	27.9
Incr Delay (d2), s/veh	0.2	0.5	0.5	1.2	1.1	1.1	2.0	0.0	0.1	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	0.1	2.1	2.2	3.5	9.1	9.5	5.6	0.0	1.3	0.2	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.7	8.8	8.8	20.6	18.2	18.2	40.1	0.0	26.5	27.8	0.0	28.1
LnGrp LOS	B	A	A	C	B	B	D	A	C	C	A	C
Approach Vol, veh/h		495			1226			307			173	
Approach Delay, s/veh		9.0			18.6			36.9			28.1	
Approach LOS		A			B			D			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		66.5		33.5		66.5		33.5				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		42.5		48.5		42.5		48.5				
Max Q Clear Time (g_c+I1), s		23.7		28.1		23.1		9.4				
Green Ext Time (p_c), s		2.1		0.9		6.1		0.9				

Intersection Summary												
HCM 6th Ctrl Delay			19.7									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	242	840	116	61	430	177	60	530	43	92	292	40
Future Volume (veh/h)	242	840	116	61	430	177	60	530	43	92	292	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	257	894	123	65	457	188	64	564	46	98	311	43
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	280	1381	190	284	1079	439	213	966	79	178	544	456
Arrive On Green	0.31	0.88	0.88	0.16	0.44	0.44	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1781	3127	430	1781	2431	990	1025	3325	271	810	1870	1570
Grp Volume(v), veh/h	257	508	509	65	333	312	64	301	309	98	311	43
Grp Sat Flow(s),veh/h/ln	1781	1777	1781	1781	1777	1644	1025	1777	1819	810	1870	1570
Q Serve(g_s), s	16.7	9.3	9.3	3.8	15.4	15.6	6.8	17.4	17.4	14.1	17.0	2.4
Cycle Q Clear(g_c), s	16.7	9.3	9.3	3.8	15.4	15.6	23.8	17.4	17.4	31.5	17.0	2.4
Prop In Lane	1.00		0.24	1.00		0.60	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	280	785	787	284	789	730	213	516	528	178	544	456
V/C Ratio(X)	0.92	0.65	0.65	0.23	0.42	0.43	0.30	0.58	0.58	0.55	0.57	0.09
Avail Cap(c_a), veh/h	371	785	787	284	789	730	269	614	629	222	647	543
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.4	4.5	4.5	44.0	22.8	22.9	46.3	36.4	36.4	49.9	36.2	31.0
Incr Delay (d2), s/veh	18.4	3.7	3.7	0.2	1.7	1.8	0.6	0.8	0.8	2.0	0.7	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	7.3	2.5	2.5	1.7	6.6	6.2	1.8	7.5	7.8	2.9	7.8	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.8	8.1	8.1	44.2	24.5	24.7	46.9	37.1	37.1	51.8	36.9	31.1
LnGrp LOS	E	A	A	D	C	C	D	D	D	D	D	C
Approach Vol, veh/h		1274			710			674			452	
Approach Delay, s/veh		18.3			26.4			38.1			39.6	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	23.6	57.0		39.4	22.9	57.8		39.4				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.0	4.5		4.5				
Max Green Setting (Gmax), s	12.5	53.0		41.5	25.0	40.5		41.5				
Max Q Clear Time (g_c+I1), s	5.8	11.3		25.8	18.7	17.6		33.5				
Green Ext Time (p_c), s	0.0	9.5		2.9	0.2	4.7		1.3				

Intersection Summary			
HCM 6th Ctrl Delay		27.5	
HCM 6th LOS		C	

Intersection	
Int Delay, s/veh	34.8

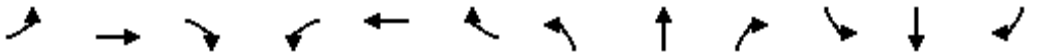
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↰	↑	↱	↰	↑	↱
Traffic Vol, veh/h	14	14	28	73	11	67	42	762	297	70	352	25
Future Vol, veh/h	14	14	28	73	11	67	42	762	297	70	352	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	8	8	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	Free
Storage Length	-	-	-	-	-	-	75	-	170	70	-	135
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	16	31	81	12	74	47	847	330	78	391	28

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1531	1496	391	1520	1496	855	391	0	-	855	0	0
Stage 1	547	547	-	949	949	-	-	-	-	-	-	-
Stage 2	984	949	-	571	547	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	96	123	658	97	123	358	1168	-	0	785	-	0
Stage 1	521	517	-	313	339	-	-	-	0	-	-	0
Stage 2	299	339	-	506	517	-	-	-	0	-	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	62	105	658	~ 73	105	355	1168	-	-	779	-	-
Mov Cap-2 Maneuver	62	105	-	~ 73	105	-	-	-	-	-	-	-
Stage 1	500	465	-	298	323	-	-	-	-	-	-	-
Stage 2	218	323	-	419	465	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	50.4	$ 304.9	0.4	1.7
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	1168	-	139	117	779	-
HCM Lane V/C Ratio	0.04	-	0.448	1.434	0.1	-
HCM Control Delay (s)	8.2	-	50.4	$ 304.9	10.1	-
HCM Lane LOS	A	-	F	F	B	-
HCM 95th %tile Q(veh)	0.1	-	2	11.7	0.3	-

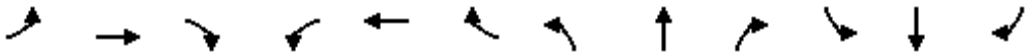
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	962	86	85	587	93	97	27	166	128	46	13
Future Volume (veh/h)	30	962	86	85	587	93	97	27	166	128	46	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.95	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	31	992	89	88	605	96	100	28	171	132	47	13
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	73	1811	162	110	1760	279	125	296	237	158	246	68
Arrive On Green	0.04	0.55	0.55	0.06	0.57	0.57	0.07	0.16	0.16	0.09	0.18	0.18
Sat Flow, veh/h	1781	3294	295	1781	3063	485	1781	1870	1501	1781	1391	385
Grp Volume(v), veh/h	31	535	546	88	350	351	100	28	171	132	0	60
Grp Sat Flow(s),veh/h/ln	1781	1777	1813	1781	1777	1771	1781	1870	1501	1781	0	1776
Q Serve(g_s), s	2.3	26.2	26.2	6.6	14.1	14.2	7.5	1.7	14.6	9.8	0.0	3.9
Cycle Q Clear(g_c), s	2.3	26.2	26.2	6.6	14.1	14.2	7.5	1.7	14.6	9.8	0.0	3.9
Prop In Lane	1.00		0.16	1.00		0.27	1.00		1.00	1.00		0.22
Lane Grp Cap(c), veh/h	73	977	996	110	1021	1018	125	296	237	158	0	314
V/C Ratio(X)	0.43	0.55	0.55	0.80	0.34	0.34	0.80	0.09	0.72	0.83	0.00	0.19
Avail Cap(c_a), veh/h	157	977	996	177	1021	1018	315	416	334	276	0	355
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	63.2	19.6	19.6	62.5	15.2	15.2	61.8	48.6	54.0	60.5	0.0	47.3
Incr Delay (d2), s/veh	4.7	2.2	2.2	14.6	0.9	0.9	13.1	0.2	5.3	12.6	0.0	0.4
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	11.0	11.2	3.4	5.8	5.8	3.8	0.8	5.8	5.0	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.0	21.8	21.8	77.1	16.1	16.2	75.0	48.7	59.3	73.1	0.0	47.7
LnGrp LOS	E	C	C	E	B	B	E	D	E	E	A	D
Approach Vol, veh/h		1112			789			299			192	
Approach Delay, s/veh		23.1			23.0			63.5			65.2	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	79.6	16.1	26.3	9.6	82.9	13.6	28.9
Change Period (Y+Rc), s	4.6	5.4	4.1	5.0	4.1	5.4	4.1	5.0
Max Green Setting (Gmax), s	13.4	51.6	20.9	30.0	11.9	53.6	23.9	27.0
Max Q Clear Time (g_c+I1), s	8.6	28.2	11.8	16.6	4.3	16.2	9.5	5.9
Green Ext Time (p_c), s	0.1	12.9	0.3	0.7	0.0	9.5	0.2	0.3

Intersection Summary	
HCM 6th Ctrl Delay	31.5
HCM 6th LOS	C



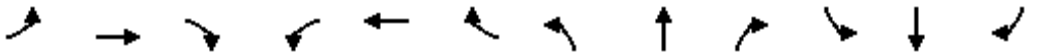
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	1077	108	67	448	12	144	39	83	14	24	31
Future Volume (veh/h)	26	1077	108	67	448	12	144	39	83	14	24	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	1134	114	71	472	13	152	41	87	15	25	33
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	752	2472	248	341	2682	74	242	87	185	179	121	159
Arrive On Green	0.76	0.76	0.76	1.00	1.00	1.00	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	910	3253	327	445	3530	97	1341	527	1119	1259	730	963
Grp Volume(v), veh/h	27	619	629	71	237	248	152	0	128	15	0	58
Grp Sat Flow(s),veh/h/ln	910	1777	1803	445	1777	1850	1341	0	1646	1259	0	1693
Q Serve(g_s), s	0.9	15.4	15.5	4.1	0.0	0.0	13.3	0.0	8.4	1.3	0.0	3.6
Cycle Q Clear(g_c), s	0.9	15.4	15.5	19.6	0.0	0.0	16.8	0.0	8.4	9.8	0.0	3.6
Prop In Lane	1.00		0.18	1.00		0.05	1.00		0.68	1.00		0.57
Lane Grp Cap(c), veh/h	752	1350	1370	341	1350	1406	242	0	272	179	0	280
V/C Ratio(X)	0.04	0.46	0.46	0.21	0.18	0.18	0.63	0.00	0.47	0.08	0.00	0.21
Avail Cap(c_a), veh/h	752	1350	1370	341	1350	1406	395	0	460	323	0	473
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.93	0.93	0.93	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	3.6	5.3	5.3	1.7	0.0	0.0	50.6	0.0	45.3	49.8	0.0	43.3
Incr Delay (d2), s/veh	0.1	1.1	1.1	1.3	0.3	0.3	2.0	0.0	0.9	0.1	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	0.1	4.9	4.9	0.2	0.1	0.1	4.5	0.0	3.5	0.4	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.7	6.4	6.4	2.9	0.3	0.3	52.6	0.0	46.3	49.9	0.0	43.6
LnGrp LOS	A	A	A	A	A	A	D	A	D	D	A	D
Approach Vol, veh/h		1275			556			280			73	
Approach Delay, s/veh		6.4			0.6			49.7			44.9	
Approach LOS		A			A			D			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		95.7		24.3		95.7		24.3				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		77.5		33.5		77.5		33.5				
Max Q Clear Time (g_c+I1), s		17.5		18.8		21.6		11.8				
Green Ext Time (p_c), s		8.3		0.8		3.4		0.2				

Intersection Summary												
HCM 6th Ctrl Delay			11.7									
HCM 6th LOS			B									

APPENDIX D -

OPENING YEAR (2021) PEAK HOUR INTERSECTION ANALYSIS WORKSHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	350	61	62	915	149	54	256	21	183	414	249
Future Volume (veh/h)	71	350	61	62	915	149	54	256	21	183	414	249
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	75	368	64	65	963	157	57	269	22	193	436	262
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	97	1302	224	230	1541	251	148	1033	84	343	582	489
Arrive On Green	0.02	0.14	0.14	0.13	0.50	0.50	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1781	3028	522	1781	3054	498	747	3322	270	1084	1870	1573
Grp Volume(v), veh/h	75	215	217	65	560	560	57	143	148	193	436	262
Grp Sat Flow(s),veh/h/ln	1781	1777	1772	1781	1777	1775	747	1777	1815	1084	1870	1573
Q Serve(g_s), s	4.2	10.8	11.0	3.3	22.8	22.8	7.4	6.0	6.1	16.3	20.9	13.8
Cycle Q Clear(g_c), s	4.2	10.8	11.0	3.3	22.8	22.8	28.4	6.0	6.1	22.4	20.9	13.8
Prop In Lane	1.00		0.29	1.00		0.28	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	97	764	762	230	896	895	148	553	565	343	582	489
V/C Ratio(X)	0.77	0.28	0.29	0.28	0.62	0.63	0.39	0.26	0.26	0.56	0.75	0.54
Avail Cap(c_a), veh/h	160	764	762	230	896	895	173	613	626	380	645	543
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.5	29.1	29.2	39.4	17.9	17.9	43.7	25.8	25.8	34.2	31.0	28.5
Incr Delay (d2), s/veh	12.0	0.9	0.9	0.7	3.3	3.3	1.6	0.2	0.2	1.5	4.4	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	5.1	5.2	1.4	9.4	9.4	1.4	2.5	2.6	4.3	9.8	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.4	30.0	30.1	40.0	21.2	21.2	45.3	26.1	26.1	35.8	35.3	29.4
LnGrp LOS	E	C	C	D	C	C	D	C	C	D	D	C
Approach Vol, veh/h		507			1185			348			891	
Approach Delay, s/veh		34.5			22.2			29.2			33.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.4	47.0		35.6	9.4	55.0		35.6				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.0	4.5		4.5				
Max Green Setting (Gmax), s	9.5	43.0		34.5	9.0	43.5		34.5				
Max Q Clear Time (g_c+I1), s	5.3	13.0		30.4	6.2	24.8		24.4				
Green Ext Time (p_c), s	0.0	2.5		0.7	0.0	6.9		3.3				

Intersection Summary			
HCM 6th Ctrl Delay		28.7	
HCM 6th LOS		C	

Intersection	
Int Delay, s/veh	118

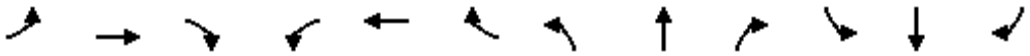
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↑	↱	↰	↑	↱
Traffic Vol, veh/h	16	6	22	164	41	122	23	396	82	61	676	67
Future Vol, veh/h	16	6	22	164	41	122	23	396	82	61	676	67
Conflicting Peds, #/hr	1	0	1	1	0	1	0	0	11	11	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	Free
Storage Length	-	-	-	-	-	-	75	-	170	70	-	135
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	6	23	173	43	128	24	417	86	64	712	71

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1392	1316	713	1332	1316	429	712	0	-	428	0	0
Stage 1	840	840	-	476	476	-	-	-	-	-	-	-
Stage 2	552	476	-	856	840	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	119	158	432	~ 131	158	626	888	-	0	1131	-	0
Stage 1	360	381	-	570	557	-	-	-	0	-	-	0
Stage 2	518	557	-	352	381	-	-	-	0	-	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	68	143	432	~ 111	143	619	888	-	-	1119	-	-
Mov Cap-2 Maneuver	68	143	-	~ 111	143	-	-	-	-	-	-	-
Stage 1	350	359	-	549	536	-	-	-	-	-	-	-
Stage 2	367	536	-	308	359	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	45.4	$ 542.8	0.5	0.7
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	888	-	134	167	1119	-
HCM Lane V/C Ratio	0.027	-	0.346	2.061	0.057	-
HCM Control Delay (s)	9.2	-	45.4	$ 542.8	8.4	-
HCM Lane LOS	A	-	E	F	A	-
HCM 95th %tile Q(veh)	0.1	-	1.4	26.9	0.2	-

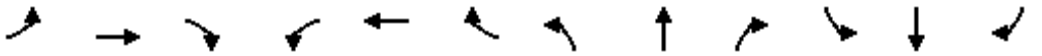
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	421	121	170	1181	46	137	27	86	37	20	21
Future Volume (veh/h)	14	421	121	170	1181	46	137	27	86	37	20	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.95	1.00		0.94
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	443	127	179	1243	48	144	28	91	39	21	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	47	1370	389	211	2099	81	173	311	251	76	94	98
Arrive On Green	0.03	0.51	0.51	0.12	0.60	0.60	0.10	0.17	0.17	0.04	0.12	0.12
Sat Flow, veh/h	1781	2708	768	1781	3485	134	1781	1870	1506	1781	806	844
Grp Volume(v), veh/h	15	289	281	179	633	658	144	28	91	39	0	43
Grp Sat Flow(s),veh/h/ln	1781	1777	1699	1781	1777	1843	1781	1870	1506	1781	0	1650
Q Serve(g_s), s	1.0	11.5	11.7	11.8	26.4	26.5	9.5	1.5	6.4	2.6	0.0	2.8
Cycle Q Clear(g_c), s	1.0	11.5	11.7	11.8	26.4	26.5	9.5	1.5	6.4	2.6	0.0	2.8
Prop In Lane	1.00		0.45	1.00		0.07	1.00		1.00	1.00		0.51
Lane Grp Cap(c), veh/h	47	899	860	211	1070	1110	173	311	251	76	0	192
V/C Ratio(X)	0.32	0.32	0.33	0.85	0.59	0.59	0.83	0.09	0.36	0.52	0.00	0.22
Avail Cap(c_a), veh/h	132	899	860	362	1070	1110	251	461	371	273	0	434
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.4	17.5	17.5	51.8	14.7	14.8	53.2	42.3	44.4	56.2	0.0	48.1
Incr Delay (d2), s/veh	4.7	0.9	1.0	10.8	2.4	2.3	16.0	0.3	1.9	6.4	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	4.8	4.7	5.8	10.5	10.9	5.0	0.7	2.5	1.3	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.1	18.4	18.6	62.7	17.1	17.1	69.2	42.6	46.2	62.7	0.0	49.4
LnGrp LOS	E	B	B	E	B	B	E	D	D	E	A	D
Approach Vol, veh/h		585			1470			263			82	
Approach Delay, s/veh		19.6			22.7			58.4			55.7	
Approach LOS		B			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.8	66.1	9.7	25.4	7.2	77.7	15.7	19.3
Change Period (Y+Rc), s	4.6	5.4	4.6	5.4	4.1	5.4	4.1	5.4
Max Green Setting (Gmax), s	24.4	27.6	18.4	29.6	8.9	43.6	16.9	31.6
Max Q Clear Time (g_c+I1), s	13.8	13.7	4.6	8.4	3.0	28.5	11.5	4.8
Green Ext Time (p_c), s	0.4	4.8	0.1	0.8	0.0	11.1	0.2	0.3

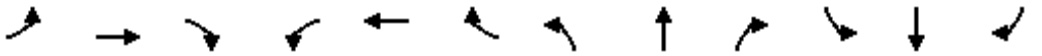
Intersection Summary	
HCM 6th Ctrl Delay	27.0
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	409	60	185	997	12	235	19	50	12	78	83
Future Volume (veh/h)	10	409	60	185	997	12	235	19	50	12	78	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	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	11	431	63	195	1049	13	247	20	53	13	82	87
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	308	1887	274	562	2179	27	347	137	364	432	250	265
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	531	3112	452	902	3593	45	1215	453	1199	1325	823	874
Grp Volume(v), veh/h	11	245	249	195	519	543	247	0	73	13	0	169
Grp Sat Flow(s),veh/h/ln	531	1777	1788	902	1777	1861	1215	0	1652	1325	0	1697
Q Serve(g_s), s	1.2	6.3	6.4	12.6	16.2	16.2	19.7	0.0	3.2	0.7	0.0	7.7
Cycle Q Clear(g_c), s	17.4	6.3	6.4	19.0	16.2	16.2	27.4	0.0	3.2	3.9	0.0	7.7
Prop In Lane	1.00		0.25	1.00		0.02	1.00		0.73	1.00		0.51
Lane Grp Cap(c), veh/h	308	1077	1084	562	1077	1128	347	0	502	432	0	515
V/C Ratio(X)	0.04	0.23	0.23	0.35	0.48	0.48	0.71	0.00	0.15	0.03	0.00	0.33
Avail Cap(c_a), veh/h	308	1077	1084	562	1077	1128	568	0	801	672	0	823
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	0.78	0.78	0.78	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.8	9.0	9.0	13.3	10.9	10.9	37.5	0.0	25.4	26.8	0.0	26.9
Incr Delay (d2), s/veh	0.2	0.5	0.5	1.3	1.2	1.1	2.0	0.0	0.1	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	0.2	2.3	2.3	2.5	5.9	6.2	5.9	0.0	1.3	0.2	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.0	9.5	9.5	14.7	12.1	12.1	39.5	0.0	25.5	26.8	0.0	27.2
LnGrp LOS	B	A	A	B	B	B	D	A	C	C	A	C
Approach Vol, veh/h		505			1257			320			182	
Approach Delay, s/veh		9.6			12.5			36.3			27.2	
Approach LOS		A			B			D			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.1		34.9		65.1		34.9				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		42.5		48.5		42.5		48.5				
Max Q Clear Time (g_c+I1), s		19.4		29.4		21.0		9.7				
Green Ext Time (p_c), s		2.3		0.9		6.5		0.9				

Intersection Summary												
HCM 6th Ctrl Delay			16.4									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	242	874	121	63	438	184	57	551	45	84	300	42
Future Volume (veh/h)	242	874	121	63	438	184	57	551	45	84	300	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	255	920	127	66	461	194	60	580	47	88	316	44
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	278	1381	191	292	1083	452	204	953	77	168	536	450
Arrive On Green	0.31	0.88	0.88	0.16	0.45	0.45	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1781	3126	431	1781	2413	1005	1019	3327	269	797	1870	1570
Grp Volume(v), veh/h	255	523	524	66	338	317	60	309	318	88	316	44
Grp Sat Flow(s),veh/h/ln	1781	1777	1781	1781	1777	1641	1019	1777	1819	797	1870	1570
Q Serve(g_s), s	16.5	10.0	10.0	3.9	15.5	15.8	6.4	18.0	18.1	12.9	17.4	2.5
Cycle Q Clear(g_c), s	16.5	10.0	10.0	3.9	15.5	15.8	23.9	18.0	18.1	31.0	17.4	2.5
Prop In Lane	1.00		0.24	1.00		0.61	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	278	785	786	292	798	737	204	509	521	168	536	450
V/C Ratio(X)	0.92	0.67	0.67	0.23	0.42	0.43	0.29	0.61	0.61	0.52	0.59	0.10
Avail Cap(c_a), veh/h	371	785	786	292	798	737	265	614	629	215	647	543
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.5	4.5	4.5	43.6	22.5	22.6	47.0	37.0	37.0	50.4	36.8	31.4
Incr Delay (d2), s/veh	17.8	3.9	3.9	0.1	1.6	1.8	0.6	0.9	0.9	1.9	0.8	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	7.2	2.6	2.6	1.7	6.6	6.3	1.7	7.9	8.1	2.6	8.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.3	8.4	8.4	43.7	24.1	24.4	47.6	37.9	37.9	52.3	37.5	31.5
LnGrp LOS	E	A	A	D	C	C	D	D	D	D	D	C
Approach Vol, veh/h		1302			721			687			448	
Approach Delay, s/veh		18.1			26.0			38.8			39.9	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	24.1	57.0		38.9	22.7	58.4		38.9				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.0	4.5		4.5				
Max Green Setting (Gmax), s	12.5	53.0		41.5	25.0	40.5		41.5				
Max Q Clear Time (g_c+I1), s	5.9	12.0		25.9	18.5	17.8		33.0				
Green Ext Time (p_c), s	0.0	9.9		2.9	0.2	4.8		1.4				

Intersection Summary												
HCM 6th Ctrl Delay			27.5									
HCM 6th LOS			C									

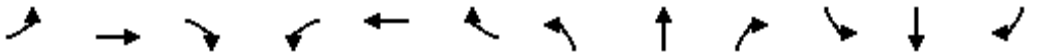
Intersection	
Int Delay, s/veh	28.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	14	26	74	11	70	44	790	309	73	363	26
Future Vol, veh/h	15	14	26	74	11	70	44	790	309	73	363	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	8	8	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	Free
Storage Length	-	-	-	-	-	-	75	-	170	70	-	135
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	15	27	78	12	74	46	832	325	77	382	27

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1503	1468	382	1489	1468	840	382	0	-	840	0	0
Stage 1	536	536	-	932	932	-	-	-	-	-	-	-
Stage 2	967	932	-	557	536	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	100	128	665	102	128	365	1176	-	0	795	-	0
Stage 1	529	523	-	320	345	-	-	-	0	-	-	0
Stage 2	306	345	-	515	523	-	-	-	0	-	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	66	110	665	78	110	362	1176	-	-	789	-	-
Mov Cap-2 Maneuver	66	110	-	78	110	-	-	-	-	-	-	-
Stage 1	508	472	-	305	329	-	-	-	-	-	-	-
Stage 2	226	329	-	432	472	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	47.7	249.6	0.4	1.7
HCM LOS	E	F		

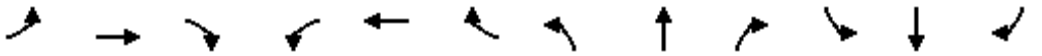
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	1176	-	140	125	789	-
HCM Lane V/C Ratio	0.039	-	0.414	1.305	0.097	-
HCM Control Delay (s)	8.2	-	47.7	249.6	10.1	-
HCM Lane LOS	A	-	E	F	B	-
HCM 95th %tile Q(veh)	0.1	-	1.8	10.6	0.3	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	995	88	88	604	97	99	28	173	133	48	11
Future Volume (veh/h)	30	995	88	88	604	97	99	28	173	133	48	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.95	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	32	1047	93	93	636	102	104	29	182	140	51	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	1771	157	116	1725	276	129	305	245	167	266	63
Arrive On Green	0.04	0.54	0.54	0.06	0.56	0.56	0.07	0.16	0.16	0.09	0.18	0.18
Sat Flow, veh/h	1781	3297	293	1781	3058	490	1781	1870	1503	1781	1447	340
Grp Volume(v), veh/h	32	564	576	93	369	369	104	29	182	140	0	63
Grp Sat Flow(s),veh/h/ln	1781	1777	1813	1781	1777	1770	1781	1870	1503	1781	0	1788
Q Serve(g_s), s	2.4	29.1	29.1	7.0	15.4	15.5	7.8	1.8	15.6	10.4	0.0	4.0
Cycle Q Clear(g_c), s	2.4	29.1	29.1	7.0	15.4	15.5	7.8	1.8	15.6	10.4	0.0	4.0
Prop In Lane	1.00		0.16	1.00		0.28	1.00		1.00	1.00		0.19
Lane Grp Cap(c), veh/h	74	954	974	116	1002	999	129	305	245	167	0	329
V/C Ratio(X)	0.43	0.59	0.59	0.80	0.37	0.37	0.80	0.10	0.74	0.84	0.00	0.19
Avail Cap(c_a), veh/h	157	954	974	177	1002	999	315	416	334	276	0	358
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	63.2	21.2	21.2	62.3	16.2	16.2	61.7	48.0	53.8	60.2	0.0	46.6
Incr Delay (d2), s/veh	4.8	2.7	2.6	16.2	1.0	1.1	13.0	0.2	6.6	13.0	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	1.2	12.3	12.6	3.6	6.3	6.3	4.0	0.8	6.3	5.3	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.9	23.9	23.8	78.5	17.2	17.2	74.6	48.2	60.4	73.2	0.0	46.9
LnGrp LOS	E	C	C	E	B	B	E	D	E	E	A	D
Approach Vol, veh/h		1172			831			315			203	
Approach Delay, s/veh		25.1			24.1			64.0			65.1	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	77.9	16.7	27.0	9.7	81.6	13.9	29.8
Change Period (Y+Rc), s	4.6	5.4	4.1	5.0	4.1	5.4	4.1	5.0
Max Green Setting (Gmax), s	13.4	51.6	20.9	30.0	11.9	53.6	23.9	27.0
Max Q Clear Time (g_c+I1), s	9.0	31.1	12.4	17.6	4.4	17.5	9.8	6.0
Green Ext Time (p_c), s	0.1	12.5	0.3	0.7	0.0	10.0	0.2	0.3

Intersection Summary	
HCM 6th Ctrl Delay	32.8
HCM 6th LOS	C



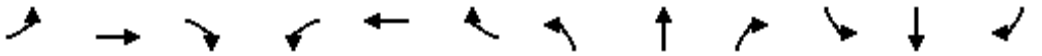
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	1112	112	69	459	8	150	41	84	15	25	32
Future Volume (veh/h)	27	1112	112	69	459	8	150	41	84	15	25	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	1171	118	73	483	8	158	43	88	16	26	34
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	743	2455	247	324	2699	45	247	92	189	184	125	163
Arrive On Green	0.75	0.75	0.75	1.00	1.00	1.00	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	905	3253	327	428	3576	59	1339	541	1108	1256	734	960
Grp Volume(v), veh/h	28	639	650	73	240	251	158	0	131	16	0	60
Grp Sat Flow(s),veh/h/ln	905	1777	1803	428	1777	1858	1339	0	1649	1256	0	1694
Q Serve(g_s), s	0.9	16.5	16.6	4.8	0.0	0.0	13.8	0.0	8.6	1.4	0.0	3.7
Cycle Q Clear(g_c), s	0.9	16.5	16.6	21.5	0.0	0.0	17.5	0.0	8.6	10.0	0.0	3.7
Prop In Lane	1.00		0.18	1.00		0.03	1.00		0.67	1.00		0.57
Lane Grp Cap(c), veh/h	743	1341	1361	324	1341	1402	247	0	281	184	0	288
V/C Ratio(X)	0.04	0.48	0.48	0.23	0.18	0.18	0.64	0.00	0.47	0.09	0.00	0.21
Avail Cap(c_a), veh/h	743	1341	1361	324	1341	1402	393	0	460	321	0	473
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.93	0.93	0.93	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	3.7	5.6	5.6	2.0	0.0	0.0	50.3	0.0	44.9	49.4	0.0	42.8
Incr Delay (d2), s/veh	0.1	1.2	1.2	1.5	0.3	0.3	2.0	0.0	0.9	0.1	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	0.2	5.3	5.4	0.3	0.1	0.1	4.7	0.0	3.6	0.4	0.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.8	6.9	6.9	3.5	0.3	0.3	52.4	0.0	45.8	49.5	0.0	43.1
LnGrp LOS	A	A	A	A	A	A	D	A	D	D	A	D
Approach Vol, veh/h		1317			564			289			76	
Approach Delay, s/veh		6.8			0.7			49.4			44.4	
Approach LOS		A			A			D			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		95.1		24.9		95.1		24.9				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		77.5		33.5		77.5		33.5				
Max Q Clear Time (g_c+I1), s		18.6		19.5		23.5		12.0				
Green Ext Time (p_c), s		8.8		0.8		3.5		0.2				

Intersection Summary												
HCM 6th Ctrl Delay			12.0									
HCM 6th LOS			B									

APPENDIX E -

OPENING YEAR (2021) WITH PROJECT PEAK HOUR INTERSECTION ANALYSIS WORKSHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	350	61	62	933	149	63	256	21	208	423	249
Future Volume (veh/h)	89	350	61	62	933	149	63	256	21	208	423	249
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	94	368	64	65	982	157	66	269	22	219	445	262
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	120	1302	224	208	1468	235	155	1074	87	357	605	509
Arrive On Green	0.02	0.14	0.14	0.12	0.48	0.48	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1781	3028	522	1781	3064	489	741	3323	270	1084	1870	1573
Grp Volume(v), veh/h	94	215	217	65	569	570	66	143	148	219	445	262
Grp Sat Flow(s),veh/h/ln	1781	1777	1772	1781	1777	1776	741	1777	1815	1084	1870	1573
Q Serve(g_s), s	5.3	10.8	11.0	3.3	24.5	24.6	8.7	5.9	6.0	18.7	21.1	13.5
Cycle Q Clear(g_c), s	5.3	10.8	11.0	3.3	24.5	24.6	29.8	5.9	6.0	24.7	21.1	13.5
Prop In Lane	1.00		0.29	1.00		0.28	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	120	764	762	208	851	851	155	575	587	357	605	509
V/C Ratio(X)	0.78	0.28	0.29	0.31	0.67	0.67	0.43	0.25	0.25	0.61	0.74	0.51
Avail Cap(c_a), veh/h	160	764	762	208	851	851	171	613	626	381	645	543
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.2	29.1	29.2	40.5	20.0	20.0	43.3	24.9	24.9	34.0	30.0	27.5
Incr Delay (d2), s/veh	16.0	0.9	0.9	0.9	4.1	4.2	1.8	0.2	0.2	2.6	4.1	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	2.9	5.1	5.2	1.5	10.3	10.3	1.6	2.5	2.6	5.0	9.9	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.1	30.0	30.1	41.3	24.1	24.1	45.1	25.1	25.1	36.6	34.1	28.3
LnGrp LOS	E	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		526			1204			357			926	
Approach Delay, s/veh		36.1			25.1			28.8			33.1	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.2	47.0		36.8	10.7	52.4		36.8				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.0	4.5		4.5				
Max Green Setting (Gmax), s	9.5	43.0		34.5	9.0	43.5		34.5				
Max Q Clear Time (g_c+I1), s	5.3	13.0		31.8	7.3	26.6		26.7				
Green Ext Time (p_c), s	0.0	2.5		0.5	0.0	6.7		2.9				

Intersection Summary												
HCM 6th Ctrl Delay			29.9									
HCM 6th LOS			C									

Intersection	
Int Delay, s/veh	129.6

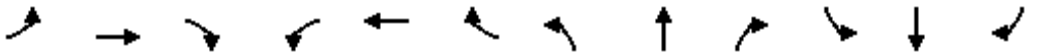
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	9	28	167	41	122	23	402	82	61	682	67
Future Vol, veh/h	16	9	28	167	41	122	23	402	82	61	682	67
Conflicting Peds, #/hr	1	0	1	1	0	1	0	0	11	11	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	Free
Storage Length	-	-	-	-	-	-	75	-	170	70	-	135
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	9	29	176	43	128	24	423	86	64	718	71

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1404	1328	719	1348	1328	435	718	0	-	434	0	0
Stage 1	846	846	-	482	482	-	-	-	-	-	-	-
Stage 2	558	482	-	866	846	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	117	155	428	~ 128	155	621	883	-	0	1126	-	0
Stage 1	357	378	-	565	553	-	-	-	0	-	-	0
Stage 2	514	553	-	348	378	-	-	-	0	-	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	66	141	428	~ 105	141	614	883	-	-	1114	-	-
Mov Cap-2 Maneuver	66	141	-	~ 105	141	-	-	-	-	-	-	-
Stage 1	347	356	-	544	533	-	-	-	-	-	-	-
Stage 2	363	533	-	297	356	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	45.4	$ 599.7	0.5	0.7
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	883	-	143	159	1114	-
HCM Lane V/C Ratio	0.027	-	0.39	2.185	0.058	-
HCM Control Delay (s)	9.2	-	45.4	$ 599.7	8.4	-
HCM Lane LOS	A	-	E	F	A	-
HCM 95th %tile Q(veh)	0.1	-	1.7	28.2	0.2	-

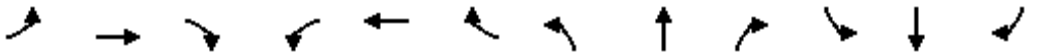
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	434	124	170	1193	46	140	27	86	37	20	24
Future Volume (veh/h)	17	434	124	170	1193	46	140	27	86	37	20	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.95	1.00		0.94
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	18	457	131	179	1256	48	147	28	91	39	21	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	54	1365	388	211	2081	79	176	315	253	76	87	103
Arrive On Green	0.03	0.50	0.50	0.12	0.60	0.60	0.10	0.17	0.17	0.04	0.12	0.12
Sat Flow, veh/h	1781	2707	769	1781	3487	133	1781	1870	1506	1781	748	890
Grp Volume(v), veh/h	18	298	290	179	640	664	147	28	91	39	0	46
Grp Sat Flow(s),veh/h/ln	1781	1777	1699	1781	1777	1843	1781	1870	1506	1781	0	1638
Q Serve(g_s), s	1.2	12.0	12.2	11.8	27.2	27.3	9.7	1.5	6.4	2.6	0.0	3.1
Cycle Q Clear(g_c), s	1.2	12.0	12.2	11.8	27.2	27.3	9.7	1.5	6.4	2.6	0.0	3.1
Prop In Lane	1.00		0.45	1.00		0.07	1.00		1.00	1.00		0.54
Lane Grp Cap(c), veh/h	54	896	857	211	1060	1100	176	315	253	76	0	190
V/C Ratio(X)	0.34	0.33	0.34	0.85	0.60	0.60	0.84	0.09	0.36	0.52	0.00	0.24
Avail Cap(c_a), veh/h	132	896	857	362	1060	1100	251	461	372	273	0	431
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.0	17.7	17.8	51.8	15.2	15.3	53.1	42.1	44.2	56.2	0.0	48.2
Incr Delay (d2), s/veh	4.4	1.0	1.1	10.8	2.5	2.5	16.6	0.3	1.8	6.4	0.0	1.4
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	0.6	5.0	4.8	5.8	10.8	11.2	5.1	0.7	0.1	1.3	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.4	18.7	18.8	62.7	17.8	17.7	69.8	42.4	46.0	62.7	0.0	49.6
LnGrp LOS	E	B	B	E	B	B	E	D	D	E	A	D
Approach Vol, veh/h		606			1483			266			85	
Approach Delay, s/veh		20.0			23.2			58.8			55.6	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.8	65.9	9.7	25.6	7.7	77.0	15.9	19.3
Change Period (Y+Rc), s	4.6	5.4	4.6	5.4	4.1	5.4	4.1	5.4
Max Green Setting (Gmax), s	24.4	27.6	18.4	29.6	8.9	43.6	16.9	31.6
Max Q Clear Time (g_c+I1), s	13.8	14.2	4.6	8.4	3.2	29.3	11.7	5.1
Green Ext Time (p_c), s	0.4	4.9	0.1	0.8	0.0	10.7	0.2	0.3

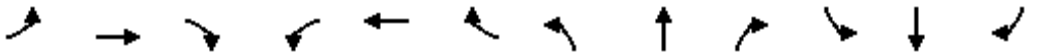
Intersection Summary	
HCM 6th Ctrl Delay	27.4
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	424	60	188	1013	21	235	19	53	12	78	83
Future Volume (veh/h)	10	424	60	188	1013	21	235	19	53	12	78	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	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	11	446	63	198	1066	22	247	20	56	13	82	87
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	299	1896	266	553	2157	45	348	132	369	429	250	265
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	518	3128	439	890	3559	73	1215	434	1215	1321	823	874
Grp Volume(v), veh/h	11	252	257	198	532	556	247	0	76	13	0	169
Grp Sat Flow(s),veh/h/ln	518	1777	1790	890	1777	1855	1215	0	1649	1321	0	1697
Q Serve(g_s), s	1.2	6.5	6.6	13.2	16.8	16.8	19.7	0.0	3.4	0.7	0.0	7.7
Cycle Q Clear(g_c), s	18.1	6.5	6.6	19.7	16.8	16.8	27.4	0.0	3.4	4.1	0.0	7.7
Prop In Lane	1.00		0.25	1.00		0.04	1.00		0.74	1.00		0.51
Lane Grp Cap(c), veh/h	299	1077	1085	553	1077	1125	348	0	501	429	0	516
V/C Ratio(X)	0.04	0.23	0.24	0.36	0.49	0.49	0.71	0.00	0.15	0.03	0.00	0.33
Avail Cap(c_a), veh/h	299	1077	1085	553	1077	1125	568	0	800	668	0	823
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	0.76	0.76	0.76	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.1	9.0	9.1	13.6	11.1	11.1	37.5	0.0	25.4	26.9	0.0	26.9
Incr Delay (d2), s/veh	0.2	0.5	0.5	1.4	1.2	1.2	2.0	0.0	0.1	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	0.2	2.4	2.4	2.6	6.1	6.4	5.9	0.0	1.3	0.2	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.4	9.5	9.6	15.0	12.3	12.3	39.5	0.0	25.5	26.9	0.0	27.2
LnGrp LOS	B	A	A	B	B	B	D	A	C	C	A	C
Approach Vol, veh/h		520			1286			323			182	
Approach Delay, s/veh		9.7			12.7			36.2			27.2	
Approach LOS		A			B			D			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.1		34.9		65.1		34.9				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		42.5		48.5		42.5		48.5				
Max Q Clear Time (g_c+I1), s		20.1		29.4		21.7		9.7				
Green Ext Time (p_c), s		2.4		0.9		6.6		0.9				

Intersection Summary												
HCM 6th Ctrl Delay			16.4									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	874	121	63	447	184	62	551	45	95	304	42
Future Volume (veh/h)	251	874	121	63	447	184	62	551	45	95	304	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	264	920	127	66	471	194	65	580	47	100	320	44
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	287	1381	191	271	1051	429	215	991	80	179	557	468
Arrive On Green	0.32	0.88	0.88	0.15	0.43	0.43	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1781	3126	431	1781	2429	991	1016	3327	269	798	1870	1571
Grp Volume(v), veh/h	264	523	524	66	343	322	65	309	318	100	320	44
Grp Sat Flow(s),veh/h/ln	1781	1777	1781	1781	1777	1643	1016	1777	1819	798	1870	1571
Q Serve(g_s), s	17.1	10.0	10.0	3.9	16.3	16.6	6.9	17.8	17.8	14.6	17.4	2.4
Cycle Q Clear(g_c), s	17.1	10.0	10.0	3.9	16.3	16.6	24.3	17.8	17.8	32.5	17.4	2.4
Prop In Lane	1.00		0.24	1.00		0.60	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	287	785	786	271	769	711	215	529	542	179	557	468
V/C Ratio(X)	0.92	0.67	0.67	0.24	0.45	0.45	0.30	0.58	0.59	0.56	0.57	0.09
Avail Cap(c_a), veh/h	371	785	786	271	769	711	264	614	629	217	647	543
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.9	4.5	4.5	44.8	23.9	24.0	46.0	35.8	35.8	49.7	35.7	30.4
Incr Delay (d2), s/veh	19.2	3.9	3.9	0.2	1.9	2.1	0.6	0.8	0.8	2.0	0.7	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	7.5	2.6	2.6	1.7	7.0	6.6	1.8	7.7	7.9	3.0	7.9	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.1	8.4	8.4	45.0	25.8	26.1	46.6	36.6	36.6	51.7	36.4	30.5
LnGrp LOS	E	A	A	D	C	C	D	D	D	D	D	C
Approach Vol, veh/h		1311			731			692			464	
Approach Delay, s/veh		18.6			27.7			37.6			39.1	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	22.8	57.0		40.2	23.3	56.4		40.2				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.0	4.5		4.5				
Max Green Setting (Gmax), s	12.5	53.0		41.5	25.0	40.5		41.5				
Max Q Clear Time (g_c+I1), s	5.9	12.0		26.3	19.1	18.6		34.5				
Green Ext Time (p_c), s	0.0	9.9		2.9	0.2	4.8		1.3				

Intersection Summary			
HCM 6th Ctrl Delay		27.7	
HCM 6th LOS		C	

Intersection	
Int Delay, s/veh	31.1

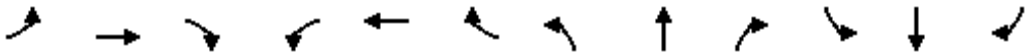
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↑	↱	↰	↑	↱
Traffic Vol, veh/h	15	15	29	76	11	70	44	793	309	73	366	26
Future Vol, veh/h	15	15	29	76	11	70	44	793	309	73	366	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	8	8	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	Free
Storage Length	-	-	-	-	-	-	75	-	170	70	-	135
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	16	31	80	12	74	46	835	325	77	385	27

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1509	1474	385	1498	1474	843	385	0	-	843	0	0
Stage 1	539	539	-	935	935	-	-	-	-	-	-	-
Stage 2	970	935	-	563	539	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	99	127	663	101	127	364	1173	-	0	793	-	0
Stage 1	527	522	-	318	344	-	-	-	0	-	-	0
Stage 2	304	344	-	511	522	-	-	-	0	-	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	65	109	663	~ 77	109	361	1173	-	-	787	-	-
Mov Cap-2 Maneuver	65	109	-	~ 77	109	-	-	-	-	-	-	-
Stage 1	506	471	-	303	328	-	-	-	-	-	-	-
Stage 2	224	328	-	425	471	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	48.2	270.4	0.4	1.7
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	1173	-	143	122	787	-
HCM Lane V/C Ratio	0.039	-	0.434	1.355	0.098	-
HCM Control Delay (s)	8.2	-	48.2	270.4	10.1	-
HCM Lane LOS	A	-	E	F	B	-
HCM 95th %tile Q(veh)	0.1	-	1.9	11	0.3	-

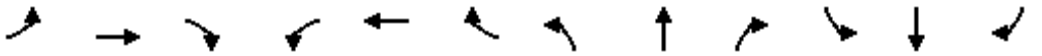
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	1001	89	88	610	97	101	28	173	133	48	13
Future Volume (veh/h)	31	1001	89	88	610	97	101	28	173	133	48	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.95	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	33	1054	94	93	642	102	106	29	182	140	51	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	75	1770	158	116	1726	274	132	305	245	167	255	70
Arrive On Green	0.04	0.54	0.54	0.06	0.56	0.56	0.07	0.16	0.16	0.09	0.18	0.18
Sat Flow, veh/h	1781	3296	294	1781	3062	486	1781	1870	1503	1781	1394	383
Grp Volume(v), veh/h	33	568	580	93	372	372	106	29	182	140	0	65
Grp Sat Flow(s),veh/h/ln	1781	1777	1813	1781	1777	1771	1781	1870	1503	1781	0	1777
Q Serve(g_s), s	2.4	29.4	29.4	7.0	15.6	15.7	7.9	1.8	15.6	10.4	0.0	4.2
Cycle Q Clear(g_c), s	2.4	29.4	29.4	7.0	15.6	15.7	7.9	1.8	15.6	10.4	0.0	4.2
Prop In Lane	1.00		0.16	1.00		0.27	1.00		1.00	1.00		0.22
Lane Grp Cap(c), veh/h	75	954	974	116	1001	998	132	305	245	167	0	325
V/C Ratio(X)	0.44	0.60	0.60	0.80	0.37	0.37	0.81	0.10	0.74	0.84	0.00	0.20
Avail Cap(c_a), veh/h	157	954	974	177	1001	998	315	416	334	276	0	355
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	63.1	21.3	21.3	62.3	16.3	16.3	61.6	48.0	53.8	60.2	0.0	46.8
Incr Delay (d2), s/veh	4.8	2.7	2.7	16.2	1.1	1.1	12.9	0.2	6.6	13.0	0.0	0.4
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	12.4	12.7	3.6	6.4	6.4	4.0	0.8	6.3	5.3	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.9	24.0	24.0	78.5	17.3	17.3	74.5	48.2	60.4	73.2	0.0	47.2
LnGrp LOS	E	C	C	E	B	B	E	D	E	E	A	D
Approach Vol, veh/h		1181			837			317			205	
Approach Delay, s/veh		25.2			24.1			64.0			65.0	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	77.9	16.7	27.0	9.8	81.5	14.1	29.7
Change Period (Y+Rc), s	4.6	5.4	4.1	5.0	4.1	5.4	4.1	5.0
Max Green Setting (Gmax), s	13.4	51.6	20.9	30.0	11.9	53.6	23.9	27.0
Max Q Clear Time (g_c+I1), s	9.0	31.4	12.4	17.6	4.4	17.7	9.9	6.2
Green Ext Time (p_c), s	0.1	12.5	0.3	0.7	0.0	10.1	0.2	0.3

Intersection Summary	
HCM 6th Ctrl Delay	32.9
HCM 6th LOS	C



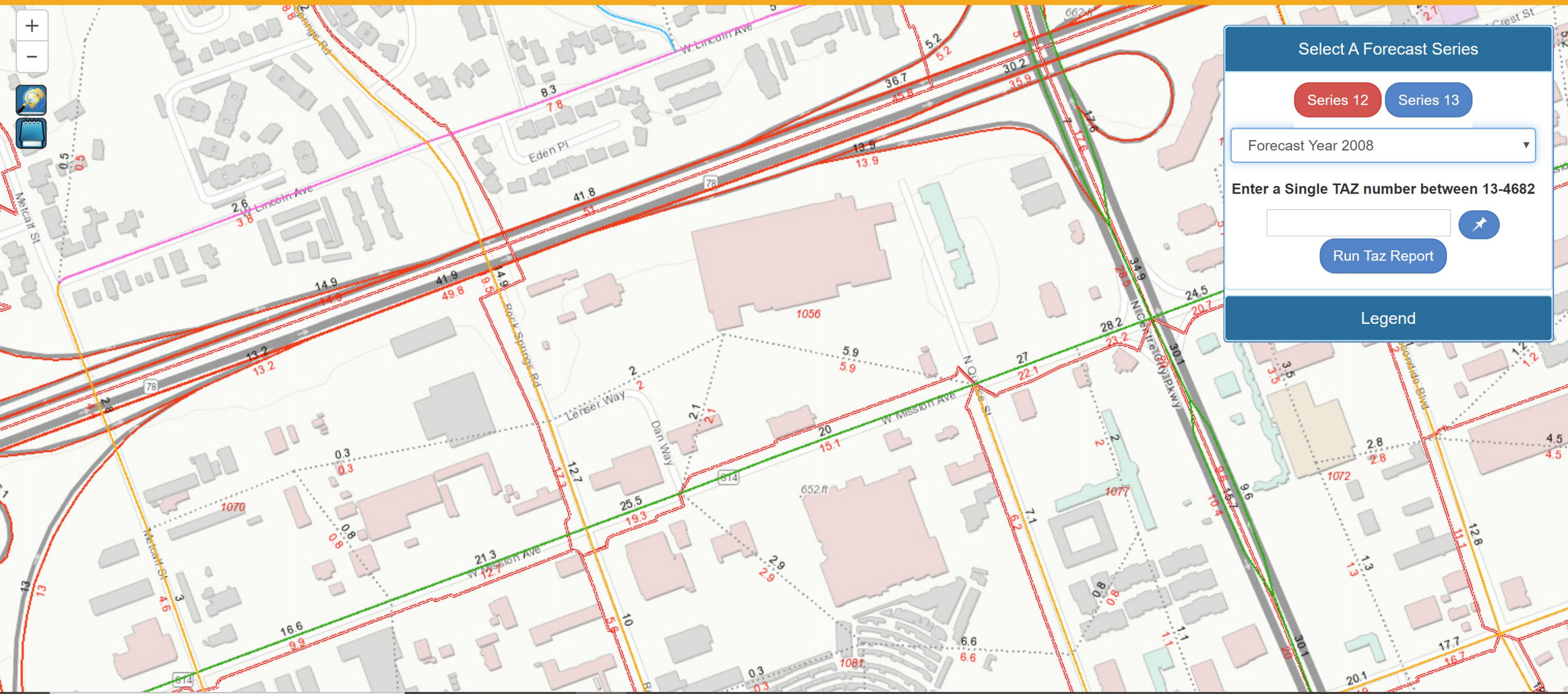
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	1120	112	70	466	12	150	41	86	15	25	32
Future Volume (veh/h)	27	1120	112	70	466	12	150	41	86	15	25	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	1179	118	74	491	13	158	43	91	16	26	34
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	735	2456	245	321	2667	71	247	90	191	181	125	164
Arrive On Green	0.75	0.75	0.75	1.00	1.00	1.00	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	894	3255	325	425	3534	93	1339	528	1118	1253	734	960
Grp Volume(v), veh/h	28	642	655	74	247	257	158	0	134	16	0	60
Grp Sat Flow(s),veh/h/ln	894	1777	1803	425	1777	1851	1339	0	1647	1253	0	1694
Q Serve(g_s), s	1.0	16.7	16.8	5.0	0.0	0.0	13.8	0.0	8.8	1.4	0.0	3.7
Cycle Q Clear(g_c), s	1.0	16.7	16.8	21.8	0.0	0.0	17.5	0.0	8.8	10.2	0.0	3.7
Prop In Lane	1.00		0.18	1.00		0.05	1.00		0.68	1.00		0.57
Lane Grp Cap(c), veh/h	735	1341	1361	321	1341	1397	247	0	281	181	0	289
V/C Ratio(X)	0.04	0.48	0.48	0.23	0.18	0.18	0.64	0.00	0.48	0.09	0.00	0.21
Avail Cap(c_a), veh/h	735	1341	1361	321	1341	1397	393	0	460	318	0	473
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.92	0.92	0.92	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	3.7	5.7	5.7	2.0	0.0	0.0	50.3	0.0	44.9	49.6	0.0	42.8
Incr Delay (d2), s/veh	0.1	1.2	1.2	1.5	0.3	0.3	2.0	0.0	0.9	0.2	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	0.2	5.3	5.4	0.3	0.1	0.1	4.7	0.0	3.7	0.4	0.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.8	6.9	6.9	3.6	0.3	0.3	52.4	0.0	45.9	49.7	0.0	43.1
LnGrp LOS	A	A	A	A	A	A	D	A	D	D	A	D
Approach Vol, veh/h		1325			578			292			76	
Approach Delay, s/veh		6.8			0.7			49.4			44.5	
Approach LOS		A			A			D			D	

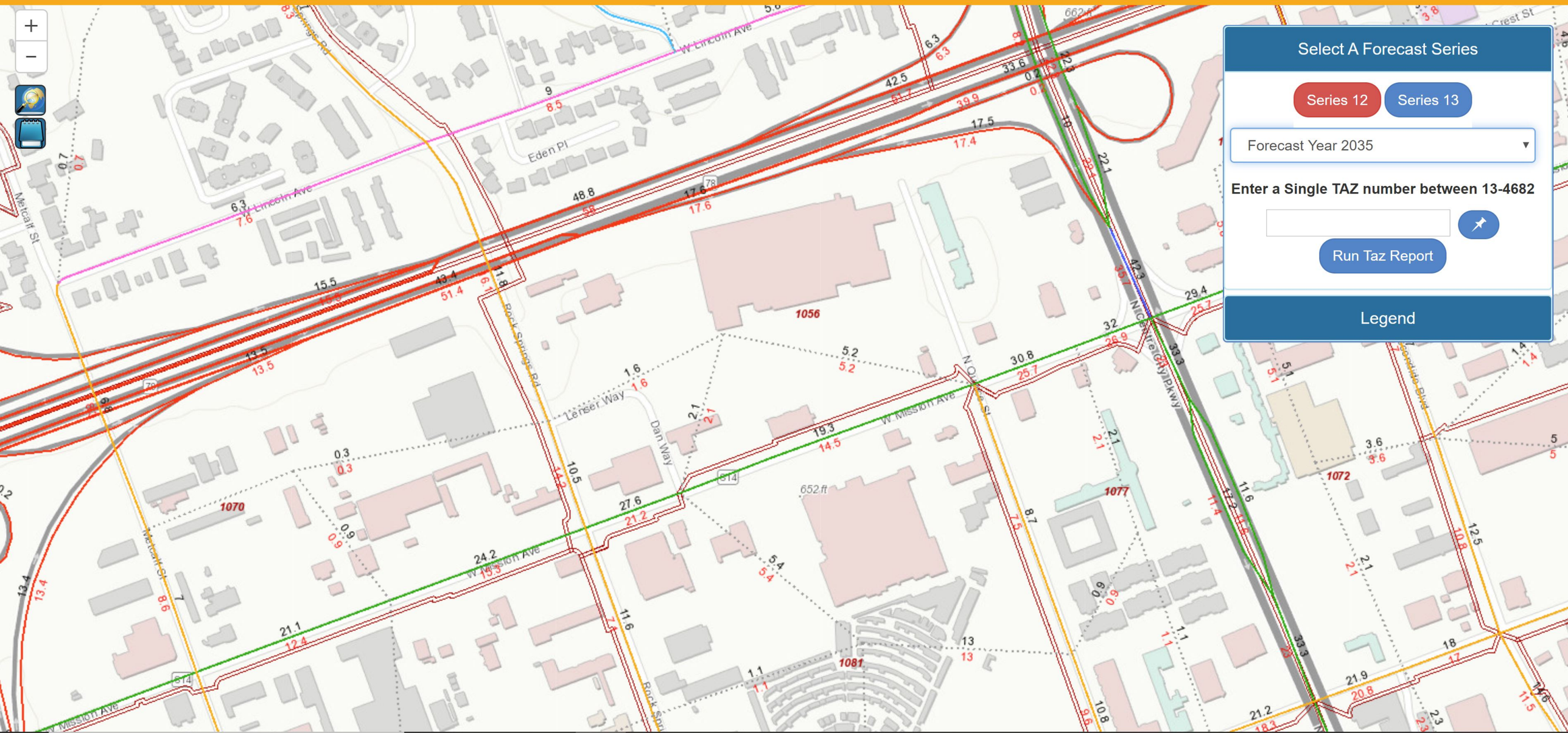
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		95.0		25.0		95.0		25.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		77.5		33.5		77.5		33.5				
Max Q Clear Time (g_c+I1), s		18.8		19.5		23.8		12.2				
Green Ext Time (p_c), s		8.9		0.8		3.6		0.2				

Intersection Summary												
HCM 6th Ctrl Delay			12.0									
HCM 6th LOS			B									

APPENDIX F -

FUTURE CONDITIONS (2035) INTERSECTION TURNING VOLUME DEVELOPMENT WORKSHEETS

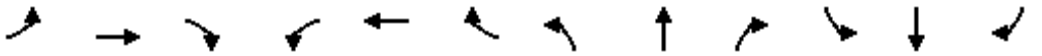

Select A Forecast Series
Series 12
Series 13
Forecast Year 2008
Enter a Single TAZ number between 13-4682
Run Taz Report
Legend
W Lincoln Ave
Eden Pl
Metcalf St
Rock Springs Rd
Lenser Way
Dan Way
W Mission Ave
N Quince St
Nicholas Freeway Pkwy
Escondido Blvd
1056
1070
1072
1077
1081
652.ft
78
814


Select A Forecast Series
Series 12
Series 13
Forecast Year 2035
Enter a Single TAZ number between 13-4682
Run Taz Report
Legend
W Lincoln Ave
Eden Pl
Metcalf St
Rock Springs Rd
Lenser Way
Dan Way
W Mission Ave
N Quince St
652 ft
1056
1070
1072
1077
1081

Intersection	Leg	Sr 12 2008	2019 Count	Sr 12 2035	Sr 12 2008 to Sr 12 2035 Annual Growth Rate	2035 Adjusted
1	EB	21,300	18102	24200	0.50%	19600
	SB	12700	14685	10500	0.19%	15500
	WB	25500	19161	27600	0.31%	20100
	NB	10000	10706	11600	0.59%	11800
2	EB	2600	1,560	6300	5.27%	2900
	SB	14200	13209	13700	0.19%	13900
	WB	8300	5290	9000	0.31%	5600
	NB	14900	14685	11800	0.19%	15500
3	EB	20000	19161	19300	0.19%	19800
	SB	5900	4,010	5200	0.19%	4200
	WB	27000	24597	30800	0.52%	26700
	NB	7100	6,050	8700	0.83%	6900
4	EB	21100	18582	27900	1.19%	22200
	SB	3000	2,490	7000	4.94%	4500
	WB	16600	18102	21100	1.00%	21100
	NB	4400	7,236	4900	0.42%	7800

APPENDIX G -

FUTURE CONDITIONS (2035) PEAK HOUR INTERSECTION ANALYSIS WORKSHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	370	80	70	950	160	70	270	30	190	440	260
Future Volume (veh/h)	80	370	80	70	950	160	70	270	30	190	440	260
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	389	84	74	1000	168	74	284	32	200	463	274
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	108	1251	267	179	1428	240	160	1092	122	363	635	534
Arrive On Green	0.02	0.14	0.14	0.10	0.47	0.47	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1781	2908	622	1781	3039	510	721	3215	359	1060	1870	1574
Grp Volume(v), veh/h	84	236	237	74	584	584	74	156	160	200	463	274
Grp Sat Flow(s),veh/h/ln	1781	1777	1753	1781	1777	1772	721	1777	1797	1060	1870	1574
Q Serve(g_s), s	4.7	11.9	12.1	3.9	26.0	26.1	10.0	6.3	6.5	16.9	21.7	13.9
Cycle Q Clear(g_c), s	4.7	11.9	12.1	3.9	26.0	26.1	31.8	6.3	6.5	23.3	21.7	13.9
Prop In Lane	1.00		0.35	1.00		0.29	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	108	764	754	179	835	832	160	603	610	363	635	534
V/C Ratio(X)	0.78	0.31	0.31	0.41	0.70	0.70	0.46	0.26	0.26	0.55	0.73	0.51
Avail Cap(c_a), veh/h	160	764	754	179	835	832	164	613	620	369	645	543
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.3	29.6	29.7	42.2	20.9	21.0	42.9	23.9	23.9	32.4	29.0	26.4
Incr Delay (d2), s/veh	12.8	1.0	1.1	1.5	4.9	4.9	2.1	0.2	0.2	1.7	4.1	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	2.5	5.8	5.8	1.7	11.0	11.0	1.8	2.6	2.7	4.4	10.1	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.1	30.6	30.7	43.7	25.8	25.9	45.0	24.1	24.2	34.1	33.1	27.2
LnGrp LOS	E	C	C	D	C	C	D	C	C	C	C	C
Approach Vol, veh/h		557			1242			390			937	
Approach Delay, s/veh		35.3			26.9			28.1			31.6	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.5	47.0		38.5	10.1	51.5		38.5				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.0	4.5		4.5				
Max Green Setting (Gmax), s	9.5	43.0		34.5	9.0	43.5		34.5				
Max Q Clear Time (g_c+I1), s	5.9	14.1		33.8	6.7	28.1		25.3				
Green Ext Time (p_c), s	0.0	2.8		0.2	0.0	6.6		3.3				

Intersection Summary			
HCM 6th Ctrl Delay		29.9	
HCM 6th LOS		C	

Intersection	
Int Delay, s/veh	234.3

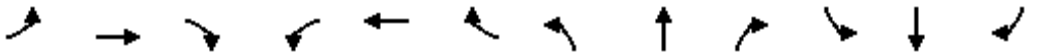
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↑	↱	↰	↑	↱
Traffic Vol, veh/h	30	10	50	170	70	130	50	410	90	70	680	130
Future Vol, veh/h	30	10	50	170	70	130	50	410	90	70	680	130
Conflicting Peds, #/hr	1	0	1	1	0	1	0	0	11	11	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	Free
Storage Length	-	-	-	-	-	-	75	-	170	70	-	135
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	11	53	179	74	137	53	432	95	74	716	137

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1509	1413	717	1446	1413	444	716	0	-	443	0	0
Stage 1	864	864	-	549	549	-	-	-	-	-	-	-
Stage 2	645	549	-	897	864	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	99	138	430	~ 109	138	614	885	-	0	1117	-	0
Stage 1	349	371	-	520	516	-	-	-	0	-	-	0
Stage 2	461	516	-	334	371	-	-	-	0	-	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	36	120	430	~ 80	120	607	885	-	-	1105	-	-
Mov Cap-2 Maneuver	36	120	-	~ 80	120	-	-	-	-	-	-	-
Stage 1	328	346	-	484	480	-	-	-	-	-	-	-
Stage 2	284	480	-	265	346	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	210.2	$ 1003.7	1	0.8
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	885	-	87	127	1105	-
HCM Lane V/C Ratio	0.059	-	1.089	3.067	0.067	-
HCM Control Delay (s)	9.3	-	210.2	$ 1003.7	8.5	-
HCM Lane LOS	A	-	F	F	A	-
HCM 95th %tile Q(veh)	0.2	-	6.5	36.8	0.2	-

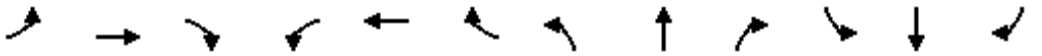
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	430	130	210	1200	50	140	30	110	40	20	30
Future Volume (veh/h)	20	430	130	210	1200	50	140	30	110	40	20	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.95	1.00		0.94
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	21	453	137	221	1263	53	147	32	116	42	21	32
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	60	1283	384	253	2060	86	176	312	251	78	74	113
Arrive On Green	0.03	0.48	0.48	0.14	0.59	0.59	0.10	0.17	0.17	0.04	0.12	0.12
Sat Flow, veh/h	1781	2669	799	1781	3472	146	1781	1870	1506	1781	640	975
Grp Volume(v), veh/h	21	300	290	221	646	670	147	32	116	42	0	53
Grp Sat Flow(s),veh/h/ln	1781	1777	1691	1781	1777	1841	1781	1870	1506	1781	0	1615
Q Serve(g_s), s	1.4	12.7	12.9	14.6	27.9	28.0	9.7	1.7	8.3	2.8	0.0	3.6
Cycle Q Clear(g_c), s	1.4	12.7	12.9	14.6	27.9	28.0	9.7	1.7	8.3	2.8	0.0	3.6
Prop In Lane	1.00		0.47	1.00		0.08	1.00		1.00	1.00		0.60
Lane Grp Cap(c), veh/h	60	854	813	253	1054	1092	176	312	251	78	0	188
V/C Ratio(X)	0.35	0.35	0.36	0.87	0.61	0.61	0.84	0.10	0.46	0.54	0.00	0.28
Avail Cap(c_a), veh/h	132	854	813	362	1054	1092	251	461	371	273	0	425
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.7	19.5	19.5	50.4	15.6	15.6	53.1	42.4	45.1	56.2	0.0	48.5
Incr Delay (d2), s/veh	4.2	1.1	1.2	16.3	2.7	2.6	16.6	0.3	2.8	6.7	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	5.3	5.2	7.5	11.2	11.6	5.1	0.8	3.3	1.4	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.9	20.6	20.8	66.7	18.3	18.2	69.8	42.7	48.0	62.9	0.0	50.2
LnGrp LOS	E	C	C	E	B	B	E	D	D	E	A	D
Approach Vol, veh/h		611			1537			295			95	
Approach Delay, s/veh		22.1			25.2			58.2			55.8	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.6	63.1	9.9	25.4	8.1	76.6	15.9	19.3
Change Period (Y+Rc), s	4.6	5.4	4.6	5.4	4.1	5.4	4.1	5.4
Max Green Setting (Gmax), s	24.4	27.6	18.4	29.6	8.9	43.6	16.9	31.6
Max Q Clear Time (g_c+I1), s	16.6	14.9	4.8	10.3	3.4	30.0	11.7	5.6
Green Ext Time (p_c), s	0.5	4.8	0.1	1.0	0.0	10.3	0.2	0.4

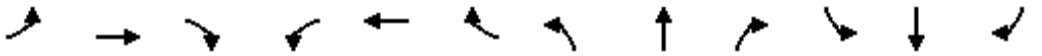
Intersection Summary	
HCM 6th Ctrl Delay	29.4
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	460	60	190	1130	30	240	30	50	30	120	160
Future Volume (veh/h)	20	460	60	190	1130	30	240	30	50	30	120	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	484	63	200	1189	32	253	32	53	32	126	168
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	201	1657	215	448	1851	50	349	244	404	535	278	371
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	457	3162	410	859	3532	95	1085	632	1047	1311	720	960
Grp Volume(v), veh/h	21	271	276	200	598	623	253	0	85	32	0	294
Grp Sat Flow(s),veh/h/ln	457	1777	1795	859	1777	1851	1085	0	1680	1311	0	1681
Q Serve(g_s), s	3.5	8.6	8.6	17.1	24.1	24.2	22.6	0.0	3.3	1.6	0.0	13.0
Cycle Q Clear(g_c), s	27.6	8.6	8.6	25.7	24.1	24.2	35.7	0.0	3.3	4.9	0.0	13.0
Prop In Lane	1.00		0.23	1.00		0.05	1.00		0.62	1.00		0.57
Lane Grp Cap(c), veh/h	201	931	941	448	931	970	349	0	648	535	0	649
V/C Ratio(X)	0.10	0.29	0.29	0.45	0.64	0.64	0.72	0.00	0.13	0.06	0.00	0.45
Avail Cap(c_a), veh/h	201	931	941	448	931	970	457	0	815	665	0	815
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.73	0.73	0.73	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.0	13.4	13.4	20.6	17.1	17.1	36.1	0.0	19.9	21.4	0.0	22.9
Incr Delay (d2), s/veh	1.0	0.8	0.8	2.3	2.5	2.4	3.3	0.0	0.1	0.0	0.0	0.4
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	0.4	3.4	3.4	3.5	9.5	9.9	6.1	0.0	1.3	0.5	0.0	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.0	14.2	14.2	23.0	19.6	19.5	39.4	0.0	19.9	21.5	0.0	23.2
LnGrp LOS	C	B	B	C	B	B	D	A	B	C	A	C
Approach Vol, veh/h		568			1421			338			326	
Approach Delay, s/veh		14.7			20.0			34.5			23.1	
Approach LOS		B			B			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		56.9		43.1		56.9		43.1				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		42.5		48.5		42.5		48.5				
Max Q Clear Time (g_c+I1), s		29.6		37.7		27.7		15.0				
Green Ext Time (p_c), s		2.3		0.9		6.5		1.7				

Intersection Summary												
HCM 6th Ctrl Delay			21.1									
HCM 6th LOS			C									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	890	150	70	450	190	70	570	50	90	310	50
Future Volume (veh/h)	250	890	150	70	450	190	70	570	50	90	310	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	263	937	158	74	474	200	74	600	53	95	326	53
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	286	1338	226	265	1035	433	214	994	88	173	564	473
Arrive On Green	0.32	0.88	0.88	0.15	0.43	0.43	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1781	3030	511	1781	2409	1008	1002	3301	291	779	1870	1571
Grp Volume(v), veh/h	263	549	546	74	349	325	74	323	330	95	326	53
Grp Sat Flow(s),veh/h/ln	1781	1777	1764	1781	1777	1640	1002	1777	1815	779	1870	1571
Q Serve(g_s), s	17.1	11.3	11.4	4.4	16.7	16.9	8.1	18.6	18.7	14.2	17.7	2.9
Cycle Q Clear(g_c), s	17.1	11.3	11.4	4.4	16.7	16.9	25.8	18.6	18.7	32.9	17.7	2.9
Prop In Lane	1.00		0.29	1.00		0.61	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	286	785	779	265	764	705	214	535	547	173	564	473
V/C Ratio(X)	0.92	0.70	0.70	0.28	0.46	0.46	0.35	0.60	0.60	0.55	0.58	0.11
Avail Cap(c_a), veh/h	371	785	779	265	764	705	259	614	628	208	647	543
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.83	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	4.6	4.6	45.4	24.3	24.3	46.4	35.8	35.8	49.9	35.5	30.3
Incr Delay (d2), s/veh	18.4	4.3	4.3	0.2	2.0	2.2	0.7	1.0	1.0	2.0	0.7	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	7.4	2.8	2.8	1.9	7.2	6.8	2.0	8.1	8.3	2.8	8.1	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.4	8.9	8.9	45.6	26.2	26.5	47.1	36.8	36.8	51.9	36.2	30.4
LnGrp LOS	E	A	A	D	C	C	D	D	D	D	D	C
Approach Vol, veh/h		1358			748			727			474	
Approach Delay, s/veh		18.5			28.3			37.9			38.7	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	22.3	57.0		40.7	23.3	56.1		40.7				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.0	4.5		4.5				
Max Green Setting (Gmax), s	12.5	53.0		41.5	25.0	40.5		41.5				
Max Q Clear Time (g_c+I1), s	6.4	13.4		27.8	19.1	18.9		34.9				
Green Ext Time (p_c), s	0.0	10.6		3.0	0.2	4.9		1.2				

Intersection Summary			
HCM 6th Ctrl Delay		27.9	
HCM 6th LOS		C	

Intersection	
Int Delay, s/veh	94.5

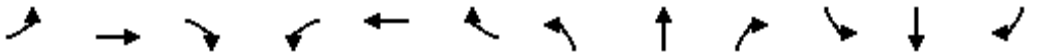
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↰	↑	↱	↰	↑	↱
Traffic Vol, veh/h	30	30	50	80	20	80	90	790	320	80	370	50
Future Vol, veh/h	30	30	50	80	20	80	90	790	320	80	370	50
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	8	8	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	Free
Storage Length	-	-	-	-	-	-	75	-	170	70	-	135
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	32	53	84	21	84	95	832	337	84	389	53

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1632	1587	389	1630	1587	840	389	0	-	840	0	0
Stage 1	557	557	-	1030	1030	-	-	-	-	-	-	-
Stage 2	1075	1030	-	600	557	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	81	108	659	~ 81	108	365	1170	-	0	795	-	0
Stage 1	515	512	-	282	311	-	-	-	0	-	-	0
Stage 2	266	311	-	488	512	-	-	-	0	-	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	44	88	659	~ 46	88	362	1170	-	-	789	-	-
Mov Cap-2 Maneuver	44	88	-	~ 46	88	-	-	-	-	-	-	-
Stage 1	473	458	-	257	284	-	-	-	-	-	-	-
Stage 2	174	284	-	374	458	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	218	$ 708	0.9	1.8
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	1170	-	100	82	789	-
HCM Lane V/C Ratio	0.081	-	1.158	2.311	0.107	-
HCM Control Delay (s)	8.3	-	218	$ 708	10.1	-
HCM Lane LOS	A	-	F	F	B	-
HCM 95th %tile Q(veh)	0.3	-	7.7	17.5	0.4	-

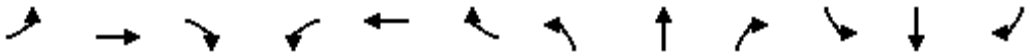
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1010	90	120	610	110	100	30	210	140	50	20
Future Volume (veh/h)	30	1010	90	120	610	110	100	30	210	140	50	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.95	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	32	1063	95	126	642	116	105	32	221	147	53	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	1635	146	150	1626	293	130	337	272	174	257	102
Arrive On Green	0.04	0.50	0.50	0.08	0.54	0.54	0.07	0.18	0.18	0.10	0.20	0.20
Sat Flow, veh/h	1781	3295	294	1781	2996	540	1781	1870	1509	1781	1255	497
Grp Volume(v), veh/h	32	573	585	126	380	378	105	32	221	147	0	74
Grp Sat Flow(s),veh/h/ln	1781	1777	1812	1781	1777	1760	1781	1870	1509	1781	0	1752
Q Serve(g_s), s	2.4	32.4	32.4	9.4	16.8	16.9	7.8	1.9	19.0	11.0	0.0	4.7
Cycle Q Clear(g_c), s	2.4	32.4	32.4	9.4	16.8	16.9	7.8	1.9	19.0	11.0	0.0	4.7
Prop In Lane	1.00		0.16	1.00		0.31	1.00		1.00	1.00		0.28
Lane Grp Cap(c), veh/h	74	882	899	150	964	955	130	337	272	174	0	359
V/C Ratio(X)	0.43	0.65	0.65	0.84	0.39	0.40	0.80	0.09	0.81	0.85	0.00	0.21
Avail Cap(c_a), veh/h	157	882	899	177	964	955	315	416	335	276	0	359
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	63.2	25.3	25.3	60.9	18.0	18.0	61.6	46.1	53.1	59.9	0.0	44.6
Incr Delay (d2), s/veh	4.8	3.7	3.6	26.4	1.2	1.2	12.9	0.1	12.3	14.5	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	1.2	14.1	14.4	5.3	7.0	7.0	4.0	0.9	8.1	5.6	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.9	29.0	28.9	87.3	19.2	19.2	74.6	46.3	65.5	74.4	0.0	44.9
LnGrp LOS	E	C	C	F	B	B	E	D	E	E	A	D
Approach Vol, veh/h		1190			884			358			221	
Approach Delay, s/veh		30.0			28.9			66.4			64.6	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	72.4	17.3	29.4	9.7	78.7	14.0	32.6
Change Period (Y+Rc), s	4.6	5.4	4.1	5.0	4.1	5.4	4.1	5.0
Max Green Setting (Gmax), s	13.4	51.6	20.9	30.0	11.9	53.6	23.9	27.0
Max Q Clear Time (g_c+I1), s	11.4	34.4	13.0	21.0	4.4	18.9	9.8	6.7
Green Ext Time (p_c), s	0.1	11.2	0.3	0.7	0.0	10.2	0.2	0.3

Intersection Summary	
HCM 6th Ctrl Delay	37.4
HCM 6th LOS	D



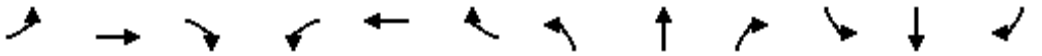
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1260	120	70	530	20	150	70	90	30	40	70
Future Volume (veh/h)	60	1260	120	70	530	20	150	70	90	30	40	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	63	1326	126	74	558	21	158	74	95	32	42	74
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	662	2360	223	254	2516	95	244	150	193	200	124	218
Arrive On Green	0.72	0.72	0.72	1.00	1.00	1.00	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	835	3274	310	366	3489	131	1274	737	946	1214	606	1068
Grp Volume(v), veh/h	63	717	735	74	284	295	158	0	169	32	0	116
Grp Sat Flow(s),veh/h/ln	835	1777	1807	366	1777	1843	1274	0	1682	1214	0	1674
Q Serve(g_s), s	2.7	22.6	23.0	8.9	0.0	0.0	14.5	0.0	10.7	2.9	0.0	7.1
Cycle Q Clear(g_c), s	2.7	22.6	23.0	31.9	0.0	0.0	21.6	0.0	10.7	13.5	0.0	7.1
Prop In Lane	1.00		0.17	1.00		0.07	1.00		0.56	1.00		0.64
Lane Grp Cap(c), veh/h	662	1281	1302	254	1281	1329	244	0	343	200	0	342
V/C Ratio(X)	0.10	0.56	0.56	0.29	0.22	0.22	0.65	0.00	0.49	0.16	0.00	0.34
Avail Cap(c_a), veh/h	662	1281	1302	254	1281	1329	340	0	470	291	0	467
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.91	0.91	0.91	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.1	7.8	7.9	4.2	0.0	0.0	50.1	0.0	42.3	48.3	0.0	40.8
Incr Delay (d2), s/veh	0.3	1.8	1.8	2.6	0.4	0.4	2.1	0.0	0.8	0.3	0.0	0.4
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	0.5	7.8	8.0	0.6	0.1	0.1	4.7	0.0	4.5	0.9	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.3	9.6	9.6	6.9	0.4	0.4	52.2	0.0	43.1	48.5	0.0	41.3
LnGrp LOS	A	A	A	A	A	A	D	A	D	D	A	D
Approach Vol, veh/h		1515			653			327			148	
Approach Delay, s/veh		9.4			1.1			47.5			42.8	
Approach LOS		A			A			D			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		91.0		29.0		91.0		29.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		77.5		33.5		77.5		33.5				
Max Q Clear Time (g_c+I1), s		25.0		23.6		33.9		15.5				
Green Ext Time (p_c), s		11.2		0.8		4.3		0.5				

Intersection Summary												
HCM 6th Ctrl Delay			14.0									
HCM 6th LOS			B									

APPENDIX H -

FUTURE CONDITIONS (2035) WITH PROJECT PEAK HOUR INTERSECTION ANALYSIS WORKSHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	370	80	70	968	160	79	270	30	215	449	260
Future Volume (veh/h)	98	370	80	70	968	160	79	270	30	215	449	260
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	103	389	84	74	1019	168	83	284	32	226	473	274
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	131	1251	267	169	1377	227	160	1109	124	370	645	543
Arrive On Green	0.02	0.14	0.14	0.10	0.45	0.45	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1781	2908	622	1781	3048	502	714	3215	359	1060	1870	1574
Grp Volume(v), veh/h	103	236	237	74	593	594	83	156	160	226	473	274
Grp Sat Flow(s),veh/h/ln	1781	1777	1753	1781	1777	1773	714	1777	1797	1060	1870	1574
Q Serve(g_s), s	5.8	11.9	12.1	3.9	27.5	27.6	11.5	6.3	6.4	19.5	22.2	13.8
Cycle Q Clear(g_c), s	5.8	11.9	12.1	3.9	27.5	27.6	33.7	6.3	6.4	25.9	22.2	13.8
Prop In Lane	1.00		0.35	1.00		0.28	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	131	764	754	169	803	801	160	613	620	370	645	543
V/C Ratio(X)	0.79	0.31	0.31	0.44	0.74	0.74	0.52	0.25	0.26	0.61	0.73	0.50
Avail Cap(c_a), veh/h	160	764	754	169	803	801	160	613	620	370	645	543
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.0	29.6	29.7	42.7	22.6	22.6	43.5	23.5	23.6	32.9	28.7	26.0
Incr Delay (d2), s/veh	18.4	1.0	1.1	1.8	6.0	6.1	2.9	0.2	0.2	2.9	4.3	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	3.3	5.8	5.8	1.8	12.0	12.0	2.1	2.6	2.7	5.1	10.3	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.4	30.6	30.7	44.5	28.6	28.7	46.4	23.7	23.8	35.8	33.0	26.7
LnGrp LOS	E	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		576			1261			399			973	
Approach Delay, s/veh		37.0			29.6			28.5			31.9	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.0	47.0		39.0	11.3	49.7		39.0				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.0	4.5		4.5				
Max Green Setting (Gmax), s	9.5	43.0		34.5	9.0	43.5		34.5				
Max Q Clear Time (g_c+I1), s	5.9	14.1		35.7	7.8	29.6		27.9				
Green Ext Time (p_c), s	0.0	2.8		0.0	0.0	6.4		2.8				

Intersection Summary			
HCM 6th Ctrl Delay		31.5	
HCM 6th LOS		C	

Intersection	
Int Delay, s/veh	256.7

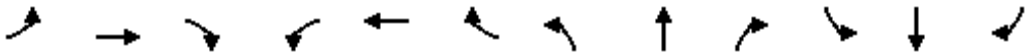
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	13	56	173	70	130	50	416	90	70	686	130
Future Vol, veh/h	30	13	56	173	70	130	50	416	90	70	686	130
Conflicting Peds, #/hr	1	0	1	1	0	1	0	0	11	11	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	Free
Storage Length	-	-	-	-	-	-	75	-	170	70	-	135
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	14	59	182	74	137	53	438	95	74	722	137

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1521	1425	723	1463	1425	450	722	0	-	449	0	0
Stage 1	870	870	-	555	555	-	-	-	-	-	-	-
Stage 2	651	555	-	908	870	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	97	136	426	~ 107	136	609	880	-	0	1111	-	0
Stage 1	346	369	-	516	513	-	-	-	0	-	-	0
Stage 2	457	513	-	330	369	-	-	-	0	-	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	34	118	426	~ 75	118	602	880	-	-	1099	-	-
Mov Cap-2 Maneuver	34	118	-	~ 75	118	-	-	-	-	-	-	-
Stage 1	325	344	-	480	478	-	-	-	-	-	-	-
Stage 2	280	478	-	254	344	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	240.7	$ 1098.9	1	0.8
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	880	-	88	120	1099	-
HCM Lane V/C Ratio	0.06	-	1.184	3.272	0.067	-
HCM Control Delay (s)	9.4	-	240.3	$ 1098.9	8.5	-
HCM Lane LOS	A	-	F	F	A	-
HCM 95th %tile Q(veh)	0.2	-	7.3	38	0.2	-

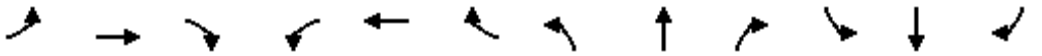
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	443	133	210	1212	50	143	30	110	40	20	33
Future Volume (veh/h)	23	443	133	210	1212	50	143	30	110	40	20	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.95	1.00		0.94
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	24	466	140	221	1276	53	151	32	116	42	21	35
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	65	1279	381	253	2042	85	180	316	255	78	70	117
Arrive On Green	0.04	0.48	0.48	0.14	0.59	0.59	0.10	0.17	0.17	0.04	0.12	0.12
Sat Flow, veh/h	1781	2673	796	1781	3474	144	1781	1870	1507	1781	603	1005
Grp Volume(v), veh/h	24	308	298	221	652	677	151	32	116	42	0	56
Grp Sat Flow(s),veh/h/ln	1781	1777	1692	1781	1777	1841	1781	1870	1507	1781	0	1608
Q Serve(g_s), s	1.6	13.1	13.4	14.6	28.7	28.8	10.0	1.7	8.3	2.8	0.0	3.8
Cycle Q Clear(g_c), s	1.6	13.1	13.4	14.6	28.7	28.8	10.0	1.7	8.3	2.8	0.0	3.8
Prop In Lane	1.00		0.47	1.00		0.08	1.00		1.00	1.00		0.63
Lane Grp Cap(c), veh/h	65	850	809	253	1044	1082	180	316	255	78	0	187
V/C Ratio(X)	0.37	0.36	0.37	0.87	0.62	0.63	0.84	0.10	0.46	0.54	0.00	0.30
Avail Cap(c_a), veh/h	132	850	809	362	1044	1082	251	461	372	273	0	423
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.4	19.8	19.8	50.4	16.1	16.1	53.0	42.2	44.9	56.2	0.0	48.6
Incr Delay (d2), s/veh	4.1	1.2	1.3	16.3	2.8	2.7	17.4	0.3	2.7	6.7	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	5.5	5.4	7.5	11.5	12.0	5.3	0.8	3.3	1.4	0.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.5	21.0	21.1	66.7	18.9	18.9	70.4	42.4	47.6	62.9	0.0	50.4
LnGrp LOS	E	C	C	E	B	B	E	D	D	E	A	D
Approach Vol, veh/h		630			1550			299			98	
Approach Delay, s/veh		22.5			25.7			58.6			55.8	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.6	62.8	9.9	25.7	8.5	75.9	16.2	19.3
Change Period (Y+Rc), s	4.6	5.4	4.6	5.4	4.1	5.4	4.1	5.4
Max Green Setting (Gmax), s	24.4	27.6	18.4	29.6	8.9	43.6	16.9	31.6
Max Q Clear Time (g_c+I1), s	16.6	15.4	4.8	10.3	3.6	30.8	12.0	5.8
Green Ext Time (p_c), s	0.5	4.8	0.1	1.0	0.0	9.9	0.2	0.4

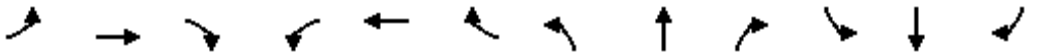
Intersection Summary	
HCM 6th Ctrl Delay	29.9
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	475	60	193	1146	39	240	30	53	30	120	160
Future Volume (veh/h)	20	475	60	193	1146	39	240	30	53	30	120	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	500	63	203	1206	41	253	32	56	32	126	168
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	194	1664	209	440	1836	62	349	235	412	532	278	371
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	446	3176	399	847	3503	119	1085	610	1067	1308	720	960
Grp Volume(v), veh/h	21	279	284	203	611	636	253	0	88	32	0	294
Grp Sat Flow(s),veh/h/ln	446	1777	1797	847	1777	1846	1085	0	1676	1308	0	1681
Q Serve(g_s), s	3.6	8.9	8.9	17.8	25.0	25.0	22.6	0.0	3.4	1.6	0.0	13.0
Cycle Q Clear(g_c), s	28.6	8.9	8.9	26.8	25.0	25.0	35.7	0.0	3.4	5.0	0.0	13.0
Prop In Lane	1.00		0.22	1.00		0.06	1.00		0.64	1.00		0.57
Lane Grp Cap(c), veh/h	194	931	942	440	931	967	349	0	647	532	0	649
V/C Ratio(X)	0.11	0.30	0.30	0.46	0.66	0.66	0.72	0.00	0.14	0.06	0.00	0.45
Avail Cap(c_a), veh/h	194	931	942	440	931	967	457	0	813	662	0	815
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.67	0.67	0.67	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.7	13.4	13.5	21.0	17.3	17.3	36.1	0.0	19.9	21.5	0.0	22.8
Incr Delay (d2), s/veh	1.1	0.8	0.8	2.3	2.4	2.4	3.3	0.0	0.1	0.0	0.0	0.4
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	0.4	3.5	3.5	3.6	9.8	10.2	6.1	0.0	1.3	0.5	0.0	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.8	14.3	14.3	23.3	19.7	19.6	39.4	0.0	20.0	21.6	0.0	23.2
LnGrp LOS	C	B	B	C	B	B	D	A	B	C	A	C
Approach Vol, veh/h		584			1450			341			326	
Approach Delay, s/veh		14.8			20.2			34.4			23.1	
Approach LOS		B			C			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		56.9		43.1		56.9		43.1				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		42.5		48.5		42.5		48.5				
Max Q Clear Time (g_c+I1), s		30.6		37.7		28.8		15.0				
Green Ext Time (p_c), s		2.3		0.9		6.5		1.7				

Intersection Summary												
HCM 6th Ctrl Delay			21.2									
HCM 6th LOS			C									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	259	890	150	70	459	190	75	570	50	101	314	50
Future Volume (veh/h)	259	890	150	70	459	190	75	570	50	101	314	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	273	937	158	74	483	200	79	600	53	106	331	53
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	296	1338	226	246	1003	412	223	1029	91	183	583	490
Arrive On Green	0.33	0.88	0.88	0.14	0.41	0.41	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1781	3030	511	1781	2423	995	998	3301	291	779	1870	1571
Grp Volume(v), veh/h	273	549	546	74	353	330	79	323	330	106	331	53
Grp Sat Flow(s),veh/h/ln	1781	1777	1764	1781	1777	1641	998	1777	1815	779	1870	1571
Q Serve(g_s), s	17.7	11.3	11.4	4.5	17.4	17.7	8.6	18.3	18.4	15.9	17.8	2.9
Cycle Q Clear(g_c), s	17.7	11.3	11.4	4.5	17.4	17.7	26.4	18.3	18.4	34.3	17.8	2.9
Prop In Lane	1.00		0.29	1.00		0.61	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	296	785	779	246	736	680	223	554	566	183	583	490
V/C Ratio(X)	0.92	0.70	0.70	0.30	0.48	0.49	0.35	0.58	0.58	0.58	0.57	0.11
Avail Cap(c_a), veh/h	371	785	779	246	736	680	257	614	628	210	647	543
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.82	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.4	4.6	4.6	46.5	25.7	25.8	45.6	34.7	34.8	49.2	34.5	29.4
Incr Delay (d2), s/veh	19.7	4.3	4.3	0.3	2.2	2.5	0.7	0.9	0.9	2.2	0.7	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	7.8	2.8	2.8	2.0	7.6	7.1	2.2	8.0	8.1	3.2	8.1	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.1	8.8	8.9	46.7	27.9	28.3	46.3	35.6	35.7	51.4	35.3	29.5
LnGrp LOS	E	A	A	D	C	C	D	D	D	D	D	C
Approach Vol, veh/h		1368			757			732			490	
Approach Delay, s/veh		18.9			29.9			36.8			38.1	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	21.1	57.0		41.9	23.9	54.2		41.9				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.0	4.5		4.5				
Max Green Setting (Gmax), s	12.5	53.0		41.5	25.0	40.5		41.5				
Max Q Clear Time (g_c+I1), s	6.5	13.4		28.4	19.7	19.7		36.3				
Green Ext Time (p_c), s	0.0	10.6		2.9	0.2	4.9		1.1				

Intersection Summary			
HCM 6th Ctrl Delay		28.1	
HCM 6th LOS		C	

Intersection	
Int Delay, s/veh	100.6

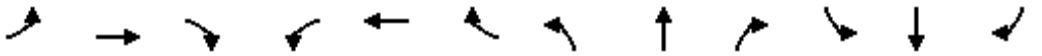
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	31	53	82	20	80	90	793	320	80	373	50
Future Vol, veh/h	30	31	53	82	20	80	90	793	320	80	373	50
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	8	8	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	Free
Storage Length	-	-	-	-	-	-	75	-	170	70	-	135
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	33	56	86	21	84	95	835	337	84	393	53

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1639	1594	393	1639	1594	843	393	0	-	843	0	0
Stage 1	561	561	-	1033	1033	-	-	-	-	-	-	-
Stage 2	1078	1033	-	606	561	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	80	107	656	~ 80	107	364	1166	-	0	793	-	0
Stage 1	512	510	-	281	310	-	-	-	0	-	-	0
Stage 2	265	310	-	484	510	-	-	-	0	-	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	43	87	656	~ 45	87	361	1166	-	-	787	-	-
Mov Cap-2 Maneuver	43	87	-	~ 45	87	-	-	-	-	-	-	-
Stage 1	471	455	-	256	283	-	-	-	-	-	-	-
Stage 2	173	283	-	367	455	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	232.5	$ 747.2	0.9	1.8
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	1166	-	100	80	787	-
HCM Lane V/C Ratio	0.081	-	1.2	2.395	0.107	-
HCM Control Delay (s)	8.4	-	232.5	$ 747.2	10.1	-
HCM Lane LOS	A	-	F	F	B	-
HCM 95th %tile Q(veh)	0.3	-	8.1	17.9	0.4	-

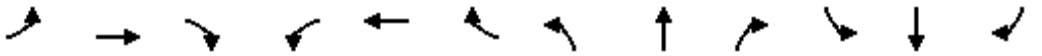
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	1016	91	120	616	110	102	30	210	140	50	22
Future Volume (veh/h)	31	1016	91	120	616	110	102	30	210	140	50	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.95	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	33	1069	96	126	648	116	107	32	221	147	53	23
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	75	1634	147	150	1627	291	133	337	272	174	248	107
Arrive On Green	0.04	0.50	0.50	0.08	0.54	0.54	0.07	0.18	0.18	0.10	0.20	0.20
Sat Flow, veh/h	1781	3293	296	1781	3001	536	1781	1870	1509	1781	1217	528
Grp Volume(v), veh/h	33	576	589	126	383	381	107	32	221	147	0	76
Grp Sat Flow(s),veh/h/ln	1781	1777	1812	1781	1777	1761	1781	1870	1509	1781	0	1745
Q Serve(g_s), s	2.4	32.7	32.7	9.4	17.0	17.1	8.0	1.9	19.0	11.0	0.0	4.9
Cycle Q Clear(g_c), s	2.4	32.7	32.7	9.4	17.0	17.1	8.0	1.9	19.0	11.0	0.0	4.9
Prop In Lane	1.00		0.16	1.00		0.30	1.00		1.00	1.00		0.30
Lane Grp Cap(c), veh/h	75	882	899	150	963	955	133	337	272	174	0	355
V/C Ratio(X)	0.44	0.65	0.65	0.84	0.40	0.40	0.81	0.09	0.81	0.85	0.00	0.21
Avail Cap(c_a), veh/h	157	882	899	177	963	955	315	416	335	276	0	355
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	63.1	25.4	25.4	60.9	18.0	18.1	61.5	46.1	53.1	59.9	0.0	44.8
Incr Delay (d2), s/veh	4.8	3.8	3.7	26.4	1.2	1.2	12.9	0.1	12.3	14.5	0.0	0.4
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	14.2	14.5	5.3	7.1	7.1	4.1	0.9	8.1	5.6	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.9	29.1	29.1	87.3	19.3	19.3	74.4	46.3	65.5	74.4	0.0	45.1
LnGrp LOS	E	C	C	F	B	B	E	D	E	E	A	D
Approach Vol, veh/h		1198			890			360			223	
Approach Delay, s/veh		30.2			28.9			66.4			64.5	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	72.4	17.3	29.4	9.8	78.6	14.2	32.5
Change Period (Y+Rc), s	4.6	5.4	4.1	5.0	4.1	5.4	4.1	5.0
Max Green Setting (Gmax), s	13.4	51.6	20.9	30.0	11.9	53.6	23.9	27.0
Max Q Clear Time (g_c+I1), s	11.4	34.7	13.0	21.0	4.4	19.1	10.0	6.9
Green Ext Time (p_c), s	0.1	11.1	0.3	0.7	0.0	10.3	0.2	0.4

Intersection Summary	
HCM 6th Ctrl Delay	37.5
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1268	120	71	537	24	150	70	92	30	40	70
Future Volume (veh/h)	60	1268	120	71	537	24	150	70	92	30	40	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	63	1335	126	75	565	25	158	74	97	32	42	74
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	656	2362	222	252	2496	110	244	148	195	198	124	218
Arrive On Green	0.72	0.72	0.72	1.00	1.00	1.00	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	826	3276	308	363	3463	153	1274	727	953	1212	606	1068
Grp Volume(v), veh/h	63	721	740	75	290	300	158	0	171	32	0	116
Grp Sat Flow(s),veh/h/ln	826	1777	1807	363	1777	1839	1274	0	1681	1212	0	1674
Q Serve(g_s), s	2.8	22.9	23.2	9.3	0.0	0.0	14.5	0.0	10.8	2.9	0.0	7.1
Cycle Q Clear(g_c), s	2.8	22.9	23.2	32.5	0.0	0.0	21.6	0.0	10.8	13.7	0.0	7.1
Prop In Lane	1.00		0.17	1.00		0.08	1.00		0.57	1.00		0.64
Lane Grp Cap(c), veh/h	656	1281	1303	252	1281	1326	244	0	343	198	0	342
V/C Ratio(X)	0.10	0.56	0.57	0.30	0.23	0.23	0.65	0.00	0.50	0.16	0.00	0.34
Avail Cap(c_a), veh/h	656	1281	1303	252	1281	1326	340	0	469	289	0	467
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.90	0.90	0.90	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.1	7.9	7.9	4.4	0.0	0.0	50.1	0.0	42.3	48.4	0.0	40.8
Incr Delay (d2), s/veh	0.3	1.8	1.8	2.7	0.4	0.4	2.1	0.0	0.8	0.3	0.0	0.4
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	0.5	7.9	8.1	0.6	0.1	0.1	4.7	0.0	4.5	0.9	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.3	9.7	9.7	7.1	0.4	0.4	52.2	0.0	43.2	48.7	0.0	41.3
LnGrp LOS	A	A	A	A	A	A	D	A	D	D	A	D
Approach Vol, veh/h		1524			665			329			148	
Approach Delay, s/veh		9.5			1.1			47.5			42.9	
Approach LOS		A			A			D			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		91.0		29.0		91.0		29.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		77.5		33.5		77.5		33.5				
Max Q Clear Time (g_c+I1), s		25.2		23.6		34.5		15.7				
Green Ext Time (p_c), s		11.4		0.8		4.4		0.5				

Intersection Summary												
HCM 6th Ctrl Delay			14.0									
HCM 6th LOS			B									

APPENDIX I -

VEHICULAR QUEUE ANALYSIS WORKSHEETS

Intersection: 1: Rock Springs Rd & W Mission Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	R
Maximum Queue (ft)	81	150	161	104	236	230	130	193	142	174	542	175
Average Queue (ft)	63	115	110	64	174	165	72	113	45	139	421	132
95th Queue (ft)	116	273	237	124	245	237	135	216	161	221	804	216
Link Distance (ft)		1237	1237		245	245		547	547		712	
Upstream Blk Time (%)					1	1					7	
Queuing Penalty (veh)					5	2					59	
Storage Bay Dist (ft)	65			75			100			150		150
Storage Blk Time (%)	36	12		6	36		9	14		16	28	2
Queuing Penalty (veh)	61	10		28	22		12	8		102	122	10

Intersection: 1: Rock Springs Rd & W Mission Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	R
Maximum Queue (ft)	99	402	375	95	228	229	139	341	288	147	262	76
Average Queue (ft)	93	249	231	54	145	152	65	244	183	90	162	22
95th Queue (ft)	115	432	400	109	255	249	153	370	327	169	277	91
Link Distance (ft)		1237	1237		245	245		547	547		712	
Upstream Blk Time (%)					1	1						
Queuing Penalty (veh)					3	5						
Storage Bay Dist (ft)	65			75			100			150		150
Storage Blk Time (%)	60	27		6	32		2	47		0	11	
Queuing Penalty (veh)	253	66		13	20		5	28		1	14	

Intersection: 1: Rock Springs Rd & W Mission Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	R
Maximum Queue (ft)	89	165	173	99	248	241	122	187	129	174	547	175
Average Queue (ft)	72	103	98	64	186	184	78	131	52	144	431	132
95th Queue (ft)	112	193	181	123	260	260	130	206	148	212	853	217
Link Distance (ft)		1237	1237		245	245		547	547		712	
Upstream Blk Time (%)					2	2					15	
Queuing Penalty (veh)					6	6					135	
Storage Bay Dist (ft)	65			75			100			150		150
Storage Blk Time (%)	26	12		9	38		7	17		17	24	1
Queuing Penalty (veh)	46	11		41	24		9	11		111	108	7

Intersection: 1: Rock Springs Rd & W Mission Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	R
Maximum Queue (ft)	99	450	433	92	211	226	125	318	262	169	207	82
Average Queue (ft)	98	358	340	54	149	176	66	247	197	104	151	29
95th Queue (ft)	99	511	493	103	242	269	151	339	288	189	231	97
Link Distance (ft)		1237	1237		245	245		547	547		712	
Upstream Blk Time (%)					1	3						
Queuing Penalty (veh)					3	9						
Storage Bay Dist (ft)	65			75			100			150		150
Storage Blk Time (%)	76	20		6	35		1	46		8	10	
Queuing Penalty (veh)	331	51		13	22		1	29		27	13	

Intersection: 1: Rock Springs Rd & W Mission Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	R
Maximum Queue (ft)	94	197	184	98	216	242	137	242	185	154	696	130
Average Queue (ft)	74	131	123	62	170	176	99	169	96	126	614	112
95th Queue (ft)	122	251	224	109	240	271	160	281	223	193	905	165
Link Distance (ft)		1237	1237		245	245		547	547		712	
Upstream Blk Time (%)					1	1					28	
Queuing Penalty (veh)					4	5					252	
Storage Bay Dist (ft)	65			75			100			105		105
Storage Blk Time (%)	39	15		6	36		27	22		19	46	3
Queuing Penalty (veh)	71	15		29	25		37	17		136	220	17

Intersection: 1: Rock Springs Rd & W Mission Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	R
Maximum Queue (ft)	99	425	416	93	243	251	139	343	299	149	362	127
Average Queue (ft)	96	341	322	65	175	196	78	267	214	111	239	46
95th Queue (ft)	113	502	496	118	265	287	167	379	331	184	518	133
Link Distance (ft)		1237	1237		245	245		547	547		712	
Upstream Blk Time (%)					3	5					1	
Queuing Penalty (veh)					11	17					7	
Storage Bay Dist (ft)	65			75			100			105		105
Storage Blk Time (%)	69	18		7	37		1	49		41	27	0
Queuing Penalty (veh)	305	48		17	26		4	37		148	41	0

Intersection: 2: Rock Springs Rd & W Lincoln Ave

Movement	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	R	L	T	R
Maximum Queue (ft)	39	235	50	236	45	114	346	128
Average Queue (ft)	23	166	21	154	9	50	277	32
95th Queue (ft)	48	270	65	261	89	162	405	151
Link Distance (ft)	413	920		474			329	
Upstream Blk Time (%)							7	
Queuing Penalty (veh)							0	
Storage Bay Dist (ft)			120		170	175		135
Storage Blk Time (%)				12			24	
Queuing Penalty (veh)				12			30	

Intersection: 2: Rock Springs Rd & W Lincoln Ave

Movement	EB	WB	NB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	T	R	L	T
Maximum Queue (ft)	50	116	84	316	261	68	145
Average Queue (ft)	31	81	30	228	88	39	100
95th Queue (ft)	60	133	106	379	278	83	164
Link Distance (ft)	413	920		474			329
Upstream Blk Time (%)				0			
Queuing Penalty (veh)				4			
Storage Bay Dist (ft)			120		170	175	
Storage Blk Time (%)				18			3
Queuing Penalty (veh)				60			3

Intersection: 2: Rock Springs Rd & W Lincoln Ave

Movement	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	R	L	T	R
Maximum Queue (ft)	56	211	67	198	45	97	314	65
Average Queue (ft)	33	166	22	131	9	38	217	13
95th Queue (ft)	65	252	79	227	88	118	369	93
Link Distance (ft)	413	920		474			329	
Upstream Blk Time (%)							3	
Queuing Penalty (veh)							0	
Storage Bay Dist (ft)			120		170	175		135
Storage Blk Time (%)				8			19	
Queuing Penalty (veh)				9			25	

Intersection: 2: Rock Springs Rd & W Lincoln Ave

Movement	EB	WB	NB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	T	R	L	T
Maximum Queue (ft)	66	120	124	341	198	67	166
Average Queue (ft)	35	80	41	252	94	44	88
95th Queue (ft)	71	132	125	382	283	81	179
Link Distance (ft)	413	920		474			329
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			120		170	175	
Storage Blk Time (%)				24			3
Queuing Penalty (veh)				84			3

Intersection: 2: Rock Springs Rd & W Lincoln Ave

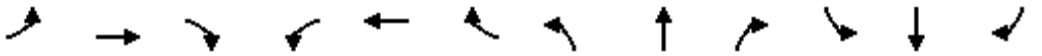
Movement	EB	WB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	L	T	R
Maximum Queue (ft)	74	235	91	190	110	344	195
Average Queue (ft)	46	180	48	146	51	303	84
95th Queue (ft)	87	265	111	209	127	395	244
Link Distance (ft)	413	920		474		329	
Upstream Blk Time (%)						10	
Queuing Penalty (veh)						0	
Storage Bay Dist (ft)			120		175		135
Storage Blk Time (%)			0	18		32	
Queuing Penalty (veh)			0	25		64	

Intersection: 2: Rock Springs Rd & W Lincoln Ave

Movement	EB	WB	NB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	T	R	L	T
Maximum Queue (ft)	104	141	103	327	235	80	142
Average Queue (ft)	68	103	53	257	120	41	95
95th Queue (ft)	120	157	110	392	313	83	159
Link Distance (ft)	413	920		474			329
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			120		170	175	
Storage Blk Time (%)			0	24			3
Queuing Penalty (veh)			0	97			4

APPENDIX J -

POST MITIGATION PEAK HOUR INTERSECTION ANALYSIS WORKSHEETS



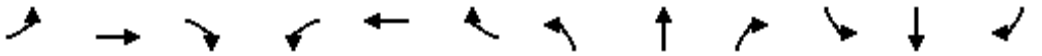
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	9	27	161	39	117	22	387	79	59	656	64
Future Volume (veh/h)	15	9	27	161	39	117	22	387	79	59	656	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	17	10	30	179	43	130	24	430	0	66	729	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	159	106	222	274	61	152	124	740		223	844	
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.07	0.40	0.00	0.13	0.45	0.00
Sat Flow, veh/h	346	393	822	732	225	560	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	57	0	0	352	0	0	24	430	0	66	729	0
Grp Sat Flow(s),veh/h/ln	1562	0	0	1518	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	0.0	13.9	0.0	0.0	0.9	13.0	0.0	2.4	25.2	0.0
Cycle Q Clear(g_c), s	1.8	0.0	0.0	15.7	0.0	0.0	0.9	13.0	0.0	2.4	25.2	0.0
Prop In Lane	0.30		0.53	0.51		0.37	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	487	0	0	486	0	0	124	740		223	844	
V/C Ratio(X)	0.12	0.00	0.00	0.72	0.00	0.00	0.19	0.58		0.30	0.86	
Avail Cap(c_a), veh/h	707	0	0	705	0	0	124	1198		223	1302	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	19.8	0.0	0.0	24.7	0.0	0.0	31.5	17.0	0.0	28.5	17.7	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	2.1	0.0	0.0	3.4	0.7	0.0	3.3	3.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	5.5	0.0	0.0	0.5	5.2	0.0	1.2	10.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.9	0.0	0.0	26.8	0.0	0.0	35.0	17.8	0.0	31.9	21.7	0.0
LnGrp LOS	B	A	A	C	A	A	C	B		C	C	
Approach Vol, veh/h		57			352			454	A		795	A
Approach Delay, s/veh		19.9			26.8			18.7			22.5	
Approach LOS		B			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.0	33.4		24.4	10.0	37.4		24.4				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	9.0	46.0		30.0	5.0	50.0		30.0				
Max Q Clear Time (g_c+I1), s	4.4	15.0		3.8	2.9	27.2		17.7				
Green Ext Time (p_c), s	0.0	2.8		0.2	0.0	5.2		1.7				

Intersection Summary			
HCM 6th Ctrl Delay		22.3	
HCM 6th LOS		C	

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



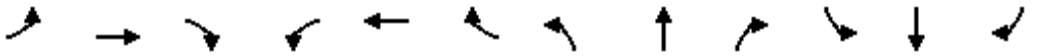
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	13	29	73	11	67	43	769	298	70	360	25
Future Volume (veh/h)	14	13	29	73	11	67	43	769	298	70	360	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	14	32	81	12	74	48	854	0	78	400	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	119	85	128	192	31	99	85	1011		114	1041	
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.05	0.54	0.00	0.06	0.56	0.00
Sat Flow, veh/h	240	582	877	641	213	679	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	62	0	0	167	0	0	48	854	0	78	400	0
Grp Sat Flow(s),veh/h/ln	1699	0	0	1533	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	0.0	3.8	0.0	0.0	1.4	20.8	0.0	2.3	6.5	0.0
Cycle Q Clear(g_c), s	1.7	0.0	0.0	5.5	0.0	0.0	1.4	20.8	0.0	2.3	6.5	0.0
Prop In Lane	0.26		0.52	0.49		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	331	0	0	322	0	0	85	1011		114	1041	
V/C Ratio(X)	0.19	0.00	0.00	0.52	0.00	0.00	0.57	0.85		0.69	0.38	
Avail Cap(c_a), veh/h	624	0	0	598	0	0	211	1491		182	1459	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.4	0.0	0.0	21.9	0.0	0.0	25.2	10.5	0.0	24.7	6.7	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	1.3	0.0	0.0	5.8	3.1	0.0	7.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	1.9	0.0	0.0	0.7	6.8	0.0	1.1	1.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.7	0.0	0.0	23.2	0.0	0.0	31.0	13.6	0.0	31.8	7.0	0.0
LnGrp LOS	C	A	A	C	A	A	C	B		C	A	
Approach Vol, veh/h		62			167			902	A		478	A
Approach Delay, s/veh		20.7			23.2			14.5			11.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.9	33.7		12.4	7.1	34.5		12.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	43.0		18.0	6.4	42.1		18.0				
Max Q Clear Time (g_c+I1), s	4.3	22.8		3.7	3.4	8.5		7.5				
Green Ext Time (p_c), s	0.0	6.3		0.2	0.0	2.6		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		14.6	
HCM 6th LOS		B	

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



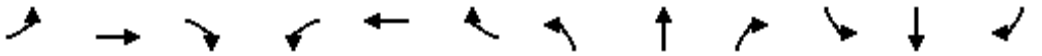
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	9	28	167	41	122	23	402	82	61	682	67
Future Volume (veh/h)	16	9	28	167	41	122	23	402	82	61	682	67
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.98		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	17	9	29	176	43	128	24	423	0	64	718	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	147	89	206	249	53	143	96	904		172	984	
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.05	0.48	0.00	0.10	0.53	0.00
Sat Flow, veh/h	370	342	795	735	206	550	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	55	0	0	347	0	0	24	423	0	64	718	0
Grp Sat Flow(s),veh/h/ln	1507	0	0	1491	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	0.0	18.5	0.0	0.0	1.2	14.1	0.0	3.1	27.5	0.0
Cycle Q Clear(g_c), s	2.3	0.0	0.0	20.8	0.0	0.0	1.2	14.1	0.0	3.1	27.5	0.0
Prop In Lane	0.31		0.53	0.51		0.37	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	441	0	0	445	0	0	96	904		172	984	
V/C Ratio(X)	0.12	0.00	0.00	0.78	0.00	0.00	0.25	0.47		0.37	0.73	
Avail Cap(c_a), veh/h	549	0	0	552	0	0	96	904		172	984	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.4	0.0	0.0	33.1	0.0	0.0	42.3	16.1	0.0	39.4	17.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	5.7	0.0	0.0	6.2	1.7	0.0	6.1	4.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.0	7.9	0.0	0.0	0.7	6.1	0.0	1.6	12.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.5	0.0	0.0	38.7	0.0	0.0	48.5	17.8	0.0	45.5	21.7	0.0
LnGrp LOS	C	A	A	D	A	A	D	B		D	C	
Approach Vol, veh/h		55			347			447	A		782	A
Approach Delay, s/veh		26.5			38.7			19.5			23.7	
Approach LOS		C			D			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.0	50.0		29.2	10.0	54.0		29.2				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	9.0	45.0		31.0	5.0	49.0		31.0				
Max Q Clear Time (g_c+I1), s	5.1	16.1		4.3	3.2	29.5		22.8				
Green Ext Time (p_c), s	0.0	2.7		0.2	0.0	4.8		1.3				

Intersection Summary			
HCM 6th Ctrl Delay		25.8	
HCM 6th LOS		C	

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



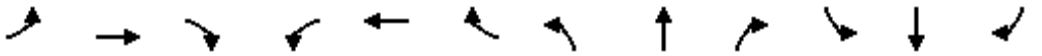
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	15	29	76	11	70	44	793	309	73	366	26
Future Volume (veh/h)	15	15	29	76	11	70	44	793	309	73	366	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.97		0.95	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	16	31	80	12	74	46	835	0	77	385	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	103	97	131	173	36	106	153	954		204	1007	
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.09	0.51	0.00	0.11	0.54	0.00
Sat Flow, veh/h	241	604	819	601	224	663	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	63	0	0	166	0	0	46	835	0	77	385	0
Grp Sat Flow(s),veh/h/ln	1664	0	0	1488	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	0.0	4.9	0.0	0.0	1.7	27.6	0.0	2.8	8.3	0.0
Cycle Q Clear(g_c), s	2.3	0.0	0.0	7.2	0.0	0.0	1.7	27.6	0.0	2.8	8.3	0.0
Prop In Lane	0.25		0.49	0.48		0.45	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	332	0	0	315	0	0	153	954		204	1007	
V/C Ratio(X)	0.19	0.00	0.00	0.53	0.00	0.00	0.30	0.88		0.38	0.38	
Avail Cap(c_a), veh/h	481	0	0	454	0	0	153	1313		204	1367	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.5	0.0	0.0	27.5	0.0	0.0	29.9	15.1	0.0	28.6	9.4	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	1.4	0.0	0.0	5.0	5.2	0.0	5.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.0	2.6	0.0	0.0	0.9	11.1	0.0	1.4	2.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.8	0.0	0.0	28.8	0.0	0.0	34.9	20.3	0.0	33.8	9.6	0.0
LnGrp LOS	C	A	A	C	A	A	C	C		C	A	
Approach Vol, veh/h		63			166			881	A		462	A
Approach Delay, s/veh		25.8			28.8			21.1			13.6	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.0	40.6		16.2	11.0	42.6		16.2				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	8.0	49.0		18.0	6.0	51.0		18.0				
Max Q Clear Time (g_c+I1), s	4.8	29.6		4.3	3.7	10.3		9.2				
Green Ext Time (p_c), s	0.0	6.0		0.2	0.0	2.5		0.5				

Intersection Summary			
HCM 6th Ctrl Delay		19.9	
HCM 6th LOS		B	

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



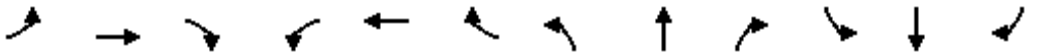
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	13	56	173	70	130	50	416	90	70	686	130
Future Volume (veh/h)	30	13	56	173	70	130	50	416	90	70	686	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	32	14	59	182	74	137	53	438	0	74	722	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	188	97	298	297	116	189	109	712		194	801	
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.06	0.38	0.00	0.11	0.43	0.00
Sat Flow, veh/h	377	268	827	661	320	525	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	105	0	0	393	0	0	53	438	0	74	722	0
Grp Sat Flow(s),veh/h/ln	1473	0	0	1506	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	0.0	16.1	0.0	0.0	2.6	17.1	0.0	3.5	32.4	0.0
Cycle Q Clear(g_c), s	3.8	0.0	0.0	19.9	0.0	0.0	2.6	17.1	0.0	3.5	32.4	0.0
Prop In Lane	0.30		0.56	0.46		0.35	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	583	0	0	602	0	0	109	712		194	801	
V/C Ratio(X)	0.18	0.00	0.00	0.65	0.00	0.00	0.49	0.62		0.38	0.90	
Avail Cap(c_a), veh/h	583	0	0	602	0	0	109	918		194	1007	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	19.6	0.0	0.0	24.5	0.0	0.0	40.9	22.6	0.0	37.3	24.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	5.4	0.0	0.0	14.8	0.9	0.0	5.6	9.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.0	7.7	0.0	0.0	1.6	7.3	0.0	1.8	15.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.8	0.0	0.0	29.9	0.0	0.0	55.7	23.4	0.0	43.0	33.4	0.0
LnGrp LOS	B	A	A	C	A	A	E	C		D	C	
Approach Vol, veh/h		105			393			491	A		796	A
Approach Delay, s/veh		19.8			29.9			26.9			34.3	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.3	38.8		37.0	10.0	43.1		37.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	9.8	44.2		32.5	5.5	48.5		32.5				
Max Q Clear Time (g_c+I1), s	5.5	19.1		5.8	4.6	34.4		21.9				
Green Ext Time (p_c), s	0.0	2.7		0.6	0.0	4.2		1.8				

Intersection Summary			
HCM 6th Ctrl Delay		30.4	
HCM 6th LOS		C	

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	31	53	82	20	80	90	793	320	80	373	50
Future Volume (veh/h)	30	31	53	82	20	80	90	793	320	80	373	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.98		0.95	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	32	33	56	86	21	84	95	835	0	84	393	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	114	105	132	176	46	115	258	958		181	876	
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.14	0.51	0.00	0.10	0.47	0.00
Sat Flow, veh/h	283	620	778	595	274	682	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	121	0	0	191	0	0	95	835	0	84	393	0
Grp Sat Flow(s),veh/h/ln	1681	0	0	1552	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	0.0	3.3	0.0	0.0	3.3	27.2	0.0	3.1	9.8	0.0
Cycle Q Clear(g_c), s	4.4	0.0	0.0	7.7	0.0	0.0	3.3	27.2	0.0	3.1	9.8	0.0
Prop In Lane	0.26		0.46	0.45		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	350	0	0	338	0	0	258	958		181	876	
V/C Ratio(X)	0.35	0.00	0.00	0.57	0.00	0.00	0.37	0.87		0.46	0.45	
Avail Cap(c_a), veh/h	490	0	0	469	0	0	258	1355		181	1274	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.6	0.0	0.0	26.8	0.0	0.0	26.6	14.8	0.0	29.2	12.3	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	1.5	0.0	0.0	4.0	4.7	0.0	8.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	2.9	0.0	0.0	1.6	10.7	0.0	1.7	3.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.2	0.0	0.0	28.3	0.0	0.0	30.6	19.5	0.0	37.6	12.7	0.0
LnGrp LOS	C	A	A	C	A	A	C	B		D	B	
Approach Vol, veh/h		121			191			930	A		477	A
Approach Delay, s/veh		26.2			28.3			20.7			17.1	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	40.3		16.7	15.0	37.3		16.7				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	7.0	50.0		18.0	10.0	47.0		18.0				
Max Q Clear Time (g_c+I1), s	5.1	29.2		6.4	5.3	11.8		9.7				
Green Ext Time (p_c), s	0.0	6.2		0.4	0.1	2.5		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		20.9	
HCM 6th LOS		C	

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

APPENDIX K -

SIGNAL WARRANT WORKSHEETS

California MUTCD 2014 Edition (FHWA's MUTCD 2009 Edition, including Revisions 1 and 2 as amended for use in California)
Figure 4C-101 (CA)

Scenario: Existing Conditions (2019)
Major Approach: Rock Springs Road
Minor Approach: W Lincoln Avenue

WARRANT 3 - PEAK HOUR
(Part A or Part B must be satisfied)

SATISFIED ☑ YES ☐ NO

Part A

SATISFIED ☐ YES ☐ NO

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for one-lane approach, or five vehicle-hours for a two-lane approach; AND	☐ YES ☐ NO
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane or traffic or 150 vph for two moving lanes; AND	☐ YES ☐ NO
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches	☐ YES ☐ NO

SATISFIED ☑ YES ☐ NO

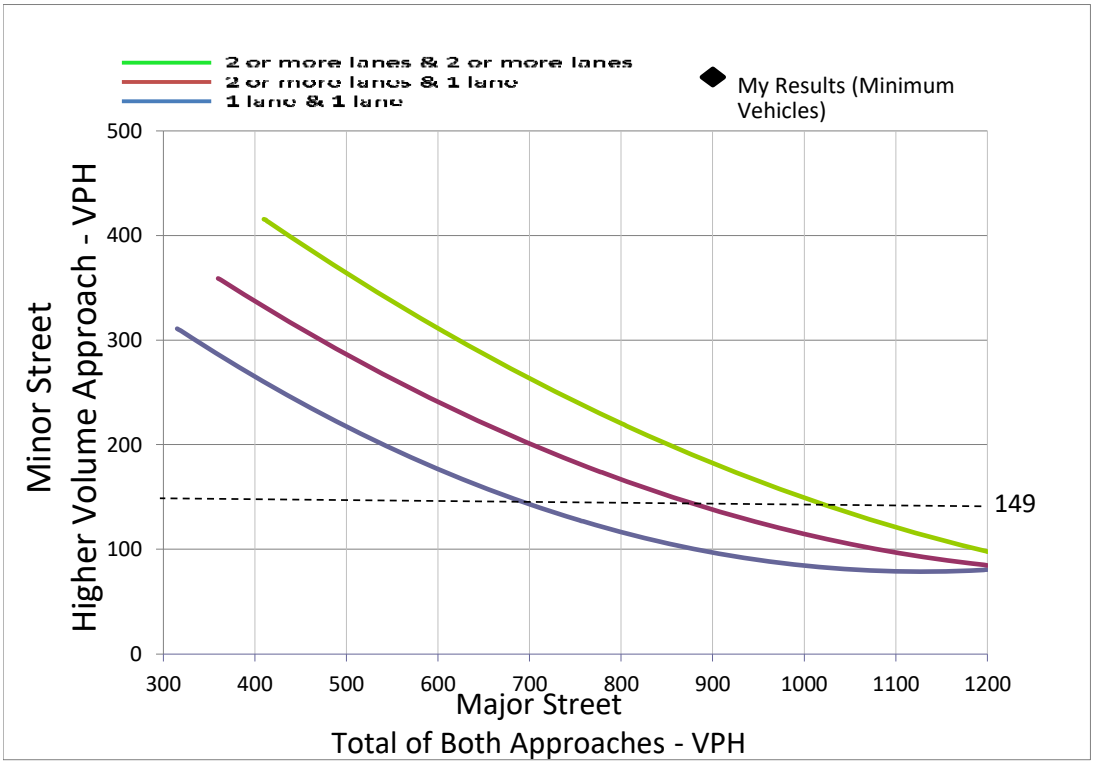
Part B

APPROACH LANES	One	Two or More	
Both Approaches - Major Street	☑	☐	1542 ← ENTER CORRECT HOURS
Higher Approach - Minor Street	☑	☐	149

ENTER PEAK HOUR VOL.

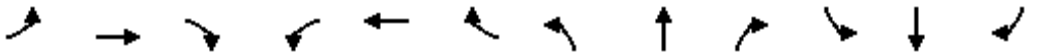
The plotted point falls above the applicable curve in Figure 4C-3 (URBAN AREAS)	☑ YES ☐ NO
OR The plotted point falls above the applicable curve in Figure 4C-4 (RURAL AREAS)	☑ YES ☐ NO

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



APPENDIX L -

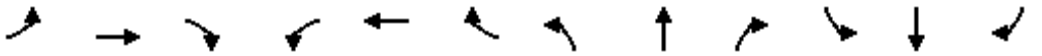
W. MISSION AVENUE AND ROCK SPRINGS ROAD INTERSECTION SB/NB PROTECTED LEFT WORKSHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	336	59	60	897	143	61	246	20	201	407	239
Future Volume (veh/h)	86	336	59	60	897	143	61	246	20	201	407	239
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	91	354	62	63	944	151	64	259	21	212	428	252
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	117	578	100	462	1179	189	84	662	53	234	529	445
Arrive On Green	0.07	0.19	0.19	0.26	0.39	0.39	0.05	0.20	0.20	0.13	0.28	0.28
Sat Flow, veh/h	1781	3020	523	1781	3062	490	1781	3324	267	1781	1870	1572
Grp Volume(v), veh/h	91	207	209	63	548	547	64	137	143	212	428	252
Grp Sat Flow(s),veh/h/ln	1781	1777	1766	1781	1777	1775	1781	1777	1814	1781	1870	1572
Q Serve(g_s), s	4.0	8.5	8.7	2.2	21.9	21.9	2.8	5.4	5.5	9.4	17.0	5.3
Cycle Q Clear(g_c), s	4.0	8.5	8.7	2.2	21.9	21.9	2.8	5.4	5.5	9.4	17.0	5.3
Prop In Lane	1.00		0.30	1.00		0.28	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	117	340	338	462	684	683	84	354	361	234	529	445
V/C Ratio(X)	0.78	0.61	0.62	0.14	0.80	0.80	0.76	0.39	0.39	0.91	0.81	0.57
Avail Cap(c_a), veh/h	200	955	949	462	966	965	151	766	782	234	893	750
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.8	29.6	29.7	22.7	21.9	21.9	37.7	27.8	27.9	34.3	26.7	5.7
Incr Delay (d2), s/veh	10.4	1.8	1.8	0.1	3.3	3.3	12.9	0.7	0.7	35.0	3.0	1.1
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	2.0	3.6	3.6	0.9	8.8	8.8	1.5	2.3	2.3	6.2	7.6	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.2	31.4	31.5	22.9	25.1	25.2	50.5	28.5	28.5	69.3	29.7	6.8
LnGrp LOS	D	C	C	C	C	C	D	C	C	E	C	A
Approach Vol, veh/h		507			1158			344			892	
Approach Delay, s/veh		34.3			25.0			32.6			32.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.3	19.3	15.0	20.4	9.3	35.3	8.3	27.1
Change Period (Y+Rc), s	4.5	4.0	4.5	4.5	4.0	4.5	4.5	4.5
Max Green Setting (Gmax), s	9.5	43.0	10.5	34.5	9.0	43.5	6.8	38.2
Max Q Clear Time (g_c+I1), s	4.2	10.7	11.4	7.5	6.0	23.9	4.8	19.0
Green Ext Time (p_c), s	0.0	2.4	0.0	1.6	0.0	6.9	0.0	3.3

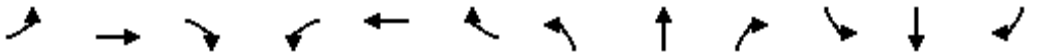
Intersection Summary	
HCM 6th Ctrl Delay	29.9
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	242	840	116	61	430	177	60	530	43	92	292	40
Future Volume (veh/h)	242	840	116	61	430	177	60	530	43	92	292	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.95	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	257	894	123	65	457	188	64	564	46	98	311	43
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	1256	173	89	679	276	91	819	67	90	460	385
Arrive On Green	0.17	0.40	0.40	0.05	0.28	0.28	0.05	0.25	0.25	0.05	0.25	0.25
Sat Flow, veh/h	1781	3127	430	1781	2422	986	1781	3324	271	1781	1870	1568
Grp Volume(v), veh/h	257	508	509	65	334	311	64	301	309	98	311	43
Grp Sat Flow(s),veh/h/ln	1781	1777	1780	1781	1777	1631	1781	1777	1818	1781	1870	1568
Q Serve(g_s), s	9.7	16.7	16.7	2.5	11.6	11.8	2.5	10.7	10.7	3.5	10.5	1.1
Cycle Q Clear(g_c), s	9.7	16.7	16.7	2.5	11.6	11.8	2.5	10.7	10.7	3.5	10.5	1.1
Prop In Lane	1.00		0.24	1.00		0.60	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	305	714	715	89	498	457	91	438	448	90	460	385
V/C Ratio(X)	0.84	0.71	0.71	0.73	0.67	0.68	0.70	0.69	0.69	1.09	0.68	0.11
Avail Cap(c_a), veh/h	640	1417	1420	269	1047	961	128	1098	1124	90	1116	935
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	17.4	17.4	32.6	22.2	22.3	32.5	23.8	23.8	33.0	23.7	11.8
Incr Delay (d2), s/veh	2.4	1.6	1.6	4.2	1.9	2.2	9.5	1.4	1.4	122.7	1.3	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	4.0	6.2	6.2	1.1	4.6	4.3	1.3	4.3	4.4	4.5	4.4	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.3	19.0	19.0	36.8	24.1	24.4	42.0	25.2	25.2	155.7	25.0	11.9
LnGrp LOS	C	B	B	D	C	C	D	C	C	F	C	B
Approach Vol, veh/h		1274			710			674			452	
Approach Delay, s/veh		21.3			25.4			26.8			52.1	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	31.9	8.0	21.6	15.9	24.0	8.0	21.6
Change Period (Y+Rc), s	4.5	4.0	4.5	4.5	4.0	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	55.5	3.5	43.0	25.0	41.0	5.0	41.5
Max Q Clear Time (g_c+I1), s	4.5	18.7	5.5	12.7	11.7	13.8	4.5	12.5
Green Ext Time (p_c), s	0.0	9.3	0.0	3.1	0.3	4.9	0.0	1.6

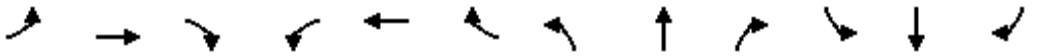
Intersection Summary	
HCM 6th Ctrl Delay	27.9
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	350	61	62	933	149	63	256	21	208	423	249
Future Volume (veh/h)	89	350	61	62	933	149	63	256	21	208	423	249
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	94	368	64	65	982	157	66	269	22	219	445	262
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	121	578	99	476	1197	191	85	635	52	258	539	453
Arrive On Green	0.07	0.19	0.19	0.27	0.39	0.39	0.05	0.19	0.19	0.14	0.29	0.29
Sat Flow, veh/h	1781	3023	520	1781	3062	489	1781	3321	269	1781	1870	1572
Grp Volume(v), veh/h	94	215	217	65	569	570	66	143	148	219	445	262
Grp Sat Flow(s),veh/h/ln	1781	1777	1767	1781	1777	1775	1781	1777	1814	1781	1870	1572
Q Serve(g_s), s	4.4	9.5	9.7	2.4	24.5	24.5	3.1	6.0	6.1	10.2	18.9	5.8
Cycle Q Clear(g_c), s	4.4	9.5	9.7	2.4	24.5	24.5	3.1	6.0	6.1	10.2	18.9	5.8
Prop In Lane	1.00		0.29	1.00		0.28	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	121	340	338	476	694	694	85	340	347	258	539	453
V/C Ratio(X)	0.78	0.63	0.64	0.14	0.82	0.82	0.78	0.42	0.43	0.85	0.83	0.58
Avail Cap(c_a), veh/h	188	897	892	476	907	906	151	720	735	324	940	790
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.1	31.7	31.8	23.7	23.3	23.3	40.1	30.3	30.3	35.5	28.3	5.9
Incr Delay (d2), s/veh	10.3	1.9	2.1	0.1	4.6	4.7	14.0	0.8	0.8	15.7	3.3	1.2
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	2.2	4.0	4.1	1.0	10.2	10.2	1.7	2.6	2.7	5.4	8.5	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.4	33.6	33.8	23.9	27.9	28.0	54.1	31.1	31.2	51.2	31.6	7.0
LnGrp LOS	D	C	C	C	C	C	D	C	C	D	C	A
Approach Vol, veh/h		526			1204			357			926	
Approach Delay, s/veh		36.5			27.7			35.4			29.3	
Approach LOS		D			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.3	20.3	16.8	20.8	9.8	37.8	8.6	29.1
Change Period (Y+Rc), s	4.5	4.0	4.5	4.5	4.0	4.5	4.5	4.5
Max Green Setting (Gmax), s	9.5	43.0	15.5	34.5	9.0	43.5	7.2	42.8
Max Q Clear Time (g_c+I1), s	4.4	11.7	12.2	8.1	6.4	26.5	5.1	20.9
Green Ext Time (p_c), s	0.0	2.5	0.2	1.6	0.0	6.8	0.0	3.6

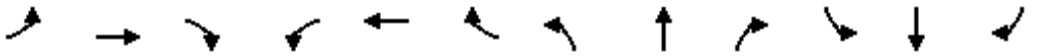
Intersection Summary	
HCM 6th Ctrl Delay	30.6
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	874	121	63	447	184	62	551	45	95	304	42
Future Volume (veh/h)	251	874	121	63	447	184	62	551	45	95	304	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.95	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	264	920	127	66	471	194	65	580	47	100	320	44
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	309	1253	173	90	672	274	88	812	66	128	498	418
Arrive On Green	0.17	0.40	0.40	0.05	0.28	0.28	0.05	0.24	0.24	0.07	0.27	0.27
Sat Flow, veh/h	1781	3126	431	1781	2420	987	1781	3326	269	1781	1870	1569
Grp Volume(v), veh/h	264	523	524	66	345	320	65	309	318	100	320	44
Grp Sat Flow(s),veh/h/ln	1781	1777	1780	1781	1777	1630	1781	1777	1818	1781	1870	1569
Q Serve(g_s), s	10.8	18.8	18.8	2.7	13.1	13.3	2.7	12.0	12.0	4.2	11.4	1.2
Cycle Q Clear(g_c), s	10.8	18.8	18.8	2.7	13.1	13.3	2.7	12.0	12.0	4.2	11.4	1.2
Prop In Lane	1.00		0.24	1.00		0.61	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	309	712	714	90	494	453	88	434	444	128	498	418
V/C Ratio(X)	0.85	0.73	0.73	0.74	0.70	0.71	0.74	0.71	0.72	0.78	0.64	0.11
Avail Cap(c_a), veh/h	592	1253	1255	296	957	878	130	981	1004	130	1033	866
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	19.1	19.1	35.2	24.3	24.4	35.2	26.0	26.0	34.3	24.4	12.3
Incr Delay (d2), s/veh	2.6	1.8	1.8	4.3	2.2	2.5	11.4	1.6	1.6	25.6	1.0	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	4.5	7.2	7.2	1.2	5.3	5.0	1.4	4.9	5.1	2.6	4.9	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.8	20.9	20.9	39.5	26.5	26.9	46.6	27.6	27.6	59.9	25.4	12.4
LnGrp LOS	C	C	C	D	C	C	D	C	C	E	C	B
Approach Vol, veh/h		1311			731			692			464	
Approach Delay, s/veh		23.3			27.8			29.4			31.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	34.1	9.9	22.9	17.0	25.4	8.2	24.5
Change Period (Y+Rc), s	4.5	4.0	4.5	4.5	4.0	4.5	4.5	4.5
Max Green Setting (Gmax), s	12.5	53.0	5.5	41.5	25.0	40.5	5.5	41.5
Max Q Clear Time (g_c+I1), s	4.7	20.8	6.2	14.0	12.8	15.3	4.7	13.4
Green Ext Time (p_c), s	0.0	9.4	0.0	3.1	0.3	5.0	0.0	1.6

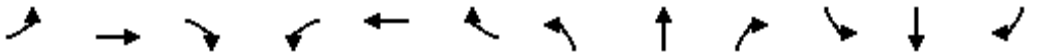
Intersection Summary	
HCM 6th Ctrl Delay	26.9
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	370	80	70	968	160	79	270	30	215	449	260
Future Volume (veh/h)	98	370	80	70	968	160	79	270	30	215	449	260
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	103	389	84	74	1019	168	83	284	32	226	473	274
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	130	562	120	478	1185	195	106	676	75	259	554	466
Arrive On Green	0.07	0.19	0.19	0.27	0.39	0.39	0.06	0.21	0.21	0.15	0.30	0.30
Sat Flow, veh/h	1781	2904	620	1781	3047	502	1781	3214	358	1781	1870	1572
Grp Volume(v), veh/h	103	236	237	74	593	594	83	156	160	226	473	274
Grp Sat Flow(s),veh/h/ln	1781	1777	1747	1781	1777	1772	1781	1777	1795	1781	1870	1572
Q Serve(g_s), s	5.5	11.9	12.1	3.0	29.5	29.6	4.4	7.3	7.4	11.9	22.9	6.9
Cycle Q Clear(g_c), s	5.5	11.9	12.1	3.0	29.5	29.6	4.4	7.3	7.4	11.9	22.9	6.9
Prop In Lane	1.00		0.36	1.00		0.28	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	130	344	338	478	691	689	106	374	378	259	554	466
V/C Ratio(X)	0.79	0.69	0.70	0.15	0.86	0.86	0.78	0.42	0.42	0.87	0.85	0.59
Avail Cap(c_a), veh/h	167	795	782	478	804	802	161	638	645	287	804	676
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.8	36.1	36.2	26.8	26.9	27.0	44.6	32.8	32.9	40.2	31.9	6.8
Incr Delay (d2), s/veh	17.7	2.4	2.6	0.1	8.3	8.4	12.7	0.7	0.8	22.5	6.2	1.2
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	3.0	5.2	5.2	1.3	13.2	13.2	2.3	3.1	3.2	6.7	10.9	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.5	38.5	38.8	27.0	35.2	35.4	57.2	33.6	33.7	62.6	38.0	8.0
LnGrp LOS	E	D	D	C	D	D	E	C	C	E	D	A
Approach Vol, veh/h		576			1261			399			973	
Approach Delay, s/veh		42.7			34.8			38.5			35.3	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.3	22.6	18.5	24.7	11.0	41.9	10.2	33.0
Change Period (Y+Rc), s	4.5	4.0	4.5	4.5	4.0	4.5	4.5	4.5
Max Green Setting (Gmax), s	9.5	43.0	15.5	34.5	9.0	43.5	8.7	41.3
Max Q Clear Time (g_c+I1), s	5.0	14.1	13.9	9.4	7.5	31.6	6.4	24.9
Green Ext Time (p_c), s	0.0	2.8	0.1	1.8	0.0	5.8	0.0	3.6

Intersection Summary	
HCM 6th Ctrl Delay	36.8
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	259	890	150	70	459	190	75	570	50	101	314	50
Future Volume (veh/h)	259	890	150	70	459	190	75	570	50	101	314	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.95	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	273	937	158	74	483	200	79	600	53	106	331	53
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	316	1247	210	96	695	286	101	813	72	123	483	405
Arrive On Green	0.18	0.41	0.41	0.05	0.29	0.29	0.06	0.25	0.25	0.07	0.26	0.26
Sat Flow, veh/h	1781	3030	511	1781	2416	992	1781	3300	291	1781	1870	1568
Grp Volume(v), veh/h	273	549	546	74	354	329	79	323	330	106	331	53
Grp Sat Flow(s),veh/h/ln	1781	1777	1764	1781	1777	1631	1781	1777	1814	1781	1870	1568
Q Serve(g_s), s	11.9	21.0	21.0	3.3	14.1	14.3	3.5	13.3	13.4	4.7	12.7	1.6
Cycle Q Clear(g_c), s	11.9	21.0	21.0	3.3	14.1	14.3	3.5	13.3	13.4	4.7	12.7	1.6
Prop In Lane	1.00		0.29	1.00		0.61	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	316	731	726	96	511	469	101	438	447	123	483	405
V/C Ratio(X)	0.86	0.75	0.75	0.77	0.69	0.70	0.78	0.74	0.74	0.86	0.68	0.13
Avail Cap(c_a), veh/h	559	1182	1173	279	903	829	112	925	945	123	986	827
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.9	20.0	20.0	37.2	25.2	25.3	37.1	27.7	27.7	36.7	26.6	13.6
Incr Delay (d2), s/veh	2.8	1.9	1.9	5.0	2.0	2.3	26.8	1.8	1.8	42.6	1.3	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	5.0	8.1	8.1	1.5	5.8	5.4	2.2	5.6	5.7	3.4	5.5	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.7	21.9	21.9	42.2	27.3	27.6	63.8	29.5	29.5	79.3	27.9	13.7
LnGrp LOS	C	C	C	D	C	C	E	C	C	E	C	B
Approach Vol, veh/h		1368			757			732			490	
Approach Delay, s/veh		24.4			28.9			33.2			37.5	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.8	36.8	10.0	24.1	18.1	27.4	9.0	25.1
Change Period (Y+Rc), s	4.5	4.0	4.5	4.5	4.0	4.5	4.5	4.5
Max Green Setting (Gmax), s	12.5	53.0	5.5	41.5	25.0	40.5	5.0	42.0
Max Q Clear Time (g_c+I1), s	5.3	23.0	6.7	15.4	13.9	16.3	5.5	14.7
Green Ext Time (p_c), s	0.0	9.8	0.0	3.3	0.3	5.1	0.0	1.7

Intersection Summary	
HCM 6th Ctrl Delay	29.3
HCM 6th LOS	C