ATTACHMENT D.3

LOCAL TRANSPORTATION ANALYSIS

LINSCOTT
LAW &
GREENSPAN
engineers

LOCAL TRANSPORTATION ANALYSIS

SANTA FE FLORES TOWNHOMES PROJECT

San Marcos, California
February 2026

LLG Ref. 3-24-3940

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EXECUTIVE SUMMARY

Linscott, Law & Greenspan, Engineers (LLG) has prepared the following Local Transportation Analysis (LTA) to determine and evaluate the potential effects to the local roadway system due to the proposed Santa Fe Flores Townhomes project (proposed Project). The Project is located in the city of San Marcos at 2966, 2972 and 2982 South Santa Fe Avenue adjacent to North Las Flores Drive on assessor parcel numbers 217-161-1800, 217-161-1900 and a portion of 217-161-1700. The 2.6-acre Project site is undeveloped and is currently designated Commercial and Light Industrial in the City General Plan and zoned as Commercial and Light Industrial. The Project would be located on a previously graded site and require a General Plan amendment and Rezone to Multifamily Residential to allow the development of 46 multi-family residential units.

The Project is calculated to generate a total of 368 ADT with 29 AM peak hour trips (6 inbound / 23 outbound) and 37 PM peak hour trips (26 inbound and 11 outbound).

While Level of Service (LOS) analysis is not used to determine CEQA significance, the intersection and segment analysis provided in this study shows that the Project will not have any substantial effects at the study area intersections and street segments. Additionally, The LTA shows that the Project will add a small amount of traffic to the intersection of S. Santa Fe Avenue / Smilax Road, which operates below City standards. However, the Project contributes only 0.58% (20 trips) of the total combined AM and PM peak hour traffic to this intersection under Near-Term conditions. The existing traffic conditions at this location are already substandard. The provision of a traffic signal would result in acceptable LOS D or better operations. A traffic signal is planned at the S. Santa Fe Avenue / Smilax Road intersection as part of the City's Capital Improvement Project (CIP) 88179 (IP 4750).

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SANTA FE FLORES TOWNHOMES PROJECT

San Marcos, California
December 2025

1.0 INTRODUCTION

Linscott, Law & Greenspan, Engineers (LLG) has prepared the following Local Transportation Analysis (LTA) for the proposed Santa Fe Flores Townhomes project (proposed Project) located at 2966, 2972 and 2982 S. Santa Fe Avenue on the northwest corner of the S. Santa Fe Avenue / N. Las Flores Drive intersection in the City of San Marcos.

Transportation impact analyses within the City of San Marcos includes two sets of requirements.

- **CEQA Analysis** primarily consisting of Vehicle Miles Traveled (VMT) analysis. Impacts to pedestrians, bicyclists, transit, hazards, and emergency access are also addressed. This is addressed under a separate cover.
- **Non-CEQA Local Transportation Analysis** to evaluate the effects of a development project on the circulation network. The analysis is used to determine consistency with the City's General Plan.

The following items are included in this transportation study:

- Project Description
- Existing Conditions Discussion
- Local Transportation Analysis Approach and Methodology
- Analysis of Existing Conditions
- Near-Term Conditions Discussion
- Trip Generation, Distribution, and Assignment
- Analysis of Near-Term Scenarios
- Long-Term Conditions Discussion
- Analysis of Long-Term Scenarios
- Active Transportation Review
- Access Assessment
- Conclusions

2.0 PROJECT DESCRIPTION

The Project is located in the city of San Marcos at 2966, 2972 and 2982 South Santa Fe Avenue adjacent to North Las Flores Drive on assessor parcel numbers 217-161-1800, 217-161-1900 and 217-161-1700. The 2.6-acre Project site is undeveloped and is currently designated Commercial and Light Industrial in the City General Plan and zoned as Commercial and Light Industrial. The Project would be located on a previously graded site and require a General Plan amendment and Rezone to Multifamily Residential to allow the development of 46 multi-family residential units that would be 3 stories in height.

Access to the site will be provided via a single right-in/right-out only driveway on S. Santa Fe Avenue.

Figure 2–1 shows the vicinity map. ***Figure 2–2*** shows a more detailed project area map. ***Figure 2–3*** shows the conceptual site plan for the Project.

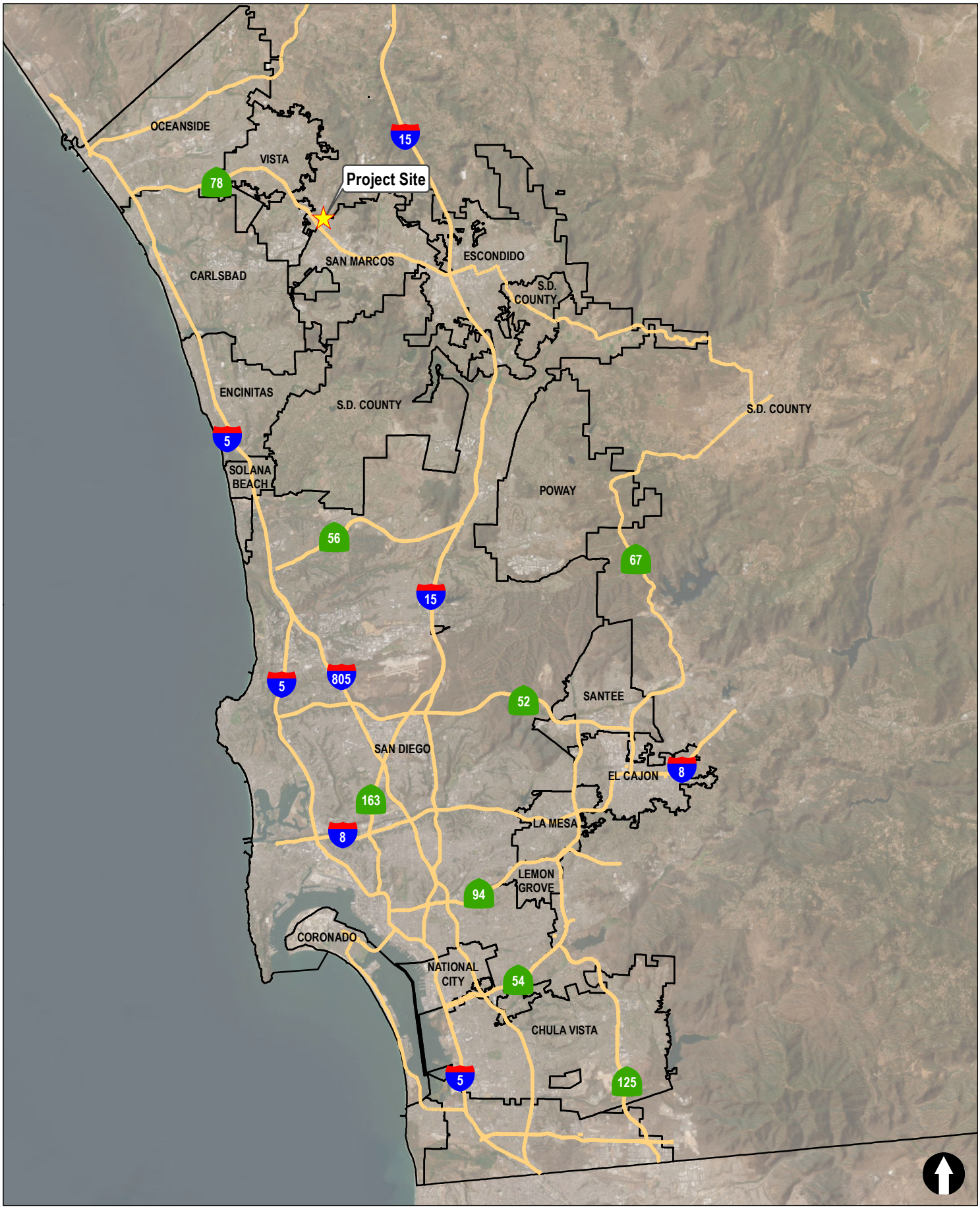

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Figure 2-1

Vicinity Map

Santa Fe Flores Townhomes

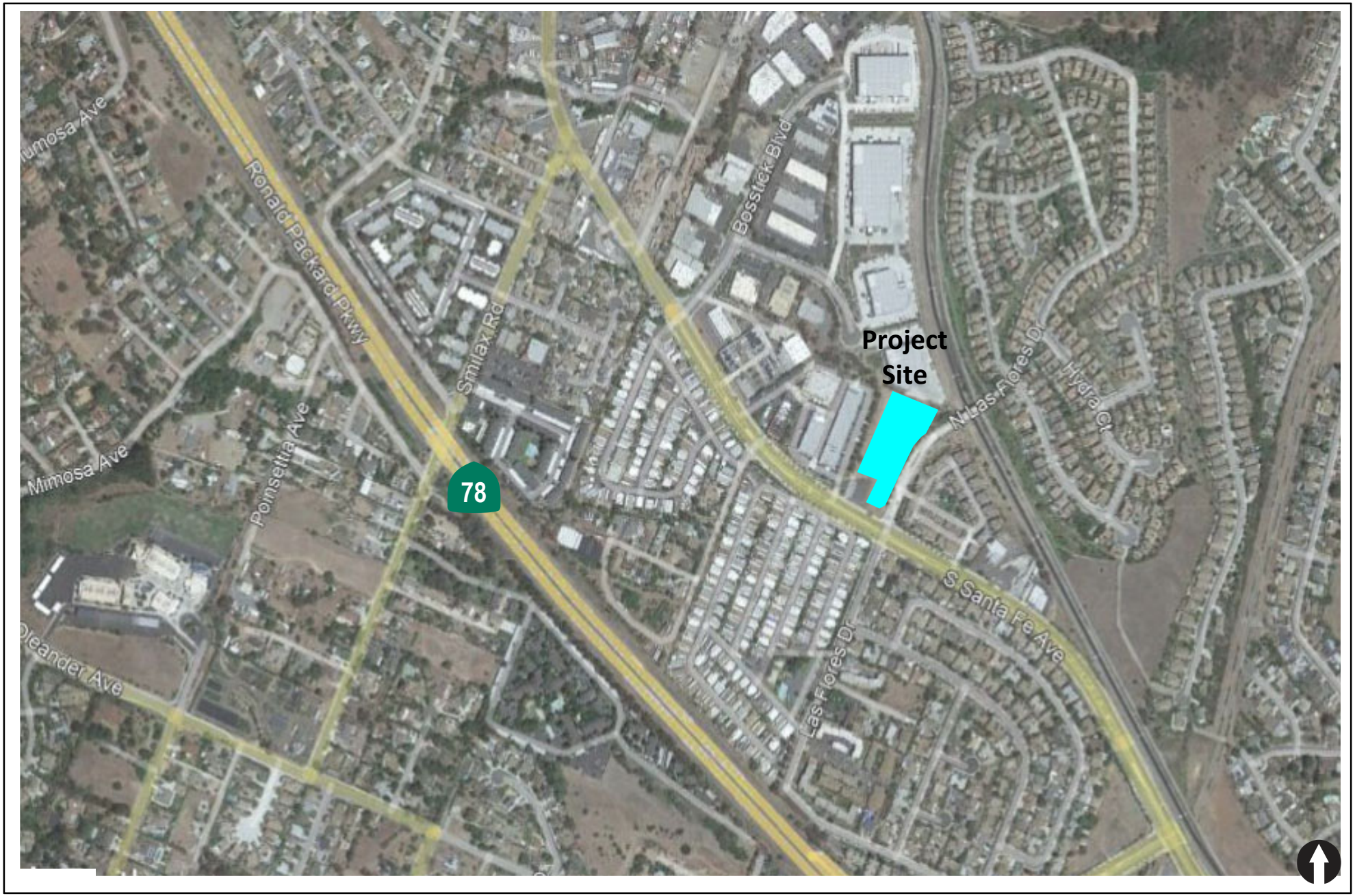

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Figure 2-2

Project Area Map

SANTA FE FLORES TOWNHOMES

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Figure 2-3

Project Site Plan

SANTA FE FLORES TOWNHOMES

3.0 EXISTING CONDITIONS

Effective evaluation of the traffic impacts associated with the proposed project requires an understanding of the existing transportation system within the project area. ***Figure 3–1*** shows an existing conditions diagram, including signalized intersections and lane configurations. The study area includes the following intersections and street segments based on the anticipated distribution of the project traffic:

Intersections:

1. S. Santa Fe Avenue / Smilax Road
2. S. Santa Fe Avenue / Bosstick Boulevard
3. S. Santa Fe Avenue / Community Drive
4. S. Santa Fe Avenue / N. Las Flores Drive
5. N. Las Flores Drive / Hollencrest Road
6. S. Santa Fe Avenue (W. Mission Road) / N. Rancho Santa Fe Road
7. Capalina Road / Hollencrest Road
8. N. Rancho Santa Fe Road / Capalina Road

Segments:

S. Santa Fe Avenue

1. Smilax Road to Bosstick Boulevard
2. Bosstick Boulevard to Community Drive
3. Community Drive to N. Las Flores Drive
4. N. Las Flores Drive to N. Rancho Santa Fe Road
5. N. Rancho Santa Fe Road to N. Pacific Street

Hollencrest Road

6. De Leone Road to Hollenbeck Road

N. Rancho Santa Fe Road

7. S. Santa Fe Avenue to Capalina Road

3.1 Existing Street Network

The principal roadways in the project study area are described briefly below. Roadway classification was determined from a review of the *City of San Marcos Mobility Element* and information gathered from field observations.

S. Santa Fe Avenue is currently constructed as a 2-lane undivided roadway north of Bosstick Boulevard, and as a 4-lane divided roadway south of Bosstick Boulevard. The posted speed limit is 45 mph. On-street parking is prohibited. Class II bike lanes are provided. S. Santa Fe Avenue is classified as a 4-Lane Arterial with Enhanced Bicycle/Pedestrian Facilities on the City's Mobility Element.

N. Las Flores Drive is constructed as a 2-lane undivided roadway. The posted speed limit is 25 mph. On-street parking is permitted on both sides of the roadway south of S. Santa Fe Avenue, and prohibited north of S. Santa Fe Avenue. No bicycle facilities are present. N. Las Flores Drive is unclassified on the City's Mobility Element.

N. Rancho Santa Fe Road is constructed as a 4-lane divided roadway. The posted speed limit is 40 mph. On-street parking is prohibited. Class II bike lanes are provided. Within the Project study area, N. Rancho Santa Fe Road is classified as a 4-lane Arterial with Class II or III Bicycle Facilities and Sidewalks on the City's Mobility Element.

Capalina Road is constructed as a 2-lane undivided roadway west of Hollenbeck Road, and as a 2-lane undivided roadway with a two-way left-turn lane east of Hollenbeck Road. The posted speed limit is 25 mph. On-street parking is generally permitted on both sides of the roadway west of N. Rancho Santa Fe Road and prohibited on both sides of the roadway east of N. Rancho Santa Fe Road. Sidewalks are provided. There are no bicycle facilities present. Capalina Road is unclassified on the City's Mobility Element.

3.2 Existing Traffic Volumes

Average daily traffic (ADT) volumes and peak hour (7:00-9:00 AM and 4:00-6:00 PM) intersection turning movement counts, including bicycle and pedestrian counts, were conducted in February 2022 within the Project study area.

Figure 3–2 shows the Existing Traffic Volumes. ***Appendix A*** contains the manual count sheets.

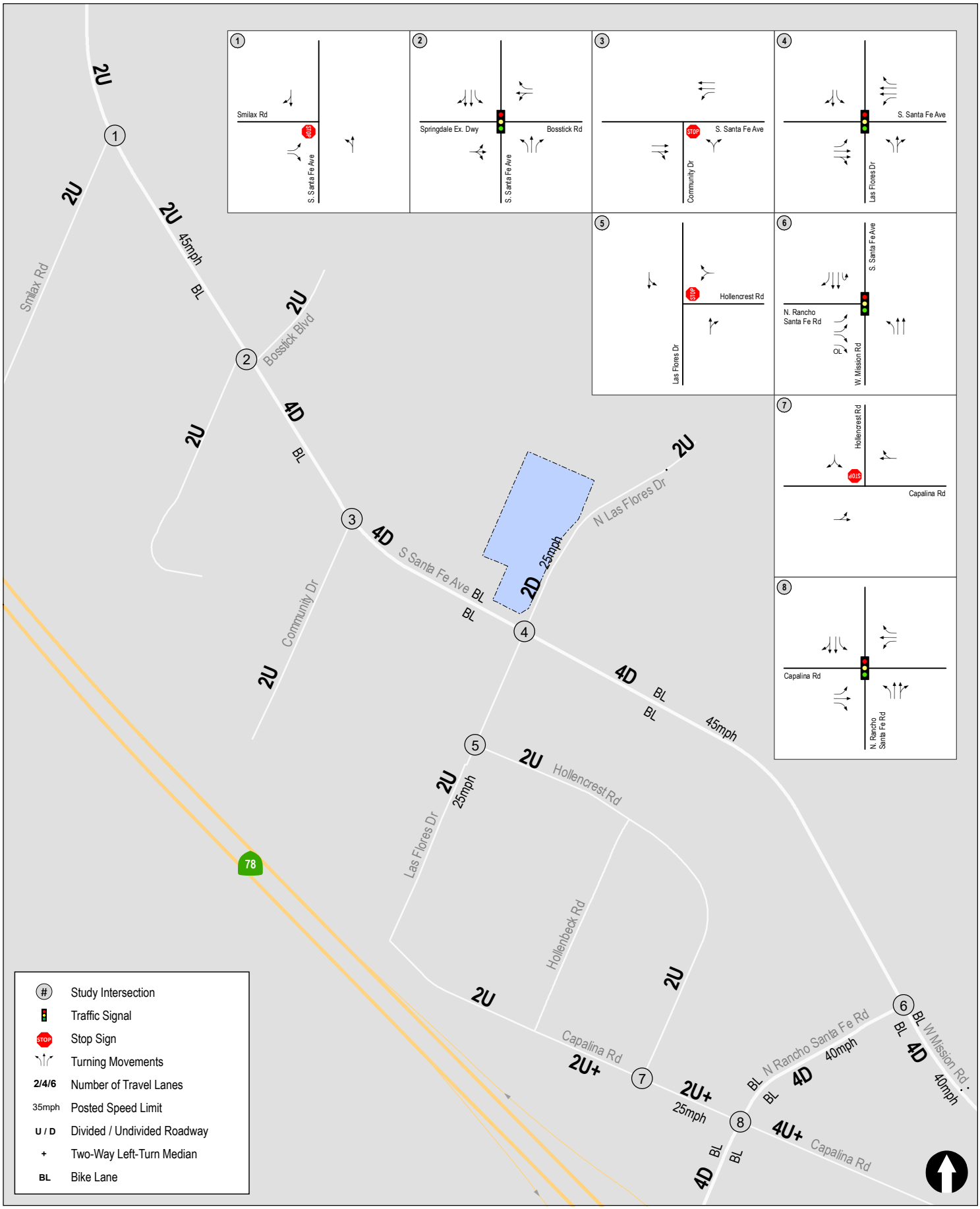

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Figure 3-1

Existing Conditions Diagram

Santa Fe Flores Townhomes

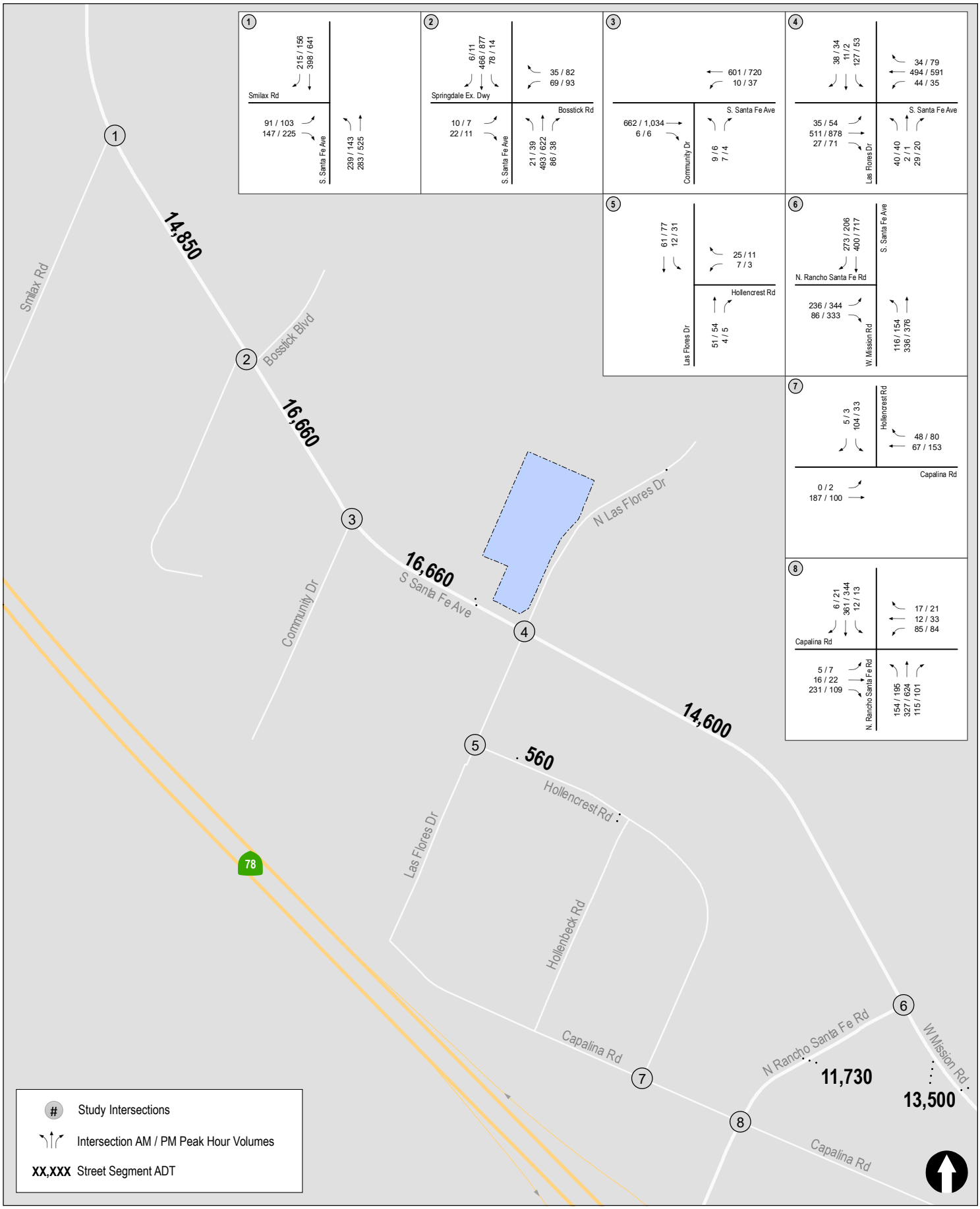

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Figure 3-2

Existing Traffic Volumes

Santa Fe Flores Townhomes

4.0 LOCAL TRANSPORTATION ANALYSIS APPROACH AND METHODOLOGY

4.1 Study Scenarios

The following scenarios were analyzed:

- Existing Conditions.
- Near-Term (Interim Year) Conditions are based on the SANDAG pre-established interim year scenario closest to the project's anticipated opening year.
- Near-Term (Interim Year) Plus Project Conditions include project-generated traffic added to interim year volumes.
- Long-Term (Year 2050) Conditions with the current zoning.
- Long-Term (Year 2050) Plus Project (with proposed zoning).

4.2 Methodology

Level of service (LOS) is the term used to denote the different operating conditions which occur on a given roadway segment under various traffic volume loads. It is a qualitative measure used to describe a quantitative analysis taking into account factors such as roadway geometries, signal phasing, speed, travel delay, freedom to maneuver, and safety. Level of service provides an index to the operational qualities of a roadway segment or an intersection. Level of service designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. Level of service designation is reported differently for signalized and unsignalized intersections, as well as for roadway segments.

4.2.1 *Intersections*

Signalized intersections were analyzed under AM and PM peak hour conditions. Average vehicle delay was determined utilizing the methodology found in Chapter 19 of the *Highway Capacity Manual 6th Edition (HCM 6),* with the assistance of the *Synchro 10* computer software. The delay values (represented in seconds) were qualified with a corresponding intersection Level of Service (LOS).

Unsignalized intersections were analyzed under AM and PM peak hour conditions. Average vehicle delay and Levels of Service (LOS) was determined based upon the procedures found in Chapter 20 and Chapter 21 of the *HCM 6* with the assistance of the *Synchro 10* computer software.

4.2.2 *Street Segments*

Street segment analysis is based upon the comparison of daily traffic volumes (ADTs) to the City of San Marcos's *Roadway Classification, Level of Service, and ADT Table*. This table provides segment capacities for different street classifications, based on traffic volumes and roadway characteristics. The City of San Marcos's *Roadway Classification, Level of Service, and ADT Table* is attached in ***Appendix B***.

4.3 Level of Service Standards

The City of San Marcos strives to maintain intersection and roadway segment operations based on LOS standards outlined in the General Plan Mobility Element. If the addition of the traffic generated

from a proposed project results in any one of the following, improvements should be identified to increase performance to acceptable or pre-project conditions under each scenario:

- Triggers an intersection operating at acceptable LOS to operate at unacceptable LOS and increases the delay by more than 2.0 seconds.
- Increases the delay for a study intersection that is already operating at unacceptable LOS by more than 2.0 seconds.
- Triggers a roadway segment operating at acceptable LOS to operate at unacceptable LOS and increases the volume/capacity (V/C) ratio by more than 0.02.
- Increases the V/C ratio for a study roadway segment that is already operating at unacceptable LOS by more than 0.02.

5.0 ANALYSIS OF EXISTING CONDITIONS

5.1 Peak Hour Intersection Levels of Service

Table 5–1 summarizes the peak hour intersection operations under Existing conditions. As seen in *Table 5–1*, the study intersections are calculated to operate acceptably at LOS D or better, with the exception of S. Santa Fe Avenue / Smilax Road, where the minor-street left-turn movement is calculated to operate at LOS F.

Appendix C contains the Existing intersection analysis worksheets.

5.2 Daily Street Segment Levels of Service

Table 5–2 summarizes the street segment operations under Existing conditions. As seen in *Table 5–2*, the study street segments are calculated to operate acceptably at LOS D or better with the exception of S. Santa Fe Avenue between Smilax Road and Bosstick Boulevard, which is calculated to operate at LOS F.

TABLE 5–1
EXISTING INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Existing	
			Delay[a]	LOS[b]
1. S. Santa Fe Avenue / Smilax Road	MSSC[c]	AM	**>100**	**F**
		PM	**>100**	**F**
2. S. Santa Fe Avenue / Bosstick Boulevard	Signal	AM	16.7	B
		PM	17.3	B
3. S. Santa Fe Avenue / Community Drive	MSSC	AM	17.3	C
		PM	32.6	D
4. S. Santa Fe Avenue / N. Las Flores Drive	Signal	AM	18.6	B
		PM	19.9	B
5. N. Las Flores Drive / Hollencrest Road	MSSC	AM	8.9	A
		PM	8.9	A
6. S. Santa Fe Avenue (W. Mission Road) / N. Rancho Santa Fe Rd	Signal	AM	12.7	B
		PM	14.5	B
7. Capalina Road / Hollencrest Road	MSSC	AM	11.7	B
		PM	10.9	B
8. N. Rancho Santa Fe Rd / Capalina Road	Signal	AM	29.3	C
		PM	28.6	C

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. MSSC = Minor-Street Stop Controlled intersection. Worst-case movement level of service reported.

SIGNALIZED		UNSIGNALIZED	
DELAY/LOS THRESHOLDS		DELAY/LOS THRESHOLDS	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

TABLE 5–2
EXISTING STREET SEGMENT OPERATIONS

Street Segment	Classification	Capacity (LOS E) [a]	ADT [b]	LOS [c]	V/C [d]
S. Santa Fe Avenue					
1. Smilax Road to Bosstick Boulevard	2-Lane Collector	8,000	**14,850**	**F**	**1.856**
2. Bosstick Boulevard to Community Drive	4-Lane Arterial with Class II or Class III Bike Lanes	40,000	16,660	B	0.417
3. Community Drive to N. Las Flores Drive	4-Lane Arterial with Class II or Class III Bike Lanes	40,000	16,660	B	0.417
4. N. Las Flores Drive to N. Rancho Santa Fe Road	4-Lane Arterial with Class II or Class III Bike Lanes	40,000	14,600	A	0.365
5. N. Rancho Santa Fe Road to N. Pacific Street	4-Lane Arterial with Class II or Class III Bike Lanes	40,000	13,500	A	0.338
Hollencrest Road					
6. De Leone Road to Hollenbeck Road	2-Lane Sub-Collector	2,200[e]	560	+C	0.070
N. Rancho Santa Fe Road					
7. S. Santa Fe Avenue to Capalina Road	4-Lane Arterial with Class II or Class III Bike Lanes	40,000	11,730	A	0.293

Footnotes:

a. Capacities based on based on the City of San Marcos' *Roadway Classifications, Capacity, and LOS* (see *Appendix B*).

b. Average Daily Traffic Volumes.

c. Level of Service.

d. Volume to Capacity.

e. Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Per the City of San Marcos' *Roadway Classifications, Capacity, and LOS*, the LOS C capacity of a Sub-Collector is 2,200 ADT.

6.0 NEAR-TERM (INTERIM YEAR 2027) CONDITIONS

This section describes Near-Term (Interim Year 2027) roadway network and traffic volume conditions. Year 2027 was selected as the closest to the opening year of the proposed Project, based on SANDAG's pre-established interim year scenarios.

6.1 Network Conditions

The existing street system as illustrated in *Figure 3–1* is assumed for Near-Term (Interim Year 2025) conditions with no assumed improvements within the study area.

6.2 Near-Term (Interim Year 2027) Traffic Volumes

To forecast future traffic volumes for Near-Term (Interim Year 2027) conditions, the SANDAG ABM2+ model was first utilized to forecast Year 2050 volumes. Year 2027 traffic volumes were then developed based on an interpolation between Existing and Year 2050 traffic volumes. The forecasted ADT volumes were then used to calculate peak hour volumes based partially on the existing relationship between ADT and peak hour volumes.

Several other traffic engineering principles and factors such as the K-factor (the proportion of daily volume that occurs during the peak period) and D-factor (the directional split of the traffic volumes) were also considered in the forecast analysis (see ***Appendix D*** for definitions). The forecast volumes were also checked for consistency between intersections, where no driveways or roadways exist between intersections, and were compared to existing volumes for accuracy.

Figure 6–1 illustrates the peak hour and ADT segment volumes under the Near-Term scenario.

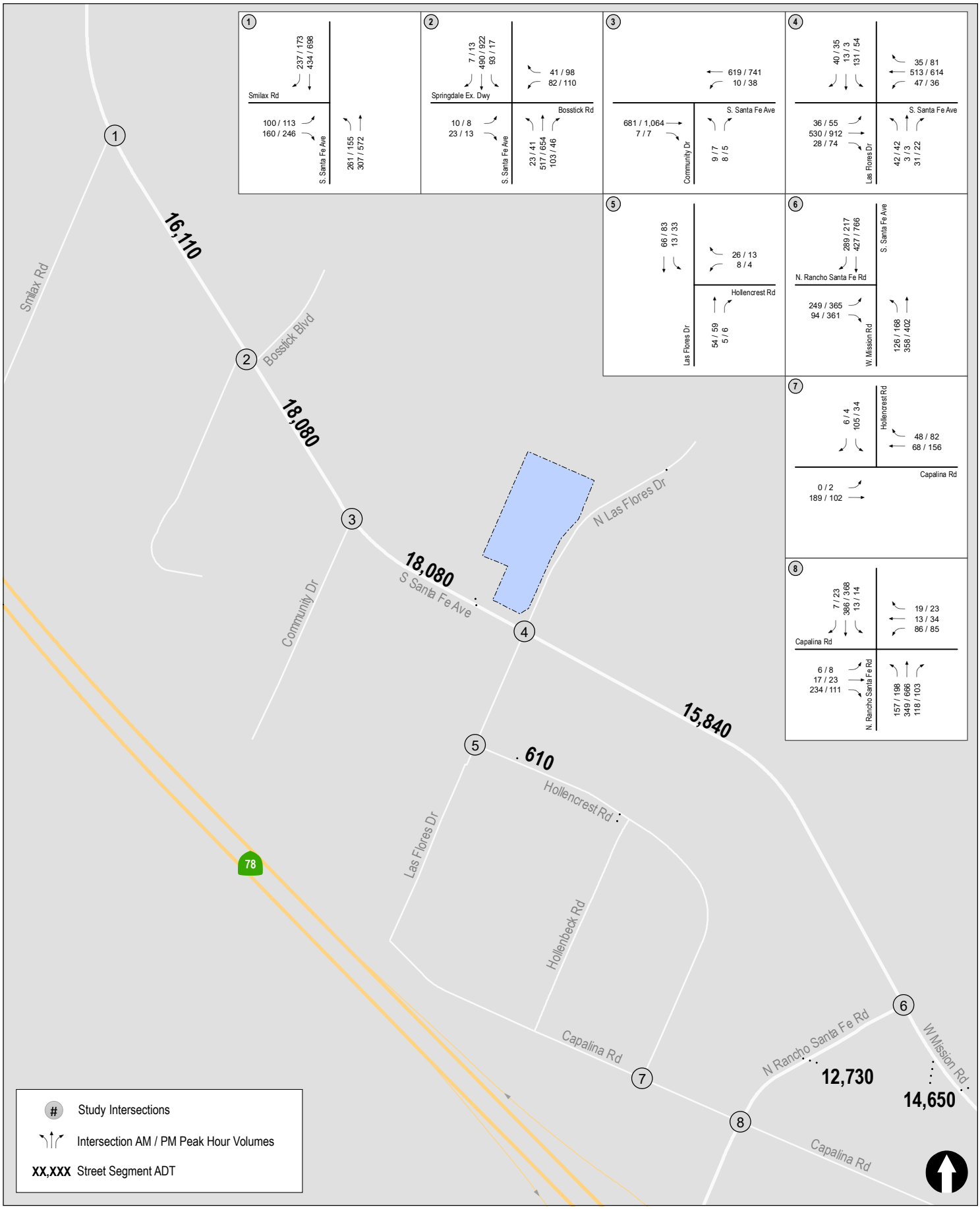

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Figure 6-1

Near-Term without Project Traffic Volumes

Santa Fe Flores Townhomes

7.0 TRIP GENERATION/DISTRIBUTION/ASSIGNMENT

As described in *Section 2*, the proposed Project would provide 46 multi-family dwelling units. The following is a discussion of the traffic expected to be generated by the Project.

7.1 Trip Generation

7.1.1 *Trip Rates*

Trip generation for the Project's multi-family housing was estimated using trip rates from SANDAG's *(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002*. The trip generation rate for "Townhomes (or any multi-family 6 -20 DU/acre)" was used based on the proposed use.

7.1.2 *Project Trips*

Table 7–1 tabulates the total Project traffic generation. The Project is calculated to generate a total of 368 ADT with 29 AM peak hour trips (6 inbound / 23 outbound) and 37 PM peak hour trips (26 inbound and 11 outbound).

7.2 Trip Distribution and Assignment

The traffic generated by the Project was distributed and assigned based on anticipated traffic patterns to and from the site, suggested travel routes provided by Google Maps (additional information provided in ***Appendix E***), and the Project site's proximity to state highways and arterials.

Access to the site will be restricted to right-in/right-out movements via S. Santa Fe Avenue. Therefore, westbound to eastbound U-turns were assumed at the S. Santa Fe Avenue / Community Drive intersection for a portion of the Project's outbound trips and eastbound to westbound U-turns were assumed at the S. Santa Fe Avenue / N. Las Flores Drive intersection for a portion of the Project's inbound trips.

Residents traveling to/from the SR 78 / Rancho Santa Fe Road interchange have a few route options, including traveling along N. Las Flores Drive to/from Capalina Road and/or Hollencrest Road. Given the Project's proposed right-in/right-out access via S. Santa Fe Avenue and a review of the suggested travel routes provided by Google Maps, this "cut-thru" route is not expected to be a major attractor of Project trips. The potential for cut-thru traffic would be much greater if access to the Project were provided via N. Las Flores Drive and residents were able to travel straight thru the traffic signal at S. Santa Fe Avenue / N. Las Flores Drive on their way to/from the interchange. Nevertheless, to provide a conservative analysis of potential cut-thru traffic, 20% of the Project's trips were assumed along Capalina Road and/or Hollencrest Road. This equates to 40 additional ADT on Hollencrest Road, with three (3) trips during the AM peak hour and four (4) trips during the PM peak hour.

Figure 7–1 shows the Project traffic distribution. ***Figure 7–2*** shows the Project traffic volumes. ***Figure 7–3*** shows the Near-Term + Project traffic volumes.

TABLE 7-1
PROJECT TRIP GENERATION

Land Use	Size	Daily Trip Ends (ADT)[b]		AM Peak Hour					PM Peak Hour				
		Rate [a]	Volume	% of ADT	In:Out Split	Volume			% of ADT	In:Out Split	Volume		
						In	Out	Total			In	Out	Total
Proposed Project													
Townhomes [c]	46 DU	8 /DU	368	8%	20 : 80	6	23	29	10%	70 : 30	26	11	37
Project Total			***368***			***6***	***23***	***29***			***26***	***11***	***37***

Footnotes:

a. Trip rates from *SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*

b. Average Daily Trips

c. 46 DU proposed on 2.23 net-acres (about 20.1 DU/acre). Therefore, the 'Residential: Condominium (or any multi-family 6-20 DU/acre)' rate was used to calculate the Project's trip generation.

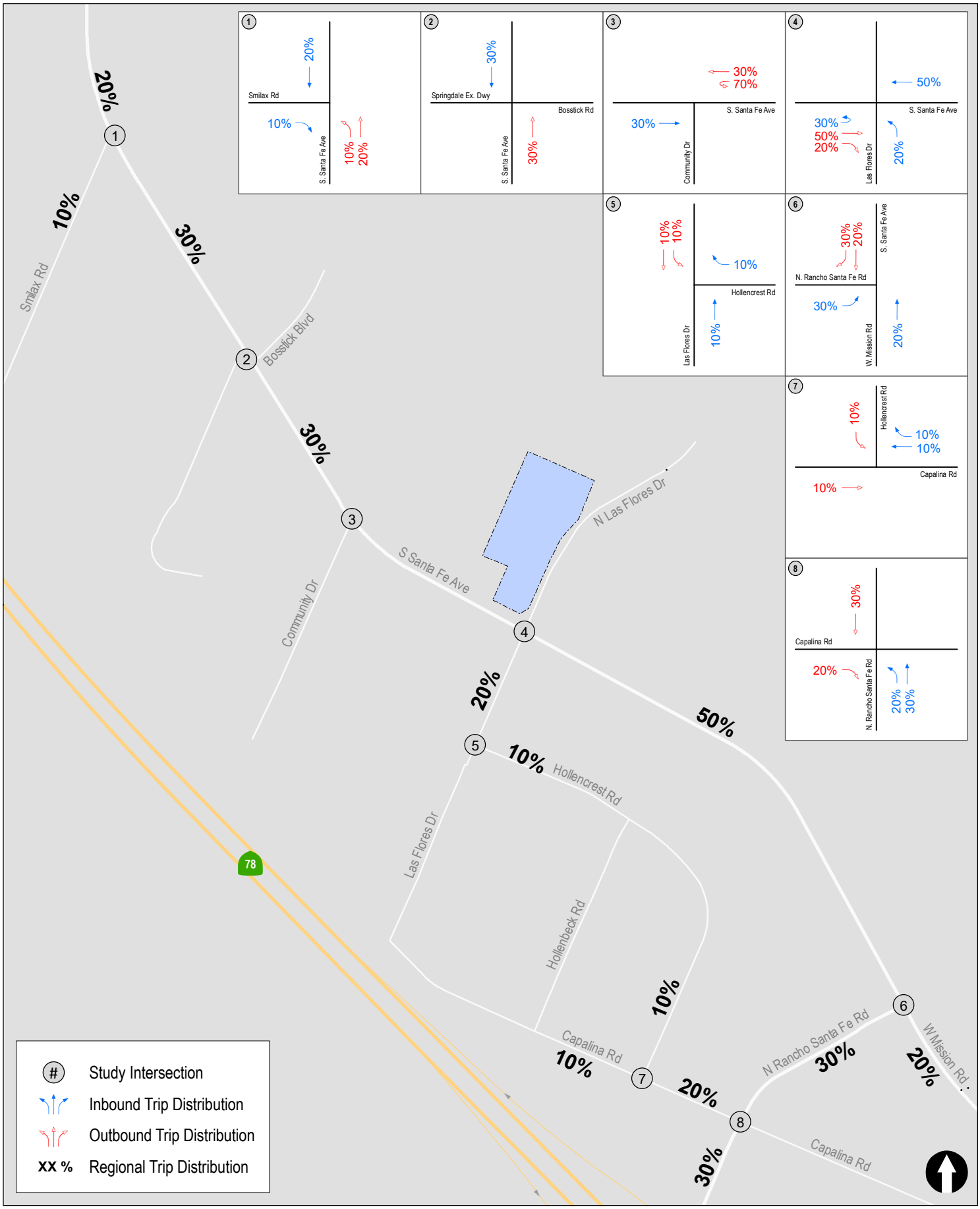

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Figure 7-1

Project Traffic Distribution

Santa Fe Flores Townhomes

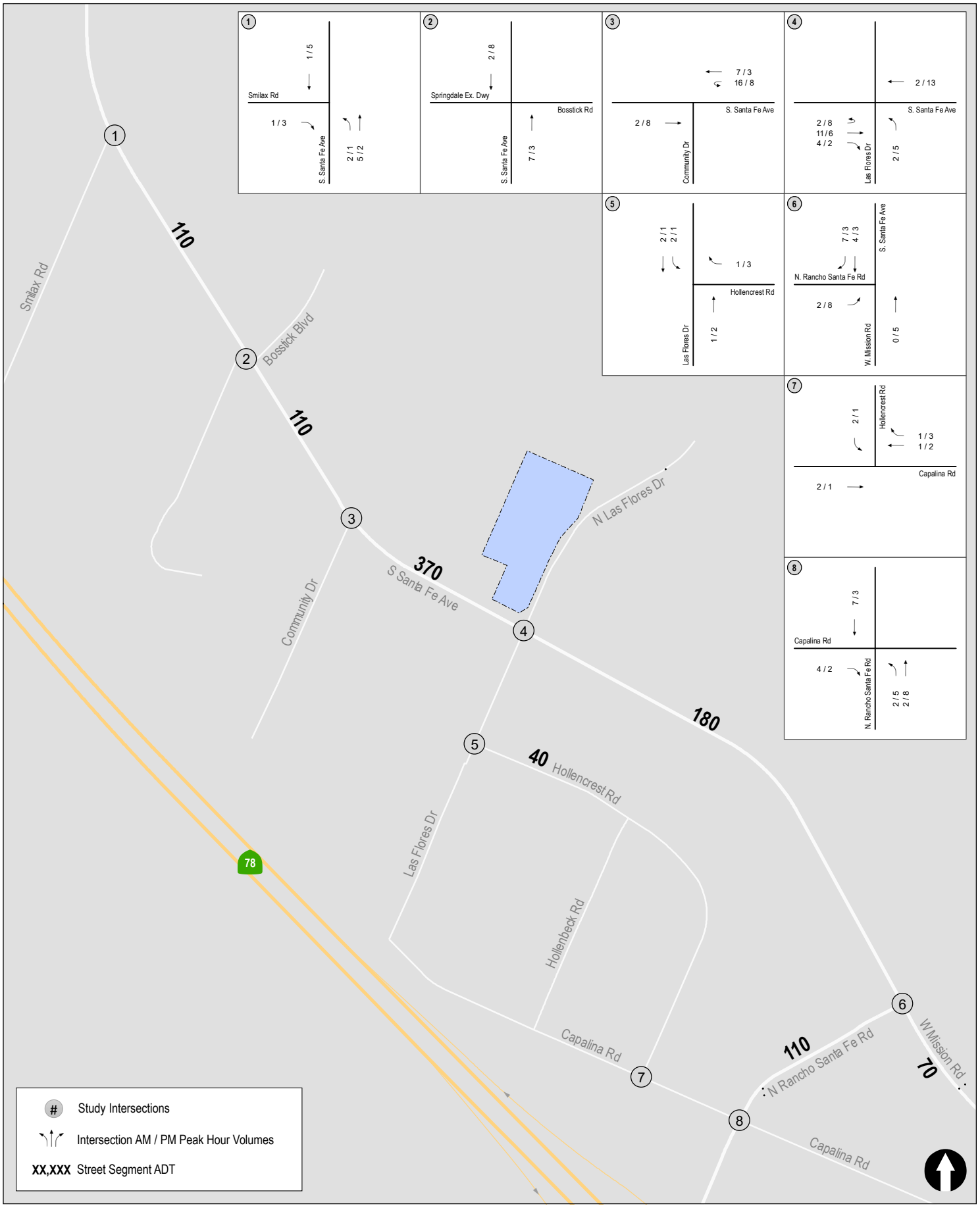

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Figure 7-2

Project Traffic Volumes

Santa Fe Flores Townhomes

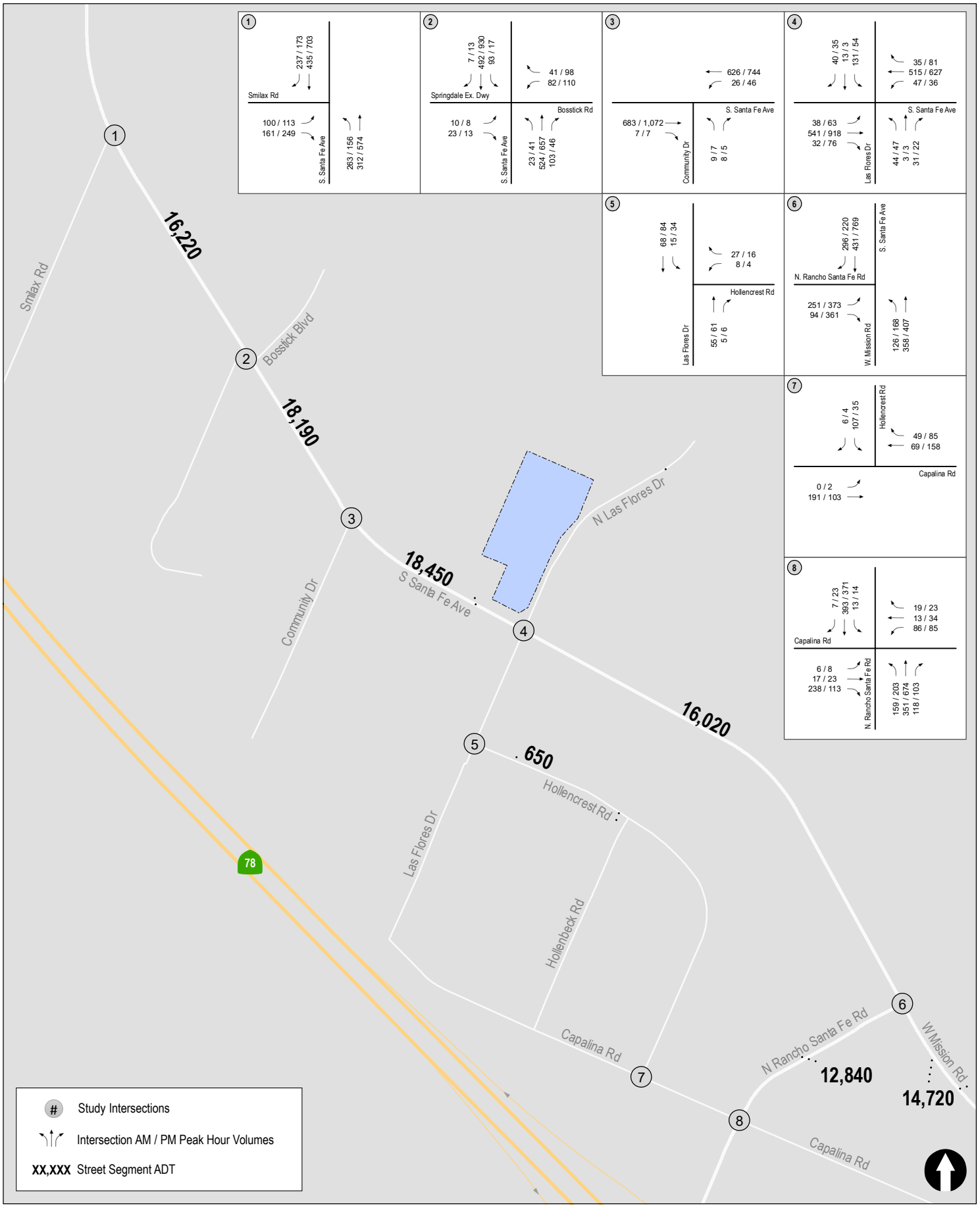

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Figure 7-3

Near-Term + Project Traffic Volumes

Santa Fe Flores Townhomes

8.0 ANALYSIS OF NEAR-TERM SCENARIOS

The following section presents the analysis of study area intersections and street segments under Near-Term conditions without and with the Project.

8.1 Near-Term Without Project

8.1.1 *Intersection Analysis*

Table 8–1 summarizes the intersection operations under Near-Term without Project conditions. As seen in *Table 8–1*, the study intersections are calculated to operate acceptably at LOS D or better with the exception of S. Santa Fe Avenue / Smilax Road, where the minor-street left-turn movement is calculated to continue to operate at LOS F.

Appendix F contains the Near-Term without Project intersection analysis calculation worksheets.

8.1.2 *Segment Operations*

Table 8–2 summarizes the street segment operations under Near-Term without Project conditions. As seen in *Table 8–2*, the study street segments are calculated to operate acceptably at LOS D or better with the exception of S. Santa Fe Avenue between Smilax Road and Bosstick Boulevard, which is calculated to continue to operate at LOS F.

8.2 Near-Term + Project

8.2.1 *Intersection Analysis*

Table 8–1 summarizes the intersection operations under Near-Term + Project conditions. As seen in *Table 8–1*, with the addition of Project traffic, the study intersections are calculated to continue to operate acceptably at LOS D or better with the exception of the following:

S. Santa Fe Avenue / Smilax Road, where the minor-street left-turn movement is calculated to continue to operate at LOS F, and S. Santa Fe Avenue / Community Drive, where the intersection is calculated to operate at LOS E in the PM peak hour.

Based on the established Level of Service Standards outlined in *Section 4.3*, the Project is calculated to result in a substantial effect to the S. Santa Fe Avenue / Smilax Road intersection. Roadway improvements to address this Level of Service deficiency are proposed in *Section 13.0*.

The Project is not calculated to result in a substantial effect to the S. Santa Fe Avenue / Community Drive intersection as the Project does not trigger the intersection to operate at unacceptable LOS **and** increase the delay by more than 2.0 seconds. The Project increases the delay by 1.8 seconds. Therefore, the Project is not calculated to result in a substantial effect to the S. Santa Fe Avenue / Community Drive intersection and no improvements are required.

Appendix G contains the Near-Term + Project intersection analysis calculation worksheets.

8.2.2 *Segment Operations*

Table 8–2 summarizes the street segment operations under Near-Term + Project conditions. As seen in *Table 8–2*, with the addition of Project traffic, the study street segments are calculated to continue

to operate acceptably at LOS D or better with the exception of S. Santa Fe Avenue between Smilax Road and Bosstick Boulevard, which is calculated to continue to operate at LOS F.

The Project-related increase in the V/C ratio for the above-listed street segment already operating at an unacceptable LOS is less than the threshold of 0.02. The Project is not calculated to result in a substantial effect to the study segment and no improvements are required.

TABLE 8–1
NEAR-TERM INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Near-Term Without Project		Near-Term + Project		Δ [c]	Substantial Effect?
			Delay [a]	LOS [b]	Delay	LOS		
1. S. Santa Fe Avenue / Smilax Road	MSSC[d]	AM	**>100**	**F**	**>100**	**F**	**>10**	**Yes**
		PM	**>100**	**F**	**>100**	**F**	**>10**	**Yes**
2. S. Santa Fe Avenue / Bosstick Bouleavard	Signal	AM	17.8	B	17.9	B	0.1	No
		PM	18.7	B	18.8	B	0.1	No
3. S. Santa Fe Avenue / Community Drive	MSSC	AM	17.5	C	18.3	C	0.8	No
		PM	34.7	D	**36.5**	**E**	**1.8**	**No**
4. S. Santa Fe Avenue / N. Las Flores Drive	Signal	AM	18.9	B	19.0	B	0.1	No
		PM	21.1	C	21.8	C	0.7	No
5. N. Las Flores Drive / Hollencrest Road	MSSC	AM	9.0	A	9.0	A	0.0	No
		PM	9.0	A	9.0	A	0.0	No
6. S. Santa Fe Avenue (W. Mission Road) / N. Rancho Santa Fe Rd	Signal	AM	12.9	B	12.9	B	0.1	No
		PM	15.3	B	15.3	B	0.0	No
7. Capalina Road / Hollencrest Road	MSSC	AM	11.7	B	11.8	B	0.1	No
		PM	11.0	B	11.0	B	0.0	No
8. N. Rancho Santa Fe Rd / Capalina Road	Signal	AM	30.1	C	30.7	C	0.6	No
		PM	30.4	C	31.8	C	1.4	No

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. Δ denotes the increase in delay due to Project.
d. MSSC = Minor-Street Stop Controlled intersection. Worst-case level of service reported.

SIGNALIZED		UNSIGNALIZED	
DELAY/LOS THRESHOLDS		DELAY/LOS THRESHOLDS	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

TABLE 8–2
NEAR-TERM STREET SEGMENT OPERATIONS

Street Segment	Capacity (LOS E) [a]	Near-Term Without Project			Near-Term With Project			Δ[e]	Substantial Effect?
		ADT [b]	LOS [c]	V/C [d]	ADT	LOS	V/C		
S. Santa Fe Avenue									
1. Smilax Road to Bosstick Boulevard	8,000	**16,110**	**F**	**2.014**	**16,220**	**F**	**2.028**	**0.014**	**No**
2. Bosstick Boulevard to Community Drive	40,000	18,080	B	0.452	18,190	B	0.455	0.003	No
3. Community Drive to N. Las Flores Drive	40,000	18,080	B	0.452	18,450	B	0.461	0.009	No
4. N. Las Flores Drive to N. Rancho Santa Fe Road	40,000	15,840	B	0.396	16,020	B	0.401	0.005	No
5. N. Rancho Santa Fe Road to N. Pacific Street	40,000	14,650	A	0.366	14,720	A	0.368	0.002	No
Hollencrest Road									
6. De Leone Road to Hollenbeck Road	2,200[f]	610	+C	0.076	650	+C	0.081	0.005	No
N. Rancho Santa Fe Road									
7. S. Santa Fe Avenue to Capalina Road	40,000	12,730	A	0.318	12,840	A	0.321	0.003	No

Footnotes:

a. Capacities based on based on the City of San Marcos' *Roadway Classifications, Capacity, and LOS* (see *Appendix B*)
b. Average Daily Traffic Volumes.
c. Level of Service.
d. Volume to Capacity.
e. Δ denotes a Project-induced increase in the Volume to Capacity (V/C) ratio.
f. Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Per the City of San Marcos' *Roadway Classifications, Capacity, and LOS*, the LOS C capacity of a Sub-Collector is 2,200 ADT.

9.0 LONG-TERM (YEAR 2050) CONDITIONS

9.1 Long-Term (Year 2050) Network Conditions

The Long-Term (Year 2050) street network in the SANDAG Series 14 forecast model includes changes to the roadway system in the vicinity of the study area including the planned widening of S. Santa Fe Avenue between Smilax Road and Bosstick Boulevard to 4-lane Arterial standards per the City of San Marcos' Mobility Element.

For the purposes of this traffic study, this network addition is assumed in the long-term traffic volumes forecast but no changes to the study area roadway geometry or intersection control as shown in *Figure 3–1*, were assumed.

9.2 Long-Term (Year 2050) Traffic Volumes

To forecast future traffic volumes for Long-Term (Year 2050) conditions, the SANDAG ABM2+ Model was utilized. The forecasted ADT volumes were then used to calculate peak hour volumes based partially on the existing relationship between ADT and peak hour volumes.

Several other traffic engineering principles and factors such as the K-factor (the proportion of daily volume that occurs during the peak period) and D-factor (the directional split of the traffic volumes) were also considered in the forecast analysis (see *Appendix D* for definitions). The forecast volumes were also checked for consistency between intersections, where no driveways or roadways exist between intersections, and were compared to existing volumes for accuracy.

Figure 9–1 shows the Long Term (Year 2050) without Project traffic volumes. ***Figure 9–2*** shows the Long Term (Year 2050) + Project traffic volumes.

9.3 Existing and Proposed Zoning

The Project site is currently designated Commercial and Light Industrial in the City General Plan and zoned as Commercial and Light Industrial. The Project requires a General Plan amendment and Rezone to Multifamily Residential. The Project will result in reduced traffic as compared to the current zoning. A comparison of the Project's trip generation calculations and trip generation calculations for a conceptual development plan based on the current zoning is shown below in ***Table 9-1***. As shown, the Project is calculated to generate approximately 180 fewer ADT as compared to the current zoning.

TABLE 9-1
TRIP GENERATION COMPARISON

Land Use	Size	Daily Trip Ends (ADT)[b]		AM Peak Hour					PM Peak Hour				
		Rate[a]	Volume	% of ADT	In:Out Split	Volume			% of ADT	In:Out Split	Volume		
						In	Out	Total			In	Out	Total
Existing Zoning (Commercial and Light Industrial)													
Industrial / Business Park (commercial included)	2.5 Acres	200 /Acre	500	12%	80 : 20	48	12	60	12%	20 : 80	12	48	60
Proposed Project													
Townhomes[c]	46 DU	8 /DU	368	8%	20 : 80	6	23	29	10%	70 : 30	26	11	37
Net-New Trips			***-132***			***-42***	***11***	***-31***			***14***	***-37***	***-23***

Footnotes:

a. Trip rates from *SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*

b. Average Daily Trips

c. 46 DU proposed on 2.23 net-acres (about 20.1 DU/acre). Therefore, the 'Residential: Condominium (or any multi-family 6-20 DU/acre)' rate was used to calculate the Project's trip generation.

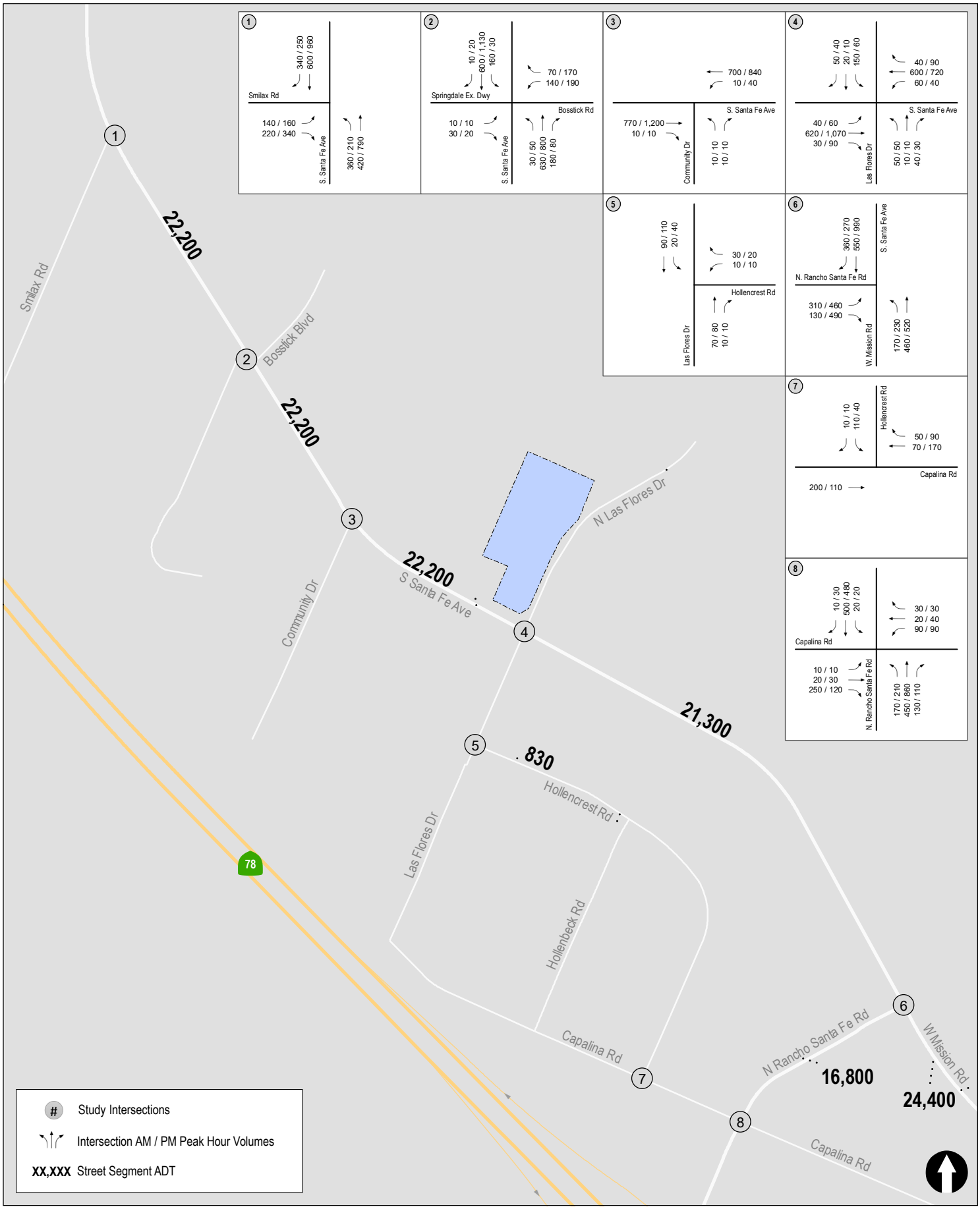

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Figure 9-1

Long-Term without Project Traffic Volumes

Santa Fe Flores Townhomes

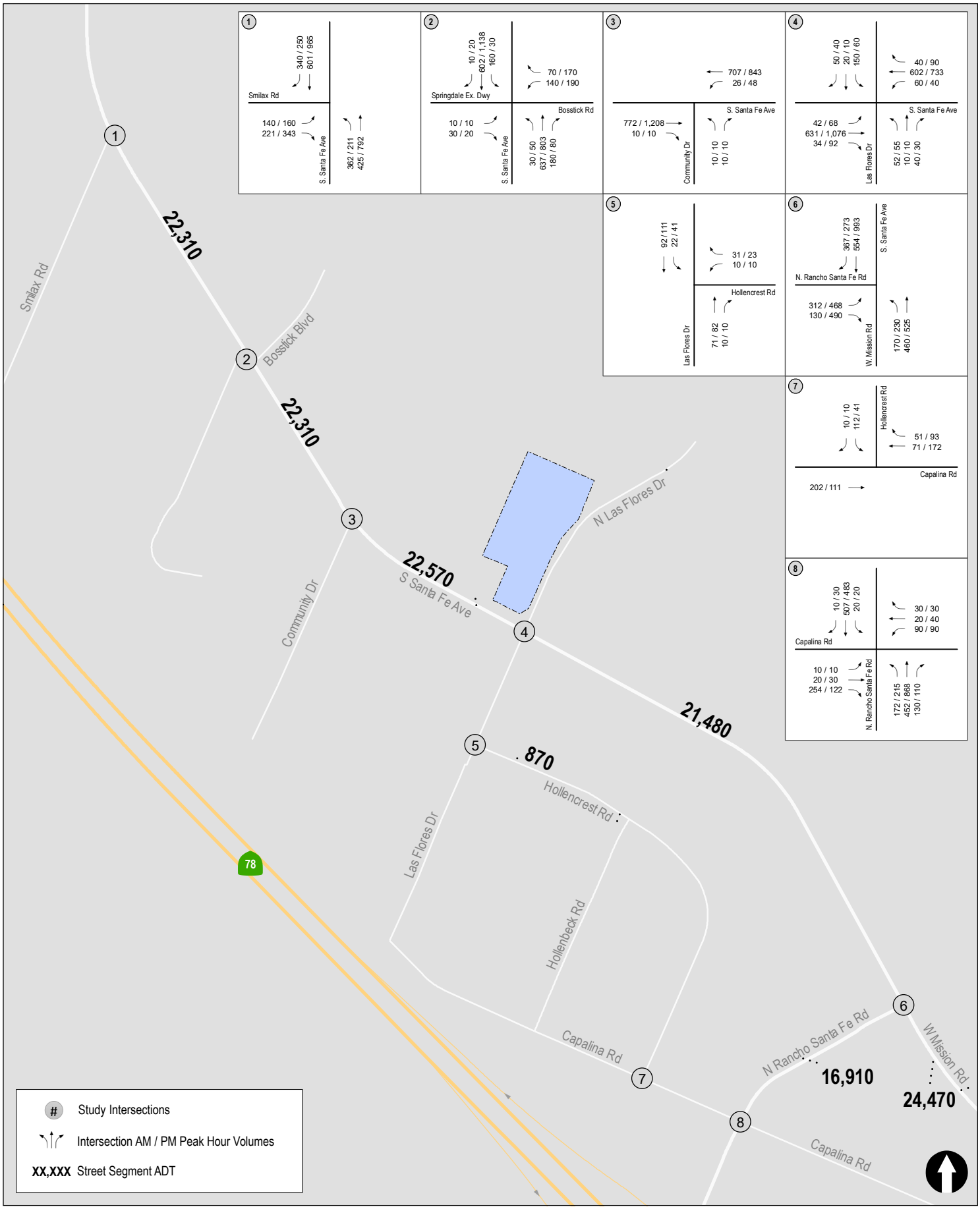

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Figure 9-2

Long-Term + Project Traffic Volumes

Santa Fe Flores Townhomes

10.0 ANALYSIS OF LONG-TERM SCENARIOS

10.1 Long-Term Without Project

10.1.1 *Intersection Analysis*

Table 10–1 summarizes the intersection operations under Long-Term without Project conditions. As seen in *Table 10–1*, the study intersections are calculated to operate acceptably at LOS D or better with the exception of:

- Intersection #1. S. Santa Fe Avenue / Smilax Road (minor-street left-turn movement calculated to operate at LOS F during the AM and PM peak hours)
- Intersection #3. S. Santa Fe Avenue / Community Drive (LOS E during the PM peak hour)

Appendix H contains the Long-Term without Project intersection analyses calculation worksheets.

10.1.2 *Segment Operations*

Table 10–2 summarizes the street segment operations under Long-Term without Project conditions. As seen in *Table 10–2*, the study street segments are calculated to operate acceptably at LOS D or better with the exception of S. Santa Fe Avenue between Smilax Road and Bosstick Boulevard, which is calculated to continue to operate at LOS F:

10.2 Long-Term + Project

10.2.1 *Intersection Analysis*

Table 10–1 summarizes the intersection operations under Long-Term + Project conditions. As seen in *Table 10–1*, with the addition of Project traffic, the study intersections are calculated to continue to operate acceptably at LOS D or better with the exception of:

- **Intersection #1. S. Santa Fe Avenue / Smilax Road (minor-street left-turn movement calculated to operate at LOS F during the AM and PM peak hours)**
- Intersection #3. S. Santa Fe Avenue / Community Drive (LOS E during the PM peak hour):

Based on the established Level of Service Standards outlined in *Section 4.3*, the Project is calculated to result in a substantial effect to the intersection of S. Santa Fe Avenue / Smilax Road. Roadway improvements to address this Level of Service deficiency are proposed in *Section 13.0*.

The Project-related increase in delay at the intersection of S. Santa Fe Avenue / Community Drive is less than the threshold of 2.0 seconds. The Project is not calculated to result in a substantial effect to this study intersection and no improvements are required.

Appendix I contains the Long-Term + Project intersection analyses calculation worksheets.

10.2.2 *Segment Operations*

Table 10–2 summarizes the segment operations under Long-Term + Project conditions. As seen in *Table 10–2*, with the addition of Project traffic, the study street segments are calculated to continue to operate acceptably at LOS D or better with the exception of S. Santa Fe Avenue between Smilax Road and Bosstick Boulevard, which is calculated to continue to operate at LOS F.

The Project-related increase in the V/C ratio for the above-listed street segment already operating at an unacceptable LOS is less than the threshold of 0.02. The Project is not calculated to result in a substantial effect to the study segment and no improvements are required.

TABLE 10–1
LONG-TERM INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Long-Term Without Project		Long-Term With Project		Δ[c]	Substantial Effect?
			Delay[a]	LOS[b]	Delay	LOS		
1. S. Santa Fe Avenue / Smilax Road	MSSC[d]	AM	**>100**	**F**	**>100**	**F**	**>10**	**Yes**
		PM	**>100**	**F**	**>100**	**F**	**>10**	**Yes**
2. S. Santa Fe Avenue / Bosstick Boulevard	Signal	AM	26.7	C	27.1	C	0.4	No
		PM	40.4	D	40.7	D	0.3	No
3. S. Santa Fe Avenue / Community Drive	MSSC	AM	19.8	C	20.9	C	1.1	No
		PM	**45.9**	**E**	**47.3**	**E**	**1.4**	**No**
4. S. Santa Fe Avenue / N. Las Flores Drive	Signal	AM	20.0	B	20.2	C	0.2	No
		PM	31.1	C	32.7	C	1.6	No
5. N. Las Flores Drive / Hollencrest Road	MSSC	AM	9.2	A	9.3	A	0.1	No
		PM	9.6	A	9.6	A	0.0	No
6. S. Santa Fe Avenue (W. Mission Road) / N. Rancho Santa Fe Rd	Signal	AM	13.9	B	14.0	B	0.1	No
		PM	22.1	C	22.2	C	0.1	No
7. Capalina Road / Hollencrest Road	MSSC	AM	12.0	B	12.1	B	0.1	No
		PM	11.2	B	11.3	B	0.1	No
8. N. Rancho Santa Fe Rd / Capalina Road	Signal	AM	36.5	D	37.4	D	0.9	No
		PM	41.8	D	43.7	D	1.9	No

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. Δ denotes the increase in delay due to Project.
d. MSSC = Minor-Street Stop Controlled intersection. Worst-case level of service reported.

SIGNALIZED		UNSIGNALIZED	
DELAY/LOS THRESHOLDS		DELAY/LOS THRESHOLDS	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

TABLE 10–2
LONG-TERM STREET SEGMENT OPERATIONS

Street Segment	Capacity (LOS E) [a]	Long-Term Without Project			Long-Term With Project			Δ[e]	Substantial Effect?
		ADT[b]	LOS[c]	V/C[d]	ADT	LOS	V/C		
S. Santa Fe Avenue									
1. Smilax Road to Bosstick Boulevard	8,000	**22,200**	**F**	**2.775**	**22,310**	**F**	**2.789**	**0.014**	**No**
2. Bosstick Boulevard to Community Drive	40,000	22,200	C	0.555	22,310	C	0.558	0.003	No
3. Community Drive to N. Las Flores Drive	40,000	22,200	C	0.555	22,570	C	0.564	0.009	No
4. N. Las Flores Drive to N. Rancho Santa Fe Road	40,000	21,300	C	0.533	21,480	C	0.537	0.004	No
5. N. Rancho Santa Fe Road to N. Pacific Street	40,000	24,400	C	0.610	24,470	C	0.612	0.002	No
Hollencrest Road									
6. De Leone Road to Hollenbeck Road	2,200	830	+C	0.104	870	+C	0.109	0.005	No
N. Rancho Santa Fe Road									
7. S. Santa Fe Avenue to Capalina Road	40,000	16,800	B	0.420	16,910	B	0.423	0.003	No

Footnotes:

a. Capacities based on based on the City of San Marcos' *Roadway Classifications, Capacity, and LOS* (see *Appendix B*)
b. Average Daily Traffic Volumes.
c. Level of Service.
d. Volume to Capacity.
e. Δ denotes a Project-induced increase in the Volume to Capacity (V/C) ratio.
f. Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Per the City of San Marcos' *Roadway Classifications, Capacity, and LOS*, the LOS C capacity of a Sub-Collector is 2,200 ADT.

11.0 ACTIVE TRANSPORTATION REVIEW

11.1 Bicycle Network

Currently, Class II bike lanes are provided on the following study street segments:

- S. Santa Fe Avenue, from Bosstick Boulevard to slightly south of N. Rancho Santa Fe Road (both sides); and
- N. Rancho Santa Fe Road, along its entire length (both sides)

In the City of San Marcos *Active Transportation Plan*, a Class IV bikeway (one-way) is planned to be constructed as the ultimate bicycle network condition on Mission Road / S. Santa Fe east of N. Rancho Santa Fe Road. The Project will provide an 8-foot-wide irrevocable offer of dedication (IOD) along the Project frontage to support the future bicycle facilities.

11.2 Pedestrian Conditions

Pedestrian sidewalks are generally provided throughout the study area, except for:

- S. Santa Fe Avenue, north of Bosstick Boulevard (both sides)
- N. Las Flores Drive, north of S. Santa Fe Avenue (east side)

The City of San Marcos Bicycle and Pedestrian Master Plan notes the same missing sidewalks in the study area on S. Santa Fe Avenue and N. Las Flores Drive.

Pedestrian crossings are provided in all directions at the intersections of S. Rancho Santa Fe Avenue / N. Las Flores Drive and Capalina Road / N. Rancho Santa Fe Road. Formalized pedestrian crossings are not provided at the following locations:

- S. Santa Fe Avenue / Smilax Road (across all legs)
- S. Santa Fe Avenue / Bosstick Boulevard (crossing prohibited across the north leg)
- S. Santa Fe Avenue / Community Drive (across all legs)
- N. Las Flores Drive / Hollencrest Road (across all legs)
- S. Santa Fe Avenue / N. Rancho Santa Fe Road (crossing prohibited across the north leg)
- Capalina Road / Hollencrest Road (across all legs)

N. Las Flores Drive is considered a "Collector" route on the *Bicycle and Pedestrian Master Plan*. Collector sidewalks are typically along roads that support institutional, industrial, open space, agricultural, or low density residential with limited lateral access and low pedestrian levels. According to the *Bicycle and Pedestrian Master Plan*, Collector sidewalks typically warrant the "basic level" sidewalk treatment adequate to provide the minimum level of safety, connectivity, access, and walkability, though special circumstances may warrant enhanced treatments.

S. Santa Fe Avenue is considered an "Arterial" route in the *Bicycle and Pedestrian Master Plan*. Arterial sidewalks are typically along roads that support moderate density business and shopping districts with moderate pedestrian levels. Arterial sidewalks typically warrant the "enhanced" walkway treatment level according to the *Bicycle and Pedestrian Master Plan*, which may include features such as street trees or other buffer between the sidewalk and vehicle lanes, among other treatments.

The Project will provide an 8-foot-wide IOD along the Project frontage to support the future pedestrian facilities.

11.3 Existing Transit Conditions

Transit service is provided to the project area via North County Transit District (NCTD) bus routes 304 and 305.

Route 304 provides bus service between Encinitas and San Marcos, with stops within the study area along N. Rancho Santa Fe Road and S. Santa Fe Avenue. This route provides a direct connection to Palomar College Station with transfers to SPRINTER Route 305 bus service. The route operates hourly between the hours of 5:00AM and 8:00PM, Monday through Friday, and between 7:30AM and 7:30PM on Saturday.

Route 305 provides bus service between Escondido and Vista, with stops within the study area along S. Santa Fe Avenue. This route provides a direct connection to Palomar College Station with transfers to SPRINTER, Route 304 bus service. The route operates hourly between the hours of 4:30AM and 11:00PM, Monday through Friday, and between 5:30AM and 11:00PM on Saturday & Sundays.

The project site is located within 1/2 mile walking distance, depending on ultimate pedestrian site access, from stop pairs serving both Route 304 and Route 305 located along S. Santa Fe Avenue. The closest bus stops to the project site are located near the intersection of S. Santa Fe Avenue / N. Las Flores Drive and the intersection of S. Santa Fe Avenue (Mission Rd) & Rancho Santa Fe Rd on both sides of the street. The project site is also approximately 1.25-mile walking or biking distance from Palomar College Station.

At the intersection of S. Santa Fe Avenue (Mission Rd) & Rancho Santa Fe Rd, the bus stop in the northbound direction provides route signage, seating with shade, and a trash receptacle and in the southbound direction the stop provides only route signage, seating, and a trash receptacle. At the intersection of S. Santa Fe Avenue / N. Las Flores Drive, the bus stop in the northbound direction provides route signage, seating, and a trash receptacle and in the southbound direction it provides route signage, seating with shade, and a trash receptacle.

12.0 ACCESS ASSESSMENT

Access is proposed via the existing driveway to S. Santa Fe Avenue which the Gourmet Liquor store currently utilizes. This driveway is limited to right turns in and out only, by the raised median within S. Santa Fe Avenue.

LLG conducted AM (7-9 AM) peak hour and PM (4-6 PM) peak hour counts on Wednesday June 8, 2022, at the subject driveway to obtain existing volumes. The AM/PM peak hour inbound counts were 11 and 30. These weekday counts were used in the analysis since weekday commute peak periods are what is analyzed based on City Guidelines. A traffic count was also conducted on Saturday, July 23, 2022, and Friday, August 5, 2022, from 5:00 PM to 6:30 PM. The inbound and outbound peak hour count was 27/27 on Saturday, and 33/37 on Friday. Project weekday volumes were added to existing volumes to conduct a peak hour analysis for the following scenarios. ***Table 12-1*** shows the project trip generation table. ***Figure 12-1*** shows the existing and existing + project traffic volumes.

- Existing Peak Hour
- Existing + Project Peak Hour

Table 12-2 shows the results of the peak hour analysis for the subject driveway. As shown on *Table 12-2*, the driveway is calculated to operate at a very good LOS B under both the existing and existing + project scenarios. LOS B is calculated using Friday and Saturday counts as well. The driveway can accommodate both existing and project traffic. ***Table 12-3*** shows a summary of the counts collected by LLG at the Gourmet Liquor driveway.

TABLE 12-1
SANTA FE LAS FLORES TRIP GENERATION

Land Use	Size	Daily Trip Ends (ADT)[b]		AM Peak Hour			PM Peak Hour		
		Rate[a]	Volume	Volume			Volume		
				In	Out	Total	In	Out	Total
Proposed Project									
Townhomes[c]	46 DU	8 /DU	368	6	23	29	26	11	37
Project Total			***368***	***6***	***23***	***29***	***26***	***11***	***37***

Footnotes:

a. Trip rates from *SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*

b. Average Daily Trips

c. 46 DU proposed on 2.23 net-acres (about 20.1 DU/acre). Therefore, the 'Residential: Condominium (or any multi-family 6-20 DU/acre)' rate was used to calculate the Project's trip generation.

TABLE 12-2
ACCESS DRIVEWAY OPERATIONS

Intersection	Control Type	Peak Hour	Existing		Existing + Project	
			Delay [a]	LOS [b]	Delay	LOS
1. S. Santa Fe Ave / Project Access Dwy.	MSSC [c]	AM	10.4	B	10.6	B
		PM	11.1	B	11.4	B

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. MSSC = Minor-Street Stop Controlled intersection. Worst-case level of service reported.

TABLE 12-3
GOURMET LIQUOR DRIVEWAY COUNTS

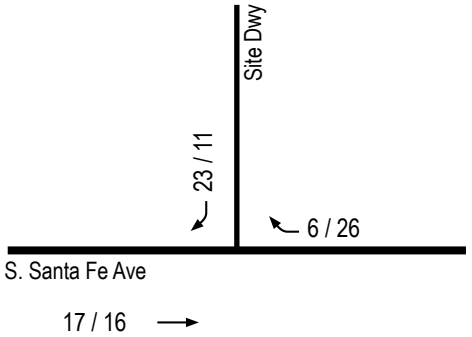
	Wednesday, June 8th, 2022		Friday, August 5th, 2022		Saturday, July 23, 2022	
	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound
AM Peak	11	11	- [a]	-	-	-
PM Peak	30	31	33	37	27	27

Footnotes:

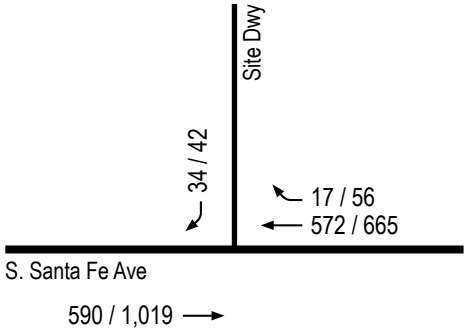
a. - = Counts not conducted during the AM peak hour.

Existing Traffic Volumes (Liquor Store Traffic)

Project Traffic Volumes (Santa Fe / Las Flores 46-Unit Project Traffic)



Existing + Project Traffic Volumes



AM / PM — AM / PM Intersection Peak Hour Volumes

LLG

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Figure 12-1

Pre & Post Project Site Driveway Traffic Volumes

Santa Fe Flores Townhomes

13.0 CONCLUSIONS

The preceding Local Transportation Analysis (LTA) was prepared to determine and evaluate the potential impacts and effects to the local roadway system due to the proposed Project.

The LTA shows that the Project will add a small amount of traffic to the intersection of S. Santa Fe Avenue / Smilax Road, which operates below City standards. However, the Project contributes only 0.58% (20 trips) of the total combined AM and PM peak hour traffic to this intersection under Near-Term conditions. The existing traffic conditions at this location are already substandard. The provision of a traffic signal would result in acceptable LOS D or better operations. A traffic signal is planned at the S. Santa Fe Avenue / Smilax Road intersection as part of the City's Capital Improvement Project (CIP) 88179 (IP 4750).

The Project should be conditioned to provide adequate corner sight distance at the Project driveway. This analysis was previously prepared by a project civil engineer for a similar project on the same site. See ***Appendix J*** for the Sight Distance Exhibit.

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San Diego

TECHNICAL APPENDICES

SANTA FE FLORES TOWNHOMES PROJECT

San Marcos, California
December 4, 2025

LLG Ref. 3-24-3940

APPENDICES

APPENDIX

A. Intersection and Segment Manual Count Sheets

B. City of San Marcos Roadway Classification Table

C. Analysis Worksheets – Existing

D. K&D Factors Definitions

E. Travel Route Maps

F. Analysis Worksheets – Near-Term

G. Analysis Worksheets – Near-Term + Project

H. Analysis Worksheets – Long-Term

I. Analysis Worksheets – Long- Term + Project

J. Sight Distance Exhibit

APPENDIX A

INTERSECTION AND SEGMENT MANUAL COUNT SHEETS

Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#01	File Name:	ITM-22-009-01
Intersection:	South Santa Fe Avenue & Smilax Road	Project:	LLG Ref. 3-22-3523
Date of Count:	Thursday, February 17, 2022		Santa Fe Las Flores

AM	South Santa Fe Avenue Southbound			Smilax Road Westbound			South Santa Fe Avenue Northbound			Smilax Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	89	31	0	0	1	33	42	1	21	0	33	251
7:15	0	98	47	0	0	0	50	45	2	17	0	46	305
7:30	1	90	38	0	0	0	59	77	0	23	0	48	336
7:45	0	124	70	0	0	0	69	74	2	18	0	34	391
8:00	0	83	55	0	0	0	60	76	0	23	0	23	320
8:15	0	101	52	0	0	0	51	56	0	27	0	42	329
8:30	1	96	46	0	0	0	35	77	0	19	0	28	302
8:45	0	82	35	0	0	0	18	93	0	15	0	16	259
Total	2	763	374	0	0	1	375	540	5	163	0	270	2493
Approach%	0.2	67.0	32.8	-	-	100.0	40.8	58.7	0.5	37.6	-	62.4	
Total%	0.1	30.6	15.0	-	-	0.0	15.0	21.7	0.2	6.5	-	10.8	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	1	398	215	-	-	-	239	283	2	91	-	147	1,376
Approach%	0.2	64.8	35.0	-	-	-	45.6	54.0	0.4	38.2	-	61.8	
Total%	0.1	28.9	15.6	-	-	-	17.4	20.6	0.1	6.6	-	10.7	
PHF			0.79			#DIV/0!			0.90			0.84	0.88

PM	South Santa Fe Avenue Southbound			Smilax Road Westbound			South Santa Fe Avenue Northbound			Smilax Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	0	147	39	0	0	1	40	122	0	15	0	51	415
16:15	0	153	28	0	0	0	22	130	0	21	0	57	411
16:30	0	170	42	0	0	0	26	140	0	31	0	60	469
16:45	10	157	39	0	0	0	41	130	0	19	0	57	453
17:00	0	159	38	0	0	3	35	150	0	23	0	56	464
17:15	0	155	37	0	0	0	41	105	1	30	0	52	421
17:30	0	143	32	0	0	0	26	129	0	24	0	68	422
17:45	0	105	37	0	0	0	41	141	0	25	0	54	403
Total	10	1189	292	0	0	4	272	1047	1	188	0	455	3458
Approach%	0.7	79.7	19.6	-	-	100.0	20.6	79.3	0.1	29.2	-	70.8	
Total%	0.3	34.4	8.4	-	-	0.1	7.9	30.3	0.0	5.4	-	13.2	

PM Intersection Peak Hour: **16:30 to 17:30**

Volume	10	641	156	-	-	3	143	525	1	103	-	225	1,807
Approach%	1.2	79.4	19.3	-	-	100.0	21.4	78.5	0.1	31.4	-	68.6	
Total%	0.6	35.5	8.6	-	-	0.2	7.9	29.1	0.1	5.7	-	12.5	
PHF			0.95			0.25			0.90			0.90	0.96

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

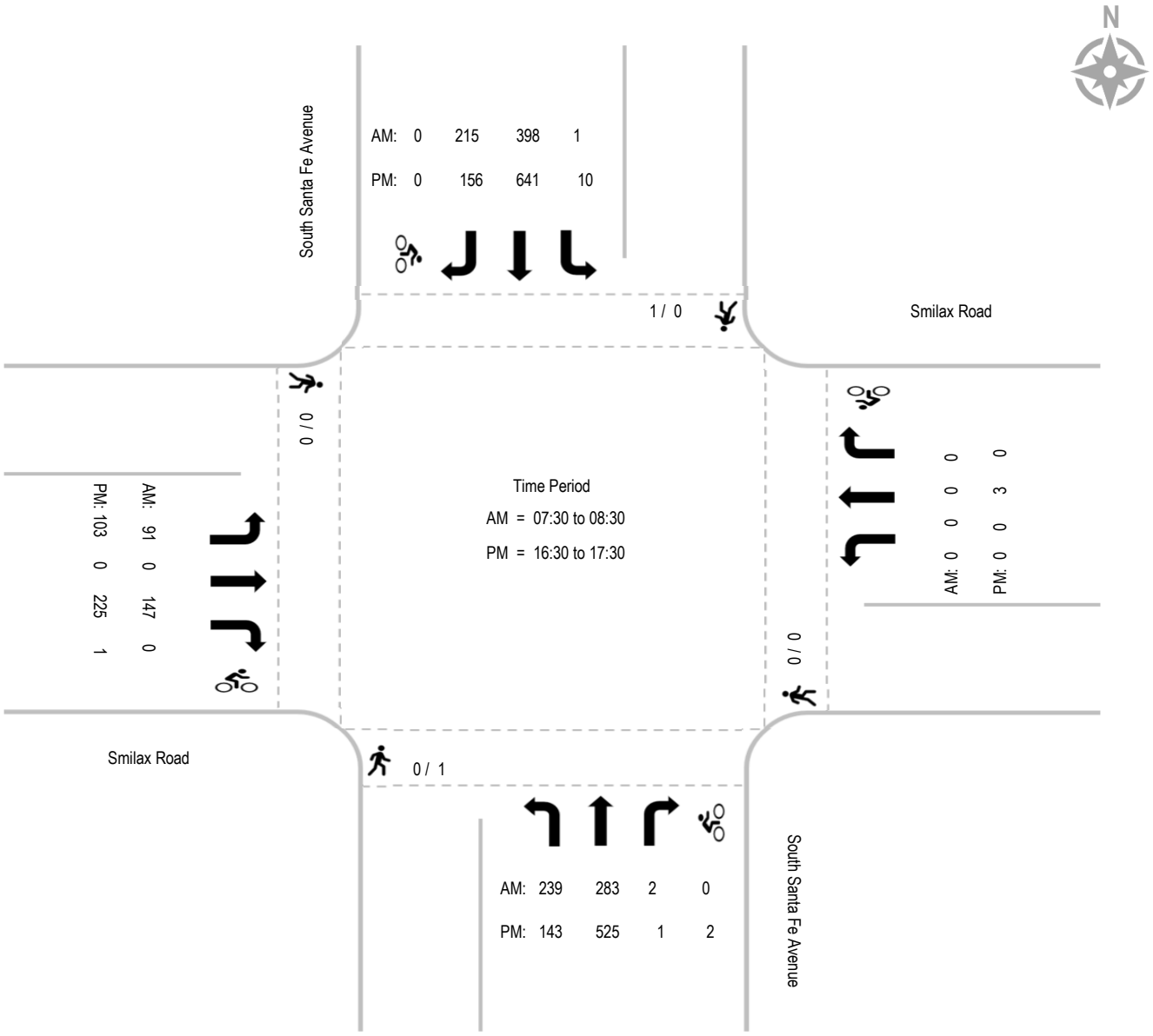
Location:	#01	File Name:	ITM-22-009-01
Intersection:	South Santa Fe Avenue & Smilax Road	Project:	LLG Ref. 3-22-3523
Date of Count:	Thursday, February 17, 2022		Santa Fe Las Flores

AM	South Santa Fe Avenue Southbound				Smilax Road Westbound				South Santa Fe Avenue Northbound				Smilax Road Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	1				0				0				0				1	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

PM	South Santa Fe Avenue Southbound				Smilax Road Westbound				South Santa Fe Avenue Northbound				Smilax Road Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
17:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	0				0				1				0				1	
Bike Total		0	0	0		0	0	0		0	2	0		1	0	0		3

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#01	File Name: ITM-22-009-01
	Intersection:	South Santa Fe Avenue & Smilax Road	Project: LLG Ref. 3-22-3523
	Date of Count:	Thursday, February 17, 2022	Santa Fe Las Flores



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#02	File Name:	ITM-22-009-02
Intersection:	South Santa Fe Avenue & Bosstick Boulevard	Project:	LLG Ref. 3-22-3523
Date of Count:	Thursday, February 17, 2022		Santa Fe Las Flores

AM	Santa Santa Fe Avenue Southbound			Bosstick Boulevard Westbound			Santa Santa Fe Avenue Northbound			Bosstick Boulevard Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	23	96	1	6	0	2	2	72	28	1	2	9	242
7:15	22	127	1	13	0	6	6	91	16	2	0	3	287
7:30	16	113	3	23	0	13	2	120	19	2	0	9	320
7:45	23	127	1	21	0	11	4	151	20	0	0	6	364
8:00	17	99	1	12	0	5	9	131	31	6	0	4	315
8:15	15	120	2	11	0	3	6	93	21	2	0	6	279
8:30	4	125	1	16	0	2	4	107	19	0	0	4	282
8:45	8	90	2	5	0	6	3	100	15	4	0	6	239
Total	128	897	12	107	0	48	36	865	169	17	2	47	2328
Approach%	12.3	86.5	1.2	69.0	-	31.0	3.4	80.8	15.8	25.8	3.0	71.2	
Total%	5.5	38.5	0.5	4.6	-	2.1	1.5	37.2	7.3	0.7	0.1	2.0	

AM Intersection Peak Hour: **07:15 to 08:15**

Volume	78	466	6	69	-	35	21	493	86	10	-	22	1,286
Approach%	14.2	84.7	1.1	66.3	-	33.7	3.5	82.2	14.3	31.3	-	68.8	
Total%	6.1	36.2	0.5	5.4	-	2.7	1.6	38.3	6.7	0.8	-	1.7	
PHF			0.91			0.72			0.86			0.73	0.88

PM	Santa Santa Fe Avenue Southbound			Bosstick Boulevard Westbound			Santa Santa Fe Avenue Northbound			Bosstick Boulevard Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	6	190	4	26	0	12	19	150	12	1	0	4	424
16:15	4	219	2	27	0	18	8	139	7	1	0	4	429
16:30	4	226	2	24	0	30	10	139	9	2	0	2	448
16:45	2	224	2	11	1	17	11	167	9	3	0	4	451
17:00	4	208	5	31	0	17	10	177	13	1	0	1	467
17:15	6	196	4	16	1	11	13	138	8	1	0	3	397
17:30	6	207	4	18	0	14	7	141	10	5	0	1	413
17:45	1	155	1	11	0	11	6	158	9	2	0	2	356
Total	33	1625	24	164	2	130	84	1209	77	16	0	21	3385
Approach%	2.0	96.6	1.4	55.4	0.7	43.9	6.1	88.2	5.6	43.2	-	56.8	
Total%	1.0	48.0	0.7	4.8	0.1	3.8	2.5	35.7	2.3	0.5	-	0.6	

PM Intersection Peak Hour: **16:15 to 17:15**

Volume	14	877	11	93	1	82	39	622	38	7	-	11	1,795
Approach%	1.6	97.2	1.2	52.8	0.6	46.6	5.6	89.0	5.4	38.9	-	61.1	
Total%	0.8	48.9	0.6	5.2	0.1	4.6	2.2	34.7	2.1	0.4	-	0.6	
PHF			0.97			0.81			0.87			0.64	0.96

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

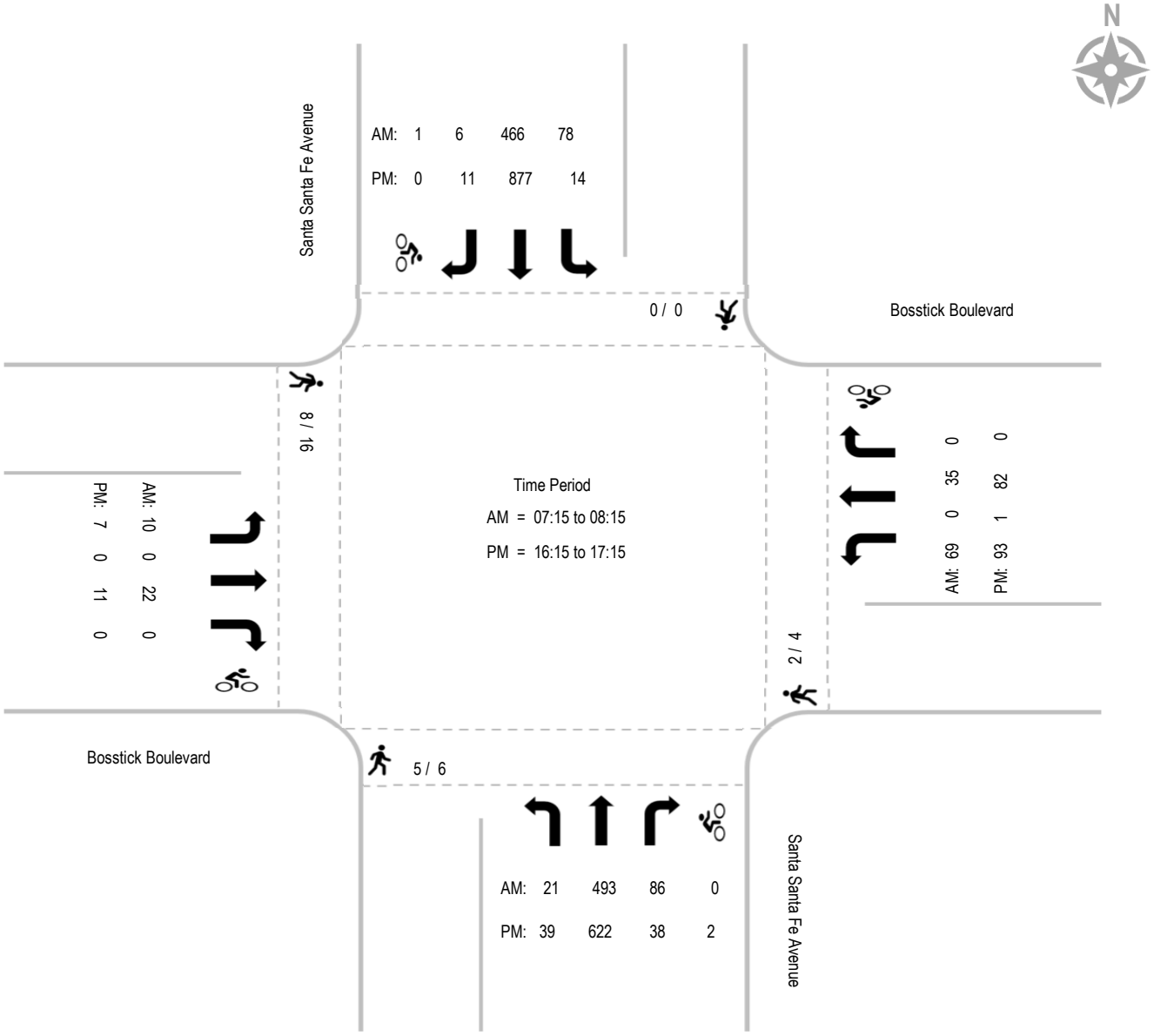
Location:	#02	File Name:	ITM-22-009-02
Intersection:	South Santa Fe Avenue & Bosstick Boulevard	Project:	LLG Ref. 3-22-3523
Date of Count:	Thursday, February 17, 2022		Santa Fe Las Flores

AM	Santa Santa Fe Avenue Southbound				Bosstick Boulevard Westbound				Santa Santa Fe Avenue Northbound				Bosstick Boulevard Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0
7:15	0	0	1	0	0	0	0	0	0	0	0	0	3	0	0	0	3	1
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	0	1	0	0	0	3	0	0	0	3	0	0	0	7	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	0				2				5				8				15	
Bike Total		0	1	0		0	0	0		0	0	0		0	0	0		1

PM	Santa Santa Fe Avenue Southbound				Bosstick Boulevard Westbound				Santa Santa Fe Avenue Northbound				Bosstick Boulevard Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	1	0	1	0	3	0	0	0	4	1
16:15	0	0	0	0	1	0	0	0	2	0	0	0	8	0	0	0	11	0
16:30	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	3	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	3	0
17:15	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	2	1
17:30	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2	0
17:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Ped Total	0				4				6				16				26	
Bike Total		0	0	0		0	0	0		0	2	0		0	0	0		2

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location: #02	File Name:	ITM-22-009-02
	Intersection: South Santa Fe Avenue & Bosstick Boulevard	Project:	LLG Ref. 3-22-3523
	Date of Count: Thursday, February 17, 2022		Santa Fe Las Flores



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#03	File Name:	ITM-22-009-08
Intersection:	South Santa Fe Avenue & Community Drive	Project:	LLG Ref. 3-22-3523
Date of Count:	Thursday, February 17, 2022		Santa Fe Las Flores

AM	South Santa Fe Avenue Southbound			- Westbound			South Santa Fe Avenue Northbound			Community Drive Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	126	3	0	0	0	2	120	0	2	0	0	253
7:15	0	138	2	0	0	0	2	99	0	0	0	4	245
7:30	0	194	1	0	0	0	3	140	0	4	0	2	344
7:45	0	168	1	0	0	0	2	142	0	1	0	2	316
8:00	0	145	3	0	0	0	3	181	0	1	0	3	336
8:15	0	155	1	0	0	0	2	138	0	3	0	0	299
8:30	0	150	1	0	0	0	3	128	0	2	0	1	285
8:45	0	113	2	0	0	0	3	81	0	1	0	0	200
Total	0	1189	14	0	0	0	20	1029	0	14	0	12	2278
Approach%	-	98.8	1.2	-	-	-	1.9	98.1	-	53.8	-	46.2	
Total%	-	52.2	0.6	-	-	-	0.9	45.2	-	0.6	-	0.5	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	-	662	6	-	-	-	10	601	-	9	-	7	1,295
Approach%	-	99.1	0.9	-	-	-	1.6	98.4	-	56.3	-	43.8	
Total%	-	51.1	0.5	-	-	-	0.8	46.4	-	0.7	-	0.5	
PHF			0.86			#DIV/0!			0.83			0.67	0.94

PM	South Santa Fe Avenue Southbound			- Westbound			South Santa Fe Avenue Northbound			Community Drive Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	0	296	0	0	0	0	8	173	0	1	0	2	480
16:15	0	297	1	0	0	0	3	172	0	0	0	1	474
16:30	0	254	0	0	0	0	3	167	0	0	0	1	425
16:45	0	248	2	0	0	0	6	156	0	1	0	1	414
17:00	0	264	0	0	0	0	17	174	0	3	0	1	459
17:15	0	269	2	0	0	0	6	202	0	0	0	1	480
17:30	0	253	2	0	0	0	8	188	0	2	0	1	454
17:45	0	226	0	0	0	0	3	159	0	0	0	1	389
Total	0	2107	7	0	0	0	54	1391	0	7	0	9	3575
Approach%	-	99.7	0.3	-	-	-	3.7	96.3	-	43.8	-	56.3	
Total%	-	58.9	0.2	-	-	-	1.5	38.9	-	0.2	-	0.3	

PM Intersection Peak Hour: **16:45 to 17:45**

Volume	-	1,034	6	-	-	-	37	720	-	6	-	4	1,807
Approach%	-	99.4	0.6	-	-	-	4.9	95.1	-	60.0	-	40.0	
Total%	-	57.2	0.3	-	-	-	2.0	39.8	-	0.3	-	0.2	
PHF			0.96			#DIV/0!			0.91			0.63	0.94

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

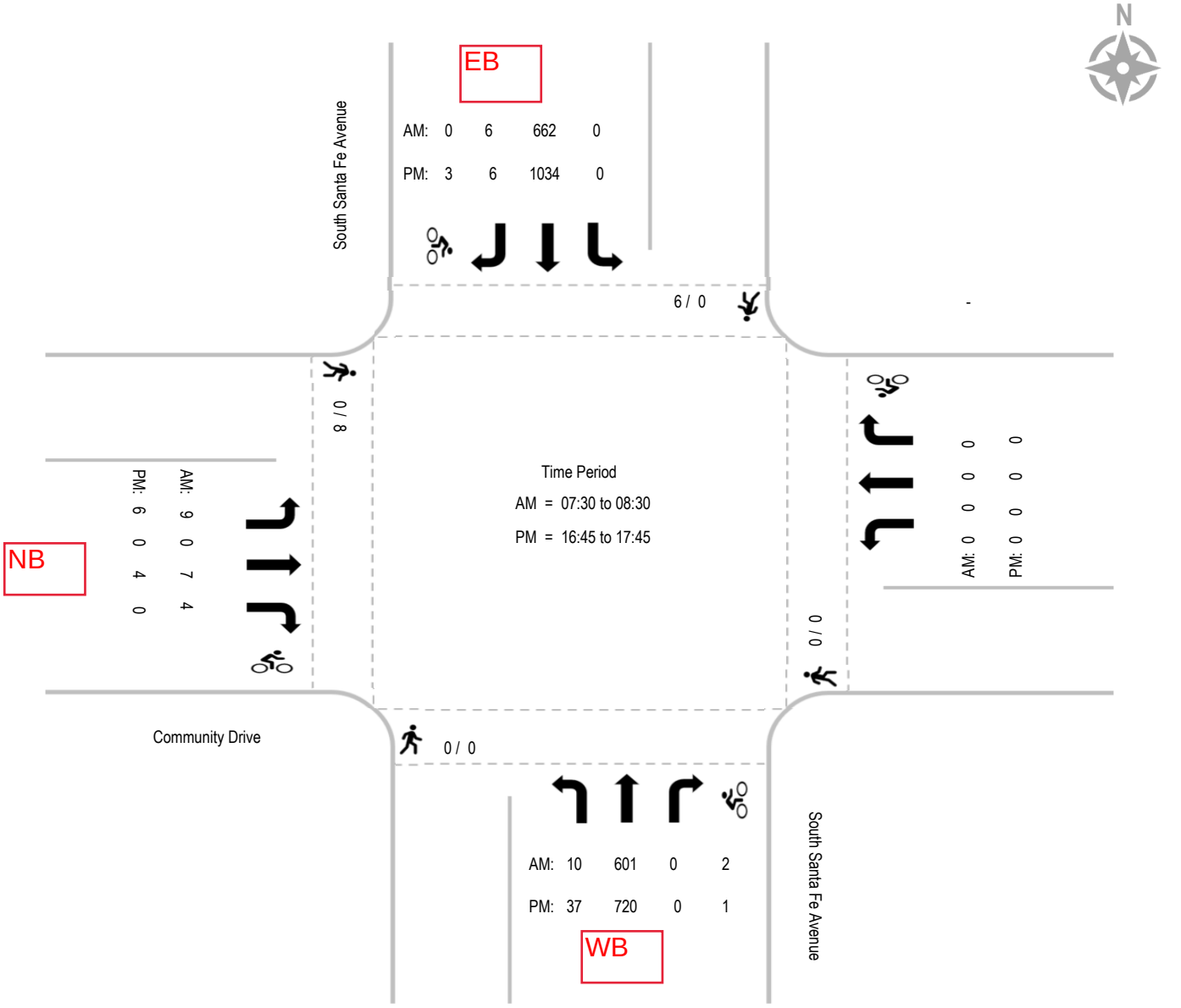
Location:	#03	File Name:	ITM-22-009-08
Intersection:	South Santa Fe Avenue & Community Drive	Project:	LLG Ref. 3-22-3523
Date of Count:	Thursday, February 17, 2022		Santa Fe Las Flores

AM	South Santa Fe Avenue Southbound				- Westbound				South Santa Fe Avenue Northbound				Community Drive Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
7:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:00	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
8:15	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
8:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Ped Total	6				0				0				0				6	
Bike Total		0	0	0		0	0	0		0	2	0		4	0	0		6

PM	South Santa Fe Avenue Southbound				- Westbound				South Santa Fe Avenue Northbound				Community Drive Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
16:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17:00	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0
17:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17:30	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	2	1
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	0				0				0				8				8	
Bike Total		0	3	0		0	0	0		0	1	0		0	0	0		4

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#03	File Name: ITM-22-009-08
	Intersection:	South Santa Fe Avenue & Smilax Road	Project: LLG Ref. 3-22-3523
	Date of Count:	Thursday, February 17, 2022	Santa Fe Las Flores



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#04	File Name:	ITM-22-009-03
Intersection:	South Santa Fe Avenue & Las Flores Drive	Project:	LLG Ref. 3-22-3523
Date of Count:	Thursday, February 17, 2022		Santa Fe Las Flores

AM	Santa Santa Fe Avenue Southbound			Las Flores Drive Westbound			Santa Santa Fe Avenue Northbound			Las Flores Drive Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	7	95	5	26	0	6	0	102	9	6	0	4	260
7:15	5	127	9	29	1	7	13	104	10	7	1	5	318
7:30	12	129	5	43	2	6	10	118	5	9	0	9	348
7:45	8	149	8	33	6	16	14	125	6	15	0	8	388
8:00	10	106	5	22	2	9	7	147	13	9	1	7	338
8:15	11	112	10	22	5	20	4	105	13	8	1	6	317
8:30	15	119	15	15	0	13	3	124	13	9	0	6	332
8:45	9	93	6	11	0	6	4	103	14	6	0	4	256
Total	77	930	63	201	16	83	55	928	83	69	3	49	2557
Approach%	7.2	86.9	5.9	67.0	5.3	27.7	5.2	87.1	7.8	57.0	2.5	40.5	
Total%	3.0	36.4	2.5	7.9	0.6	3.2	2.2	36.3	3.2	2.7	0.1	1.9	

AM Intersection Peak Hour: **07:15 to 08:15**

Volume	35	511	27	127	11	38	44	494	34	40	2	29	1,392
Approach%	6.1	89.2	4.7	72.2	6.3	21.6	7.7	86.4	5.9	56.3	2.8	40.8	
Total%	2.5	36.7	1.9	9.1	0.8	2.7	3.2	35.5	2.4	2.9	0.1	2.1	
PHF			0.87			0.80			0.86			0.77	0.90

PM	Santa Santa Fe Avenue Southbound			Las Flores Drive Westbound			Santa Santa Fe Avenue Northbound			Las Flores Drive Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	15	206	20	17	1	9	9	154	24	7	1	4	467
16:15	18	218	14	13	1	4	9	148	12	10	0	3	450
16:30	10	246	19	9	0	6	9	141	13	7	0	10	470
16:45	13	202	19	18	1	9	10	156	22	11	1	2	464
17:00	13	212	19	13	0	15	7	146	32	12	0	5	474
17:15	12	210	15	9	0	8	5	137	20	15	0	3	434
17:30	17	16	22	24	2	7	7	136	19	9	0	4	263
17:45	16	164	22	13	1	2	4	149	25	11	0	4	411
Total	114	1474	150	116	6	60	60	1167	167	82	2	35	3433
Approach%	6.6	84.8	8.6	63.7	3.3	33.0	4.3	83.7	12.0	68.9	1.7	29.4	
Total%	3.3	42.9	4.4	3.4	0.2	1.7	1.7	34.0	4.9	2.4	0.1	1.0	

PM Intersection Peak Hour: **16:15 to 17:15**

Volume	54	878	71	53	2	34	35	591	79	40	1	20	1,858
Approach%	5.4	87.5	7.1	59.6	2.2	38.2	5.0	83.8	11.2	65.6	1.6	32.8	
Total%	2.9	47.3	3.8	2.9	0.1	1.8	1.9	31.8	4.3	2.2	0.1	1.1	
PHF			0.91			0.79			0.94			0.90	0.98

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

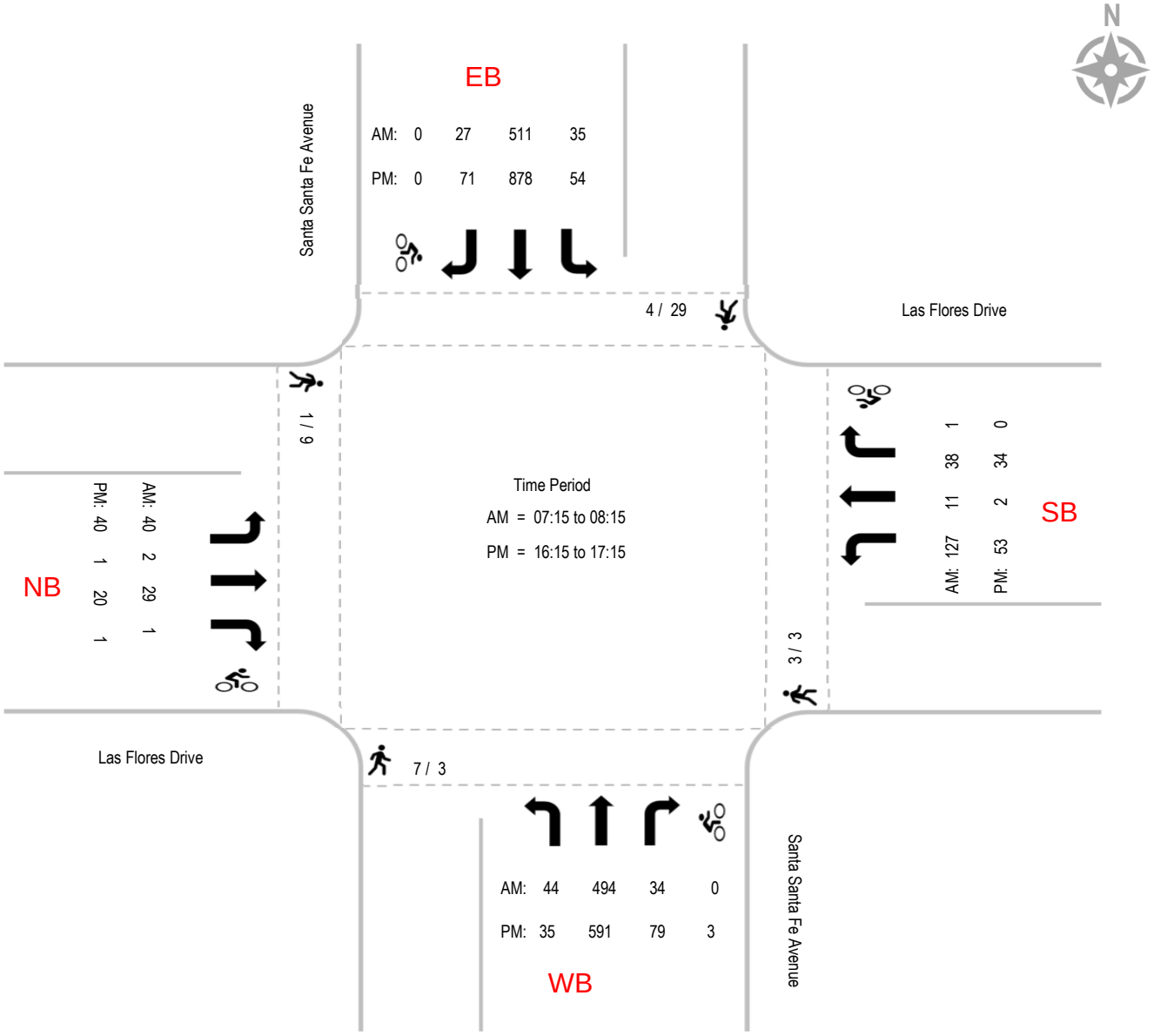
Location:	#04	File Name:	ITM-22-009-03
Intersection:	South Santa Fe Avenue & Las Flores Drive	Project:	LLG Ref. 3-22-3523
Date of Count:	Thursday, February 17, 2022		Santa Fe Las Flores

AM	Santa Santa Fe Avenue Southbound				Las Flores Drive Westbound				Santa Santa Fe Avenue Northbound				Las Flores Drive Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
7:15	1	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	3	1
7:30	2	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	4	1
7:45	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0
8:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0
8:45	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
Ped Total	4				3				7				1				15	
Bike Total		0	0	0		1	0	0		0	0	0		1	0	0		2

PM	Santa Santa Fe Avenue Southbound				Las Flores Drive Westbound				Santa Santa Fe Avenue Northbound				Las Flores Drive Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	2	0	0	0	0	0	0	0	1	0	1	0	2	0	0	0	5	1
16:15	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	1
16:30	1	0	0	0	0	0	0	0	1	0	0	0	4	0	0	0	6	0
16:45	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0
17:00	3	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	5	0
17:15	2	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	3	1
17:30	5	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	7	1
17:45	11	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	12	0
Ped Total	29				3				3				9				44	
Bike Total		0	0	0		0	0	0		0	3	0		1	0	0		4

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#04	File Name: ITM-22-009-03
	Intersection:	South Santa Fe Avenue & Las Flores Drive	Project: LLG Ref. 3-22-3523
	Date of Count:	Thursday, February 17, 2022	Santa Fe Las Flores



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#05	File Name:	ITM-22-009-04
Intersection:	Hollencrest Road & Las Flores Drive	Project:	LLG Ref. 3-22-3523
Date of Count:	Thursday, February 17, 2022		Santa Fe Las Flores

AM	- Southbound			Las Flores Drive Westbound			Hollencrest Road Northbound			Las Flores Drive Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	0	0	3	4	0	3	0	2	0	8	1	21
7:15	0	0	0	1	15	0	1	0	2	0	11	1	31
7:30	0	0	0	3	15	0	1	0	6	0	14	1	40
7:45	0	0	0	2	16	0	1	0	12	0	13	0	44
8:00	0	0	0	0	14	0	0	0	4	0	9	2	29
8:15	0	0	0	7	16	0	5	0	3	0	15	1	47
8:30	0	0	0	1	12	0	1	0	3	0	4	1	22
8:45	0	0	0	0	10	0	0	0	4	0	5	1	20
Total	0	0	0	17	102	0	12	0	36	0	79	8	254
Approach%	-	-	-	14.3	85.7	-	25.0	-	75.0	-	90.8	9.2	
Total%	-	-	-	6.7	40.2	-	4.7	-	14.2	-	31.1	3.1	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	-	-	-	12	61	-	7	-	25	-	51	4	160
Approach%	-	-	-	16.4	83.6	-	21.9	-	78.1	-	92.7	7.3	
Total%	-	-	-	7.5	38.1	-	4.4	-	15.6	-	31.9	2.5	
PHF			#DIV/0!			0.79			0.62			0.86	0.85

PM	- Southbound			Las Flores Drive Westbound			Hollencrest Road Northbound			Las Flores Drive Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	0	0	0	6	23	0	2	0	5	0	7	4	47
16:15	0	0	0	5	13	0	2	0	6	2	8	1	37
16:30	0	0	0	5	20	0	0	0	3	1	9	0	38
16:45	0	0	0	10	22	0	1	0	4	0	12	2	51
17:00	0	0	0	9	17	0	0	0	3	0	16	2	47
17:15	0	0	0	6	15	0	0	0	3	0	16	0	40
17:30	0	0	0	6	23	0	2	0	1	0	10	1	43
17:45	0	0	0	10	15	0	0	0	1	0	12	0	38
Total	0	0	0	57	148	0	7	0	26	3	90	10	341
Approach%	-	-	-	27.8	72.2	-	21.2	-	78.8	2.9	87.4	9.7	
Total%	-	-	-	16.7	43.4	-	2.1	-	7.6	0.9	26.4	2.9	

PM Intersection Peak Hour: **16:45 to 17:45**

Volume	-	-	-	31	77	-	3	-	11	-	54	5	181
Approach%	-	-	-	28.7	71.3	-	21.4	-	78.6	-	91.5	8.5	
Total%	-	-	-	17.1	42.5	-	1.7	-	6.1	-	29.8	2.8	
PHF			#DIV/0!			0.84			0.70			0.82	0.89

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

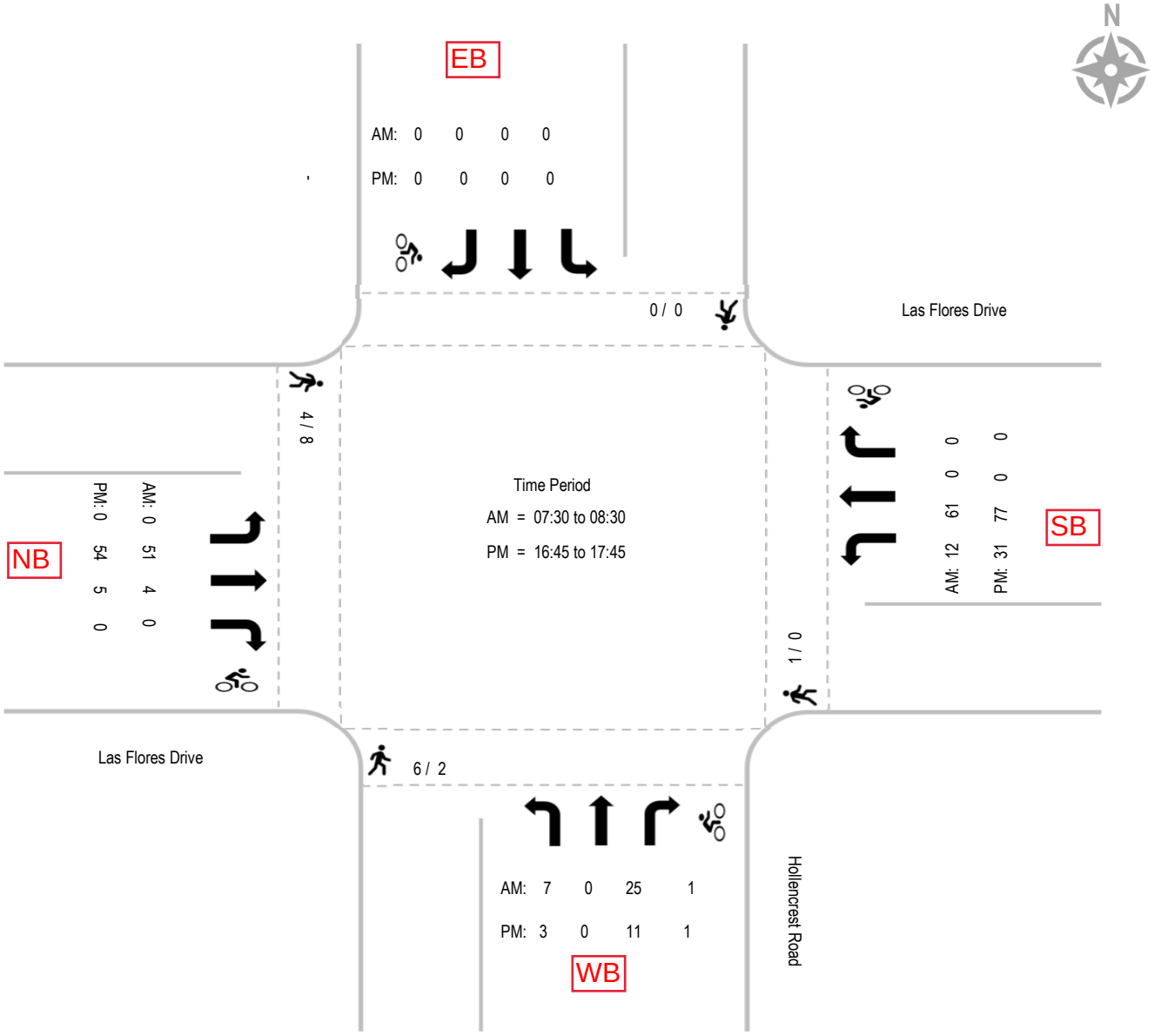
Location:	#05	File Name:	ITM-22-009-04
Intersection:	Hollencrest Road & Las Flores Drive	Project:	LLG Ref. 3-22-3523
Date of Count:	Thursday, February 17, 2022		Santa Fe Las Flores

AM	- Southbound				Las Flores Drive Westbound				Hollencrest Road Northbound				Las Flores Drive Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2	0
7:15	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	2	1
7:30	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	0	4	0
7:45	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	0				1				6				4				11	
Bike Total		0	0	0		0	0	0		0	0	1		0	0	0		1

PM	- Southbound				Las Flores Drive Westbound				Hollencrest Road Northbound				Las Flores Drive Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	1
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0
Ped Total	0				0				2				8				10	
Bike Total		0	0	0		0	0	0		1	0	0		0	0	0		1

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#05	File Name: ITM-22-009-04
	Intersection:	Hollencrest Road & Las Flores Drive	Project: LLG Ref. 3-22-3523
	Date of Count:	Thursday, February 17, 2022	Santa Fe Las Flores



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#06	File Name:	ITM-22-009-05
Intersection:	West Mission Road & N. Rancho Santa Fe Rd	Project:	LLG Ref. 3-22-3523
Date of Count:	Thursday, February 17, 2022		Santa Fe Las Flores

AM	West Mission Road Southbound			- Westbound			West Mission Road Northbound			N. Rancho Santa Fe Rd Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	74	52	0	0	0	32	45	0	68	0	11	282
7:15	0	94	70	0	0	0	30	81	0	42	0	19	336
7:30	0	107	74	0	0	0	27	73	0	60	0	23	364
7:45	0	121	69	0	0	0	33	92	0	53	0	23	391
8:00	0	78	60	0	0	0	26	90	0	81	0	21	356
8:15	1	64	55	0	0	0	35	57	0	74	0	23	309
8:30	0	79	60	0	0	0	32	66	0	69	0	27	333
8:45	0	62	47	0	0	0	27	56	0	74	0	21	287
Total	1	679	487	0	0	0	242	560	0	521	0	168	2658
Approach%	0.1	58.2	41.7	-	-	-	30.2	69.8	-	75.6	-	24.4	
Total%	0.0	25.5	18.3	-	-	-	9.1	21.1	-	19.6	-	6.3	

AM Intersection Peak Hour: **07:15 to 08:15**

Volume	-	400	273	-	-	-	116	336	-	236	-	86	1,447
Approach%	-	59.4	40.6	-	-	-	25.7	74.3	-	73.3	-	26.7	
Total%	-	27.6	18.9	-	-	-	8.0	23.2	-	16.3	-	5.9	
PHF			0.89			#DIV/0!			0.90			0.79	0.93

PM	West Mission Road Southbound			- Westbound			West Mission Road Northbound			N. Rancho Santa Fe Rd Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	1	168	59	0	0	0	45	93	0	95	0	76	537
16:15	0	184	38	0	0	0	34	81	0	66	0	75	478
16:30	1	181	58	0	0	0	33	67	0	98	0	108	546
16:45	1	187	46	0	0	0	44	123	0	83	0	72	556
17:00	0	194	56	0	0	0	35	95	0	87	0	74	541
17:15	1	155	46	0	0	0	42	91	0	76	0	79	490
17:30	0	156	51	0	0	0	37	93	0	77	0	74	488
17:45	2	144	42	0	0	0	37	94	0	69	0	57	445
Total	6	1369	396	0	0	0	307	737	0	651	0	615	4081
Approach%	0.3	77.3	22.4	-	-	-	29.4	70.6	-	51.4	-	48.6	
Total%	0.1	33.5	9.7	-	-	-	7.5	18.1	-	16.0	-	15.1	

PM Intersection Peak Hour: **16:30 to 17:30**

Volume	3	717	206	-	-	-	154	376	-	344	-	333	2,133
Approach%	0.3	77.4	22.2	-	-	-	29.1	70.9	-	50.8	-	49.2	
Total%	0.1	33.6	9.7	-	-	-	7.2	17.6	-	16.1	-	15.6	
PHF			0.93			#DIV/0!			0.79			0.82	0.96

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

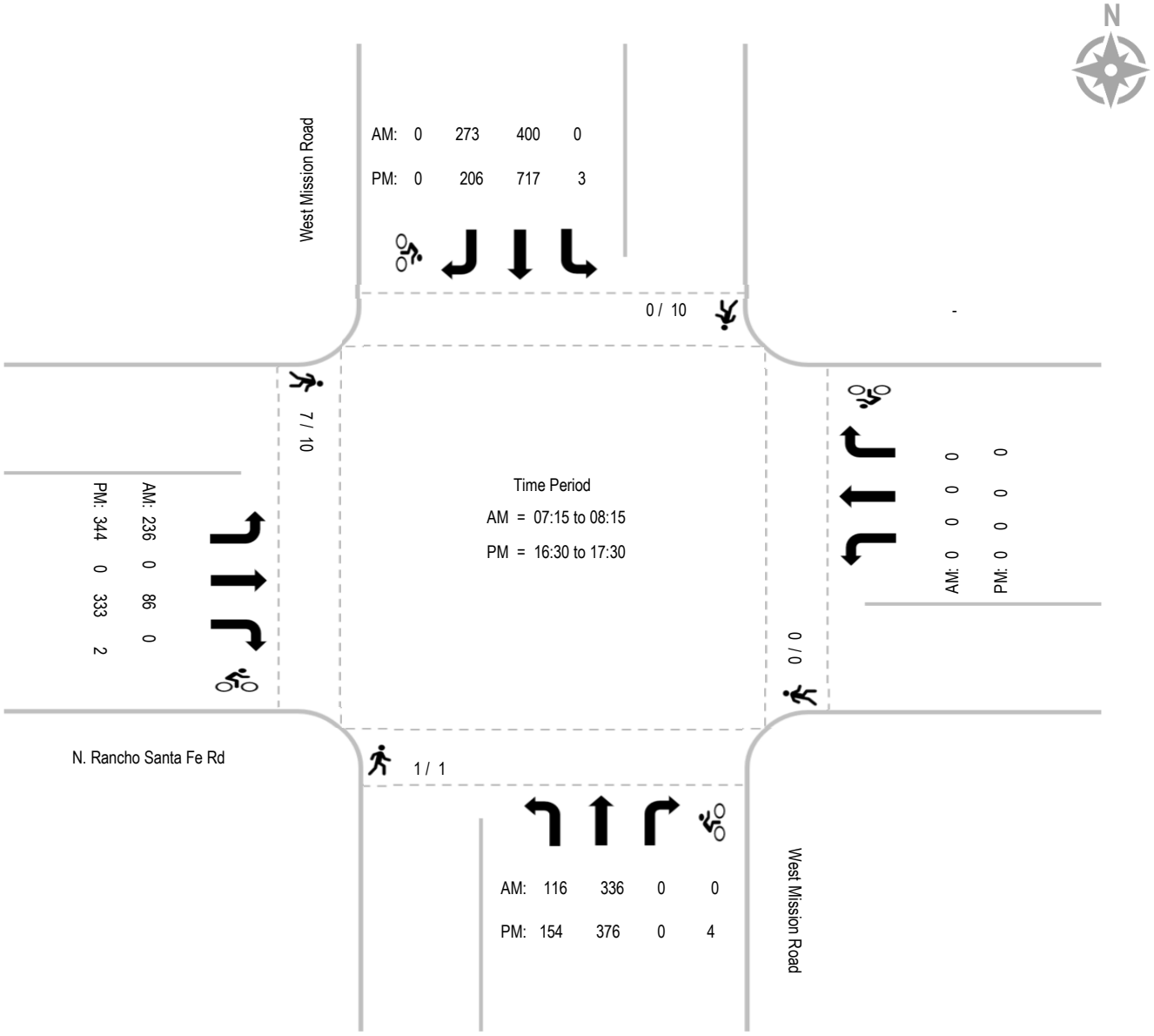
Location:	#06	File Name:	ITM-22-009-05
Intersection:	West Mission Road & N. Rancho Santa Fe Rd	Project:	LLG Ref. 3-22-3523
Date of Count:	Thursday, February 17, 2022		Santa Fe Las Flores

AM	West Mission Road Southbound				- Westbound				West Mission Road Northbound				N. Rancho Santa Fe Rd Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
7:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0
Ped Total	0				0				1				7				8	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

PM	West Mission Road Southbound				- Westbound				West Mission Road Northbound				N. Rancho Santa Fe Rd Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	10	0	0	0	0	0	0	0	0	1	0	0	3	1	0	0	13	2
16:15	0	0	0	0	0	0	0	0	0	2	0	0	3	1	0	0	3	3
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	1
17:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0
Ped Total	10				0				1				10				21	
Bike Total		0	0	0		0	0	0		3	1	0		2	0	0		6

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#06	File Name: ITM-22-009-05
	Intersection:	West Mission Road & N. Rancho Santa Fe Rd	Project: LLG Ref. 3-22-3523
	Date of Count:	Thursday, February 17, 2022	Santa Fe Las Flores



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#07	File Name:	ITM-22-009-06
Intersection:	Capalina Road & Hollencrest Road	Project:	LLG Ref. 3-22-3523
Date of Count:	Thursday, February 17, 2022		Santa Fe Las Flores

AM	Capalina Road Southbound			Hollencrest Road Westbound			Capalina Road Northbound			- Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	37	0	15	0	0	0	8	3	0	0	0	63
7:15	0	35	0	23	0	1	0	15	13	0	0	0	87
7:30	0	61	0	31	0	2	0	10	7	0	0	0	111
7:45	0	55	0	28	0	1	0	28	12	0	0	0	124
8:00	0	36	0	22	0	1	0	14	16	0	0	0	89
8:15	1	20	0	20	0	0	0	24	14	0	0	0	79
8:30	0	32	0	9	0	0	0	18	6	0	0	0	65
8:45	0	13	0	8	0	0	0	17	4	0	0	0	42
Total	1	289	0	156	0	5	0	134	75	0	0	0	660
Approach%	0.3	99.7	-	96.9	-	3.1	-	64.1	35.9	-	-	-	
Total%	0.2	43.8	-	23.6	-	0.8	-	20.3	11.4	-	-	-	

AM Intersection Peak Hour: **07:15 to 08:15**

Volume	-	187	-	104	-	5	-	67	48	-	-	-	411
Approach%	-	100.0	-	95.4	-	4.6	-	58.3	41.7	-	-	-	
Total%	-	45.5	-	25.3	-	1.2	-	16.3	11.7	-	-	-	
PHF			0.77			0.83			0.72			#DIV/0!	0.83

PM	Capalina Road Southbound			Hollencrest Road Westbound			Capalina Road Northbound			- Eastbound			
	Left	Thru	Right	Left	Thru	Right	U-Turn	Thru	Right	Left	Thru	Right	Total
16:00	1	21	0	9	0	2	0	37	29	0	0	0	99
16:15	0	23	0	7	0	0	0	47	14	0	0	0	91
16:30	0	25	0	4	0	0	0	26	18	0	0	0	73
16:45	1	31	0	13	0	1	0	43	19	0	0	0	108
17:00	0	18	0	11	0	2	0	24	18	0	0	0	73
17:15	0	31	0	12	0	1	0	35	21	0	0	0	100
17:30	2	33	0	10	0	1	0	28	15	0	0	0	89
17:45	2	26	0	11	0	2	0	47	16	0	0	0	104
Total	6	208	0	77	0	9	0	287	150	0	0	0	737
Approach%	2.8	97.2	-	89.5	-	10.5	-	65.7	34.3	-	-	-	
Total%	0.8	28.2	-	10.4	-	1.2	-	38.9	20.4	-	-	-	

PM Intersection Peak Hour: **16:00 to 17:00**

Volume	2	100	-	33	-	3	-	153	80	-	-	-	371
Approach%	2.0	98.0	-	91.7	-	8.3	-	65.7	34.3	-	-	-	
Total%	0.5	27.0	-	8.9	-	0.8	-	41.2	21.6	-	-	-	
PHF			0.80			0.64			0.88			#DIV/0!	0.86

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

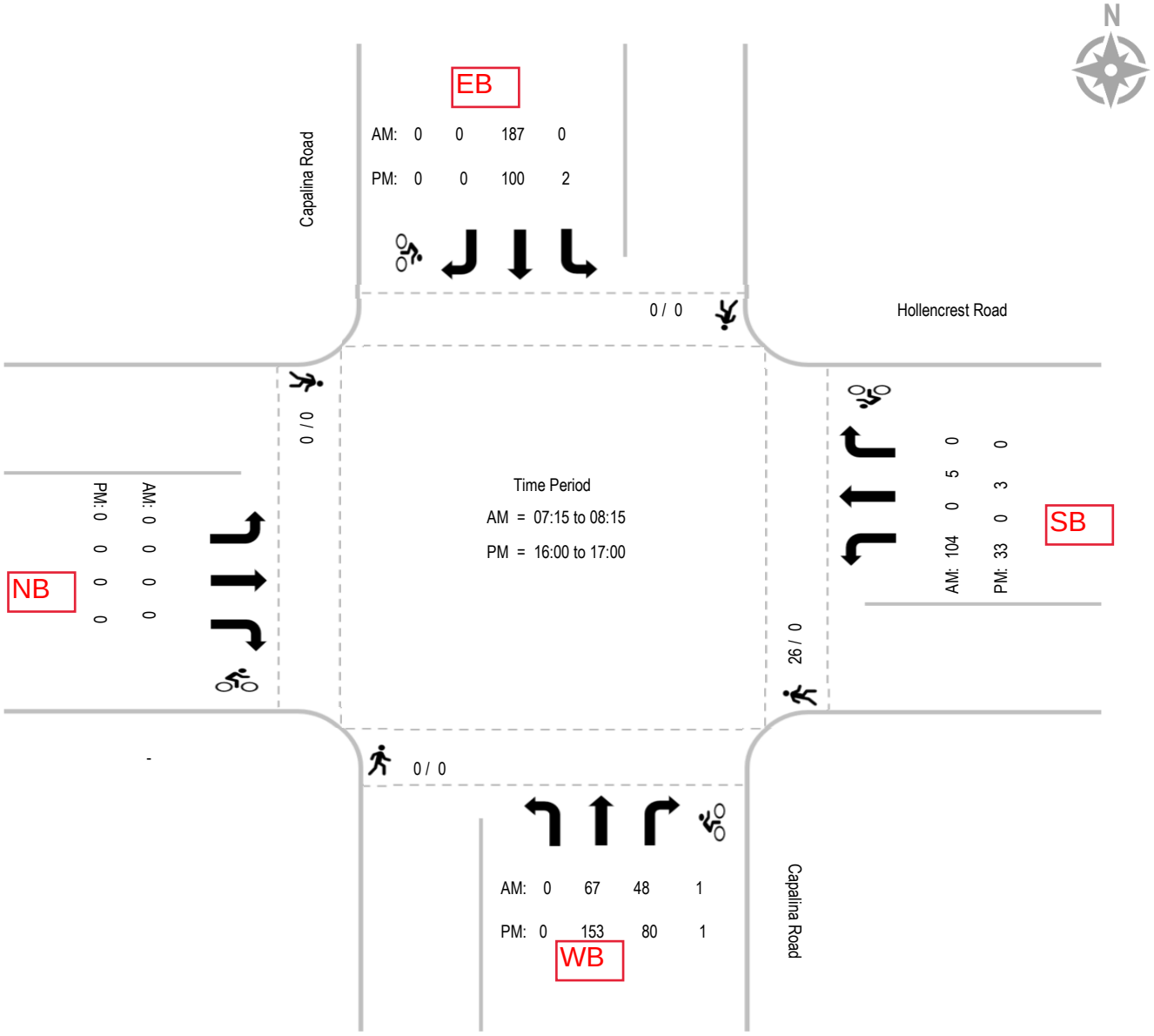
Location:	#07	File Name:	ITM-22-009-06
Intersection:	Capalina Road & Hollencrest Road	Project:	LLG Ref. 3-22-3523
Date of Count:	Thursday, February 17, 2022		Santa Fe Las Flores

AM	Capalina Road Southbound				Hollencrest Road Westbound				Capalina Road Northbound				- Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0
7:15	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	10	0
7:30	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	2	1
7:45	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	9	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
Ped Total	0				26				0				0				26	
Bike Total		0	0	0		0	0	0		0	1	0		0	0	0		1

PM	Capalina Road Southbound				Hollencrest Road Westbound				Capalina Road Northbound				- Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	0				0				0				0				0	
Bike Total		0	0	0		0	0	0		0	0	1		0	0	0		1

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#07	File Name: ITM-22-009-06
	Intersection:	Capalina Road & Hollencrest Road	Project: LLG Ref. 3-22-3523
	Date of Count:	Thursday, February 17, 2022	Santa Fe Las Flores



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#08	File Name:	ITM-22-009-07
Intersection:	Capalina Road & N. Rancho Santa Fe Road	Project:	LLG Ref. 3-22-3523
Date of Count:	Thursday, February 17, 2022		Santa Fe Las Flores

AM	Capalina Road Southbound			N. Rancho Santa Fe Road Westbound			Capalina Road Northbound			N. Rancho Santa Fe Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	70	1	18	2	5	20	78	23	0	9	43	269
7:15	1	102	0	30	5	4	32	46	32	1	7	51	311
7:30	3	91	0	18	1	5	29	76	31	2	8	78	342
7:45	6	97	0	22	5	4	49	76	32	0	5	77	373
8:00	3	82	2	19	4	2	35	94	24	3	1	40	309
8:15	0	91	4	26	2	6	41	81	28	0	2	36	317
8:30	5	85	4	13	2	3	33	90	24	2	7	33	301
8:45	1	68	4	18	5	5	30	84	33	2	3	17	270
Total	19	686	15	164	26	34	269	625	227	10	42	375	2492
Approach%	2.6	95.3	2.1	73.2	11.6	15.2	24.0	55.8	20.2	2.3	9.8	87.8	
Total%	0.8	27.5	0.6	6.6	1.0	1.4	10.8	25.1	9.1	0.4	1.7	15.0	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	12	361	6	85	12	17	154	327	115	5	16	231	1,341
Approach%	3.2	95.3	1.6	74.6	10.5	14.9	25.8	54.9	19.3	2.0	6.3	91.7	
Total%	0.9	26.9	0.4	6.3	0.9	1.3	11.5	24.4	8.6	0.4	1.2	17.2	
PHF			0.92			0.84			0.95			0.72	0.90

PM	Capalina Road Southbound			N. Rancho Santa Fe Road Westbound			Capalina Road Northbound			N. Rancho Santa Fe Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	U-Turn	Thru	Right	Left	Thru	Right	Total
16:00	6	91	6	16	3	13	63	163	25	3	8	22	419
16:15	5	68	0	16	5	9	48	145	27	3	3	23	352
16:30	3	86	7	26	9	9	39	173	30	2	7	24	415
16:45	4	75	4	13	11	5	60	139	30	0	11	33	385
17:00	3	100	5	26	5	5	42	160	18	2	0	19	385
17:15	3	83	5	19	8	2	54	152	23	3	4	33	389
17:30	2	78	1	17	9	9	42	123	22	4	10	33	350
17:45	5	75	7	20	11	4	56	122	36	0	10	29	375
Total	31	656	35	153	61	56	404	1177	211	17	53	216	3070
Approach%	4.3	90.9	4.8	56.7	22.6	20.7	22.5	65.7	11.8	5.9	18.5	75.5	
Total%	1.0	21.4	1.1	5.0	2.0	1.8	13.2	38.3	6.9	0.6	1.7	7.0	

PM Intersection Peak Hour: **16:30 to 17:30**

Volume	13	344	21	84	33	21	195	624	101	7	22	109	1,574
Approach%	3.4	91.0	5.6	60.9	23.9	15.2	21.2	67.8	11.0	5.1	15.9	79.0	
Total%	0.8	21.9	1.3	5.3	2.1	1.3	12.4	39.6	6.4	0.4	1.4	6.9	
PHF			0.88			0.78			0.95			0.78	0.95

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

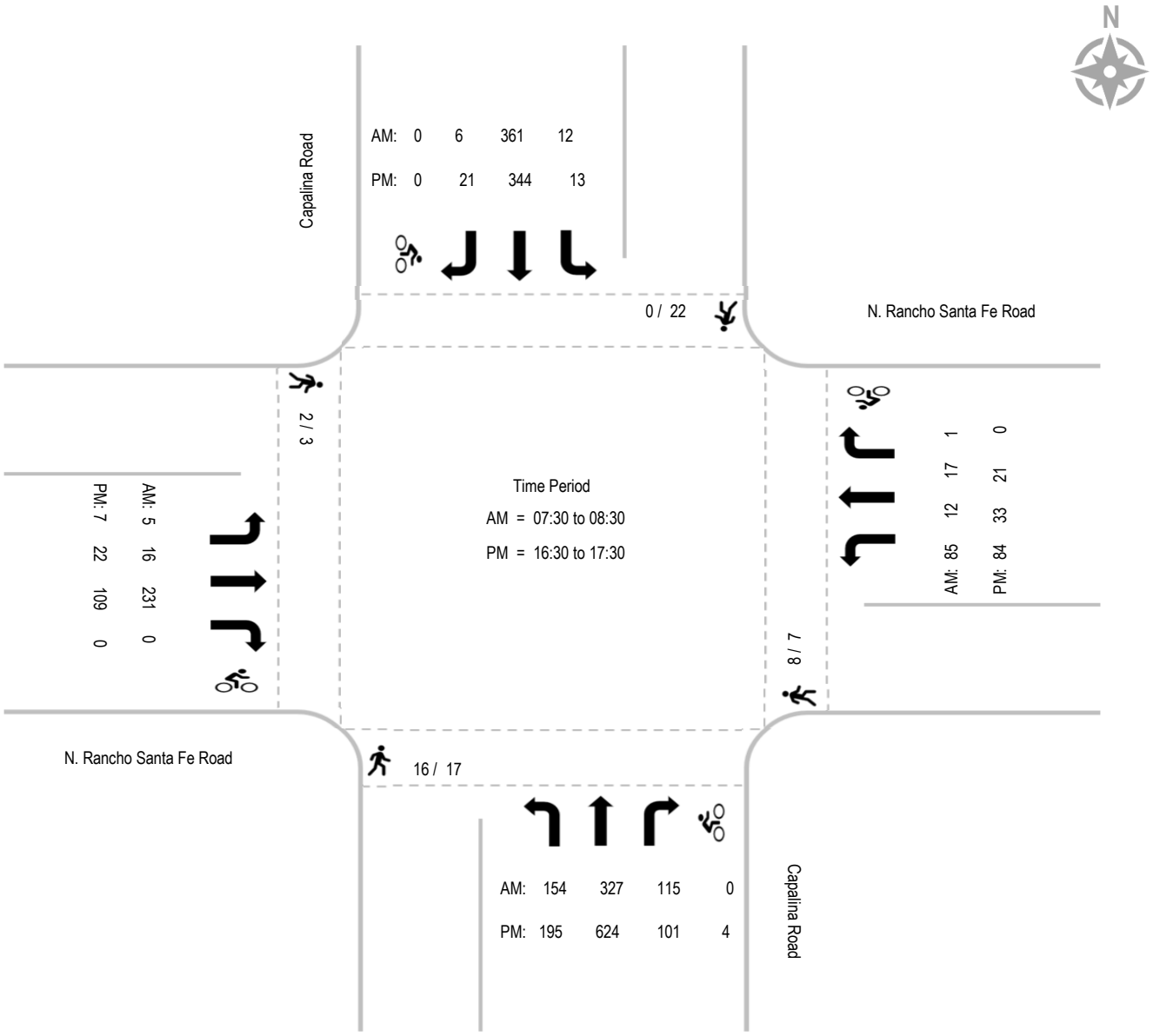
Location:	#08	File Name:	ITM-22-009-07
Intersection:	Capalina Road & N. Rancho Santa Fe Road	Project:	LLG Ref. 3-22-3523
Date of Count:	Thursday, February 17, 2022		Santa Fe Las Flores

AM	Capalina Road Southbound				N. Rancho Santa Fe Road Westbound				Capalina Road Northbound				N. Rancho Santa Fe Road Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
8:00	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2	0
8:15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
8:30	0	0	0	0	5	0	0	0	5	0	0	0	1	0	0	0	11	0
8:45	0	0	0	0	1	0	0	0	9	0	0	0	0	0	0	0	10	0
Ped Total	0				8				16				2				26	
Bike Total		0	0	0		1	0	0		0	0	0		0	0	0		1

PM	Capalina Road Southbound				N. Rancho Santa Fe Road Westbound				Capalina Road Northbound				N. Rancho Santa Fe Road Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	3	0	0	0	0	0	0	0	9	1	0	0	0	0	0	0	12	1
16:15	0	0	0	0	2	0	0	0	4	0	0	0	0	0	0	0	6	0
16:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
16:45	5	0	0	0	3	0	0	0	3	1	0	0	0	0	0	0	11	1
17:00	6	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	8	0
17:15	4	0	0	0	1	0	0	0	1	0	0	2	1	0	0	0	7	2
17:30	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	22				7				17				3				49	
Bike Total		0	0	0		0	0	0		2	0	2		0	0	0		4

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#08	File Name: ITM-22-009-07
	Intersection:	Capalina Road & N. Rancho Santa Fe Road	Project: LLG Ref. 3-22-3523
	Date of Count:	Thursday, February 17, 2022	Santa Fe Las Flores



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#07 Revised	File Name:	ITM-22-009-07
Intersection:	N. Rancho Santa Fe Road & Capalina Road	Project:	LLG Ref. 3-22-3523
Date of Count:	Thursday, February 17, 2022		Santa Fe Las Flores

AM	N. Rancho Santa Fe Rd Southbound			Capalina Road Westbound			N. Rancho Santa Fe Rd Northbound			Capalina Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	70	1	18	2	5	20	78	23	0	9	43	269
7:15	1	102	0	30	5	4	32	46	32	1	7	51	311
7:30	3	91	0	18	1	5	29	76	31	2	8	78	342
7:45	6	97	0	22	5	4	49	76	32	0	5	77	373
8:00	3	82	2	19	4	2	35	94	24	3	1	40	309
8:15	0	91	4	26	2	6	41	81	28	0	2	36	317
8:30	5	85	4	13	2	3	33	90	24	2	7	33	301
8:45	1	68	4	18	5	5	30	84	33	2	3	17	270
Total	19	686	15	164	26	34	269	625	227	10	42	375	2492
Approach%	2.6	95.3	2.1	73.2	11.6	15.2	24.0	55.8	20.2	2.3	9.8	87.8	
Total%	0.8	27.5	0.6	6.6	1.0	1.4	10.8	25.1	9.1	0.4	1.7	15.0	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	12	361	6	85	12	17	154	327	115	5	16	231	1,341
Approach%	3.2	95.3	1.6	74.6	10.5	14.9	25.8	54.9	19.3	2.0	6.3	91.7	
Total%	0.9	26.9	0.4	6.3	0.9	1.3	11.5	24.4	8.6	0.4	1.2	17.2	
PHF			0.92			0.84			0.95			0.72	0.90

PM	N. Rancho Santa Fe Rd Southbound			Capalina Road Westbound			N. Rancho Santa Fe Rd Northbound			Capalina Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	U-Turn	Thru	Right	Left	Thru	Right	Total
16:00	6	91	6	16	3	13	63	163	25	3	8	22	419
16:15	5	68	0	16	5	9	48	145	27	3	3	23	352
16:30	3	86	7	26	9	9	39	173	30	2	7	24	415
16:45	4	75	4	13	11	5	60	139	30	0	11	33	385
17:00	3	100	5	26	5	5	42	160	18	2	0	19	385
17:15	3	83	5	19	8	2	54	152	23	3	4	33	389
17:30	2	78	1	17	9	9	42	123	22	4	10	33	350
17:45	5	75	7	20	11	4	56	122	36	0	10	29	375
Total	31	656	35	153	61	56	404	1177	211	17	53	216	3070
Approach%	4.3	90.9	4.8	56.7	22.6	20.7	22.5	65.7	11.8	5.9	18.5	75.5	
Total%	1.0	21.4	1.1	5.0	2.0	1.8	13.2	38.3	6.9	0.6	1.7	7.0	

PM Intersection Peak Hour: **16:30 to 17:30**

Volume	13	344	21	84	33	21	195	624	101	7	22	109	1,574
Approach%	3.4	91.0	5.6	60.9	23.9	15.2	21.2	67.8	11.0	5.1	15.9	79.0	
Total%	0.8	21.9	1.3	5.3	2.1	1.3	12.4	39.6	6.4	0.4	1.4	6.9	
PHF			0.88			0.78			0.95			0.78	0.95

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

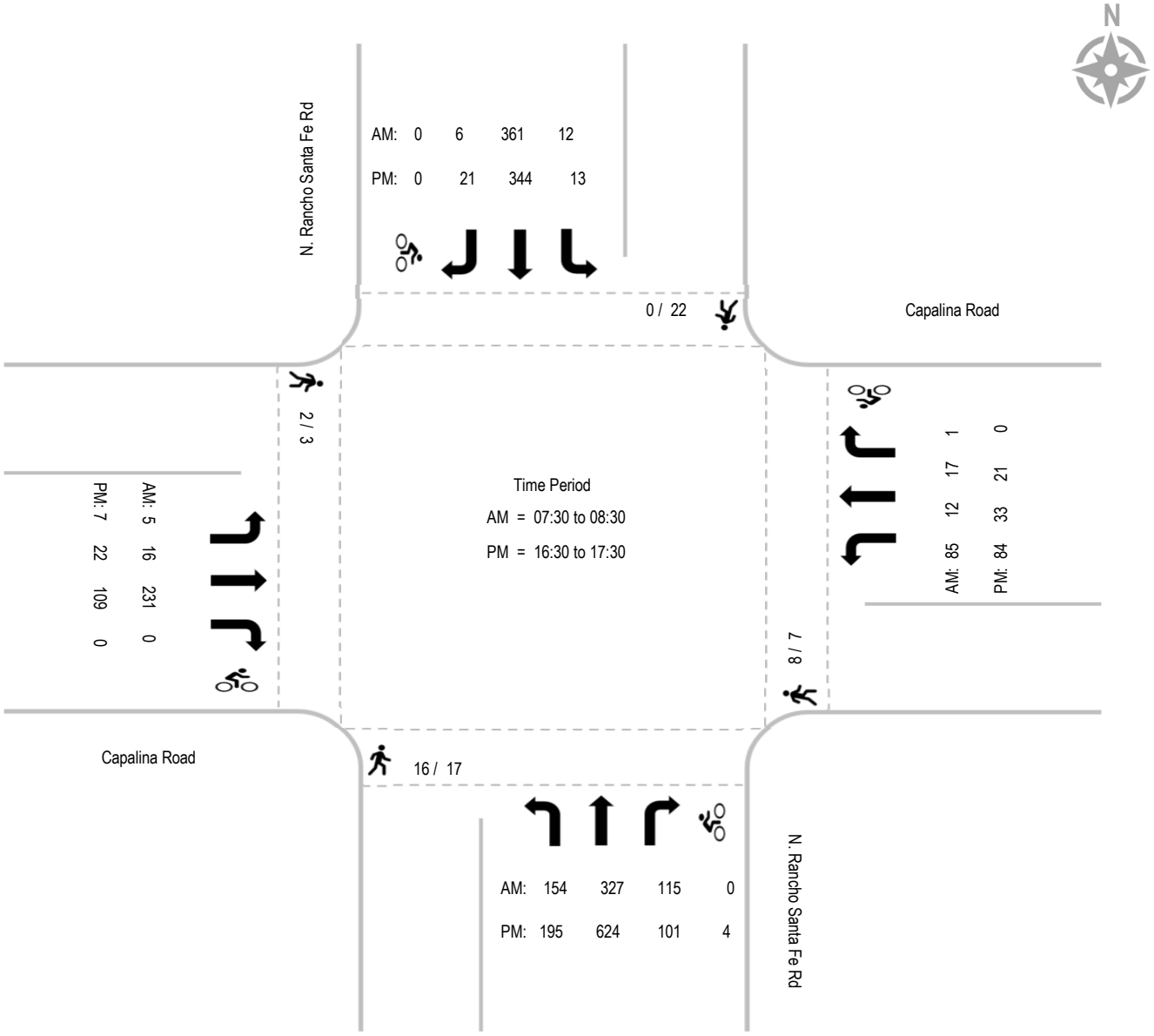
Location:	#07 Revised	File Name:	ITM-22-009-07
Intersection:	N. Rancho Santa Fe Road & Capalina Road	Project:	LLG Ref. 3-22-3523
Date of Count:	Thursday, February 17, 2022		Santa Fe Las Flores

AM	N. Rancho Santa Fe Rd Southbound				Capalina Road Westbound				N. Rancho Santa Fe Rd Northbound				Capalina Road Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
8:00	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2	0
8:15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
8:30	0	0	0	0	5	0	0	0	5	0	0	0	1	0	0	0	11	0
8:45	0	0	0	0	1	0	0	0	9	0	0	0	0	0	0	0	10	0
Ped Total	0				8				16				2				26	
Bike Total		0	0	0		1	0	0		0	0	0		0	0	0		1

PM	N. Rancho Santa Fe Rd Southbound				Capalina Road Westbound				N. Rancho Santa Fe Rd Northbound				Capalina Road Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	3	0	0	0	0	0	0	0	9	1	0	0	0	0	0	0	12	1
16:15	0	0	0	0	2	0	0	0	4	0	0	0	0	0	0	0	6	0
16:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
16:45	5	0	0	0	3	0	0	0	3	1	0	0	0	0	0	0	11	1
17:00	6	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	8	0
17:15	4	0	0	0	1	0	0	0	1	0	0	2	1	0	0	0	7	2
17:30	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	22				7				17				3				49	
Bike Total		0	0	0		0	0	0		2	0	2		0	0	0		4

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#07 Revised	File Name: ITM-22-009-07
	Intersection:	N. Rancho Santa Fe Road & Capalina Road	Project: LLG Ref. 3-22-3523
	Date of Count:	Thursday, February 17, 2022	Santa Fe Las Flores



Linscott, Law & Greenspan, Engineers

4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **BC 22-009 Loc #A S. Santa Fe Ave, between Smilax Rd and Bosstick Blvd**

Date: **Tuesday, March 1, 2022** Total Daily Volume: **14854** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
54	36	18	37	105	351	593	989	906	682	683	767	827	771	1081	1294	1755	1519	866	587	377	283	169	104
20	11	4	6	11	45	110	200	262	161	177	192	185	153	221	286	426	444	266	174	96	81	57	31
20	8	4	11	12	75	126	259	238	181	168	189	198	210	248	310	438	400	240	173	90	84	38	22
9	9	5	9	33	114	148	265	218	148	169	191	212	197	312	347	450	378	195	127	96	55	40	26
5	8	5	11	49	117	209	265	188	192	169	195	232	211	300	351	441	297	165	113	95	63	34	25

Date: **Tuesday, March 1, 2022** Total Daily Volume: **7083** Description: **Northbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
32	18	9	22	58	152	229	451	425	329	325	376	404	397	543	560	813	751	397	307	191	149	87	58
11	6	2	1	3	23	56	86	131	87	75	104	90	83	107	128	169	199	124	88	58	43	25	15
11	3	3	6	7	25	52	114	117	84	65	91	93	105	128	133	183	197	100	89	35	41	21	14
7	5	1	8	18	60	45	115	93	69	90	81	106	100	152	135	245	192	91	77	50	24	23	19
3	4	3	7	30	44	76	136	84	89	95	100	115	109	156	164	216	163	82	53	48	41	18	10

Date: **Tuesday, March 1, 2022** Total Daily Volume: **7771** Description: **Southbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
22	18	9	15	47	199	364	538	481	353	358	391	423	374	538	734	942	768	469	280	186	134	82	46
9	5	2	5	8	22	54	114	131	74	102	88	95	70	114	158	257	245	142	86	38	38	32	16
9	5	1	5	5	50	74	145	121	97	103	98	105	105	120	177	255	203	140	84	55	43	17	8
2	4	4	1	15	54	103	150	125	79	79	110	106	97	160	212	205	186	104	50	46	31	17	7
2	4	2	4	19	73	133	129	104	103	74	95	117	102	144	187	225	134	83	60	47	22	16	15

Linscott, Law & Greenspan, Engineers

4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **BC 22-009 Loc #B S. Santa Fe Ave, between Bosstick Blvd and Las Flores Dr**

Date: **Tuesday, March 1, 2022** Total Daily Volume: **16657** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
55	37	28	44	120	410	769	1112	1009	796	818	857	923	932	1220	1413	1830	1658	948	641	441	304	188	104
18	12	5	10	11	54	158	226	285	182	209	203	217	186	257	314	425	496	308	196	121	85	55	30
19	7	7	12	17	84	160	279	277	202	202	213	242	250	283	327	467	441	261	187	94	86	42	19
11	8	6	10	40	131	180	288	250	197	205	217	215	238	370	375	481	407	200	122	115	64	53	32
7	10	10	12	52	141	271	319	197	215	202	224	249	258	310	397	457	314	179	136	111	69	38	23

Date: **Tuesday, March 1, 2022** Total Daily Volume: **7926** Description: **Northbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
31	17	13	25	78	236	394	539	483	396	400	421	447	478	555	593	779	760	430	330	213	156	95	57
11	6	3	4	3	32	92	117	155	98	94	106	100	102	126	138	158	215	135	97	66	41	28	14
7	3	4	5	12	44	84	130	136	100	90	98	120	119	130	140	190	201	123	100	37	39	23	12
8	3	1	8	28	76	78	129	110	96	107	102	108	122	159	134	208	183	86	66	54	32	28	21
5	5	5	8	35	84	140	163	82	102	109	115	119	135	140	181	223	161	86	67	56	44	16	10

Date: **Tuesday, March 1, 2022** Total Daily Volume: **8731** Description: **Southbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
24	20	15	19	42	174	375	573	526	400	418	436	476	454	665	820	1051	898	518	311	228	148	93	47
7	6	2	6	8	22	66	109	130	84	115	97	117	84	131	176	267	281	173	99	55	44	27	16
12	4	3	7	5	40	76	149	141	102	112	115	122	131	153	187	277	240	138	87	57	47	19	7
3	5	5	2	12	55	102	159	140	101	98	115	107	116	211	241	273	224	114	56	61	32	25	11
2	5	5	4	17	57	131	156	115	113	93	109	130	123	170	216	234	153	93	69	55	25	22	13

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4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **BC 22-009 Loc #C S. Santa Fe Ave, between Las Flores Dr and N. Rancho Santa Fe Rd**

Date: **Tuesday, March 1, 2022** Total Daily Volume: **14595** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
18	23	18	20	119	396	774	1202	1093	802	861	880	936	951	1262	1439	1664	848	508	273	226	143	96	43
5	6	3	5	7	47	157	236	307	197	222	205	213	204	257	330	447	257	169	85	60	42	27	14
9	6	3	7	18	82	157	305	282	203	209	219	253	255	292	312	480	230	138	78	55	51	20	6
3	6	6	3	37	129	184	330	273	200	211	231	218	244	385	393	444	216	118	49	60	29	24	10
1	5	6	5	57	138	276	331	231	202	219	225	252	248	328	404	293	145	83	61	51	21	25	13

Date: **Tuesday, March 1, 2022** Total Daily Volume: **5755** Description: **Northbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
0	0	0	0	63	208	360	518	517	390	413	431	464	501	587	643	659	0	1	0	0	0	0	0
0	0	0	0	0	28	76	98	149	105	99	103	107	111	125	151	186	0	0	0	0	0	0	0
0	0	0	0	8	42	71	132	142	96	96	101	123	139	130	144	219	0	0	0	0	0	0	0
0	0	0	0	21	67	78	127	113	92	103	111	110	126	183	159	192	0	0	0	0	0	0	0
0	0	0	0	34	71	135	161	113	97	115	116	124	125	149	189	62	0	1	0	0	0	0	0

Date: **Tuesday, March 1, 2022** Total Daily Volume: **8840** Description: **Southbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
18	23	18	20	56	188	414	684	576	412	448	449	472	450	675	796	1005	848	507	273	226	143	96	43
5	6	3	5	7	19	81	138	158	92	123	102	106	93	132	179	261	257	169	85	60	42	27	14
9	6	3	7	10	40	86	173	140	107	113	118	130	116	162	168	261	230	138	78	55	51	20	6
3	6	6	3	16	62	106	203	160	108	108	120	108	118	202	234	252	216	118	49	60	29	24	10
1	5	6	5	23	67	141	170	118	105	104	109	128	123	179	215	231	145	82	61	51	21	25	13

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Average Daily Traffic

Location: **BC 22-009 Loc #D S. Santa Fe Ave-Mission Rd, between N. Rancho Santa Fe Rd and N. Pacific St**

Date: **Tuesday, March 1, 2022** Total Daily Volume: **13500** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
38	32	21	36	68	267	468	983	836	534	516	576	643	651	1000	1298	1772	1650	821	491	337	243	162	57
13	10	7	9	12	27	80	162	233	136	119	140	135	141	177	272	438	472	290	138	88	74	49	13
15	7	2	9	10	49	95	244	220	161	133	148	179	159	246	346	483	427	233	142	86	77	43	12
6	6	4	6	24	99	112	310	200	124	124	131	140	164	298	329	413	435	165	112	74	38	40	19
4	9	8	12	22	92	181	267	183	113	140	157	189	187	279	351	438	316	133	99	89	54	30	13

Date: **Tuesday, March 1, 2022** Total Daily Volume: **5893** Description: **Northbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
13	18	8	20	36	146	216	452	418	268	226	270	306	317	460	442	627	691	333	258	159	113	74	22
5	6	1	4	7	18	38	70	128	75	52	77	66	77	83	82	150	189	107	72	44	33	22	2
3	3	0	6	3	25	42	120	109	85	59	72	82	82	105	131	151	188	101	75	40	34	21	6
2	3	1	4	13	52	52	133	89	58	55	56	72	75	154	105	155	178	63	65	28	17	18	9
3	6	6	6	13	51	84	129	92	50	60	65	86	83	118	124	171	136	62	46	47	29	13	5

Date: **Tuesday, March 1, 2022** Total Daily Volume: **7607** Description: **Southbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
25	14	13	16	32	121	252	531	418	266	290	306	337	334	540	856	1145	959	488	233	178	130	88	35
8	4	6	5	5	9	42	92	105	61	67	63	69	64	94	190	288	283	183	66	44	41	27	11
12	4	2	3	7	24	53	124	111	76	74	76	97	77	141	215	332	239	132	67	46	43	22	6
4	3	3	2	11	47	60	177	111	66	69	75	68	89	144	224	258	257	102	47	46	21	22	10
1	3	2	6	9	41	97	138	91	63	80	92	103	104	161	227	267	180	71	53	42	25	17	8

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Average Daily Traffic

Location: **BC 22-009 Loc #E Hollencrest Rd, between De Leone Rd and Hollenbeck Rd**

Date: **Tuesday, March 1, 2022** Total Daily Volume: **562** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
9	2	1	4	3	11	28	32	41	19	15	16	21	31	36	34	61	53	52	34	20	29	5	5
2	1	0	1	1	0	10	9	16	4	5	3	6	12	5	13	14	13	15	9	3	6	5	2
5	1	0	3	0	1	1	5	7	4	3	5	2	4	6	3	17	6	13	10	8	9	0	2
0	0	0	0	1	4	6	9	13	7	3	3	9	7	10	10	14	19	17	5	5	8	0	1
2	0	1	0	1	6	11	9	5	4	4	5	4	8	15	8	16	15	7	10	4	6	0	0

Date: **Tuesday, March 1, 2022** Total Daily Volume: **245** Description: **Northbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
5	1	1	1	2	4	14	12	13	10	8	8	4	11	15	16	27	22	28	10	11	16	1	5
1	1	0	0	1	0	5	5	7	2	3	2	3	5	3	10	5	5	9	4	1	2	1	2
3	0	0	1	0	1	1	0	1	2	1	3	0	1	2	2	7	2	6	4	4	4	0	2
0	0	0	0	1	2	2	5	5	5	3	2	1	3	4	2	5	10	8	0	3	6	0	1
1	0	1	0	0	1	6	2	0	1	1	1	0	2	6	2	10	5	5	2	3	4	0	0

Date: **Tuesday, March 1, 2022** Total Daily Volume: **317** Description: **Southbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
4	1	0	3	1	7	14	20	28	9	7	8	17	20	21	18	34	31	24	24	9	13	4	0
1	0	0	1	0	0	5	4	9	2	2	1	3	7	2	3	9	8	6	5	2	4	4	0
2	1	0	2	0	0	0	5	6	2	2	2	2	3	4	1	10	4	7	6	4	5	0	0
0	0	0	0	0	2	4	4	8	2	0	1	8	4	6	8	9	9	9	5	2	2	0	0
1	0	0	0	1	5	5	7	5	3	3	4	4	6	9	6	6	10	2	8	1	2	0	0

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Average Daily Traffic

Location: **BC 22-009 Loc #F N. Rancho Santa Fe Rd, between S. Santa Fe Ave and Capalina Rd**

Date: **Tuesday, March 1, 2022** Total Daily Volume: **11728** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
38	30	21	25	100	290	538	706	772	625	682	692	679	690	783	1007	1069	1019	726	419	355	234	144	84
10	6	5	6	9	35	108	159	216	171	183	171	162	149	175	235	261	286	206	129	91	61	40	27
17	7	6	11	16	64	112	177	199	144	167	193	184	183	191	220	277	250	192	109	81	65	33	14
7	8	4	5	35	92	137	179	186	160	166	165	151	188	219	268	269	269	169	97	89	58	37	25
4	9	6	3	40	99	181	191	171	150	166	163	182	170	198	284	262	214	159	84	94	50	34	18

Date: **Tuesday, March 1, 2022** Total Daily Volume: **6469** Description: **Eastbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
30	13	9	11	55	142	259	301	340	306	352	356	359	386	399	628	720	639	433	236	203	146	88	58
10	3	4	3	3	18	52	61	88	91	87	82	87	81	91	148	171	173	122	70	56	40	29	18
12	4	4	4	9	32	56	73	95	61	78	93	98	103	101	145	196	144	118	68	44	34	21	10
6	2	1	3	22	46	59	69	80	74	93	89	79	106	99	162	168	172	99	51	47	36	21	20
2	4	0	1	21	46	92	98	77	80	94	92	95	96	108	173	185	150	94	47	56	36	17	10

Date: **Tuesday, March 1, 2022** Total Daily Volume: **5259** Description: **Westbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
8	17	12	14	45	148	279	405	432	319	330	336	320	304	384	379	349	380	293	183	152	88	56	26
0	3	1	3	6	17	56	98	128	80	96	89	75	68	84	87	90	113	84	59	35	21	11	9
5	3	2	7	7	32	56	104	104	83	89	100	86	80	90	75	81	106	74	41	37	31	12	4
1	6	3	2	13	46	78	110	106	86	73	76	72	82	120	106	101	97	70	46	42	22	16	5
2	5	6	2	19	53	89	93	94	70	72	71	87	74	90	111	77	64	65	37	38	14	17	8

APPENDIX B

CITY OF SAN MARCOS ROADWAY CLASSIFICATION TABLE

Table 3: Roadway Classifications, Capacity, and LOS

Street Classification	Lanes	LOS A	LOS B	LOS C	LOS D	LOS E (Capacity)
Expressway	6	30,000	42,000	60,000	70,000	80,000
Prime Arterial	6	25,000	35,000	50,000	55,000	60,000
Major Arterial	6	20,000	28,000	40,000	45,000	50,000
Major Arterial	4	15,000	21,000	30,000	35,000	40,000
Major Arterial (One-Way)	3	12,500	16,500	22,500	25,000	27,500
Major Arterial (One-Way)	2	10,000	13,000	17,500	20,000	22,500
Secondary Arterial/Collector	4	10,000	14,000	20,000	25,000	30,000
Collector (no center lane)	4	5,000	7,000	10,000	13,000	15,000
Collector (continuous left-turn lane)	2	5,000	7,000	10,000	13,000	15,000
Collector (no fronting property)	2	4,000	5,500	7,500	9,000	10,000
Collector (commercial-industrial fronting)	2	2,500	3,500	5,000	6,500	8,000
Collector (multi-family)	2	2,500	3,500	5,000	6,500	8,000
Collector (one-way)	3	11,000	14,000	19,000	22,500	26,000
Collector (one-way)	2	7,500	9,500	12,500	15,000	17,500
Collector (one-way)	1	2,500	3,500	5,000	6,500	7,500
Sub-Collector (single-family)	2	--	--	2,200	--	--

Source: *Guidelines for Transportation Impact Studies in the San Diego Region* (May 2019)
Notes: 1. The volumes and the average daily level of service listed above are only intended as a general planning outline.
2. Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.

3.7. LEVEL OF SERVICE STANDARDS

The City of San Marcos strives to maintain intersection and roadway segment operations based on LOS standards outlined in the General Plan Mobility Element. The local transportation analysis should note intersections and roadway segments that perform unacceptably (based on standards in the current General Plan Mobility Element) under no project and/or plus project conditions, and improvements that can be applied to increase performance to acceptable levels.

For study intersections, the study should identify if the addition of the traffic generated from the proposed project results in any one of the following, and improvements should be identified to increase performance to acceptable or pre-project conditions under each scenario:

- Triggers an intersection operating at acceptable LOS to operate at unacceptable LOS and increases the average delay per vehicle by more than 2.0 seconds.
- Increases the average delay per vehicle for a study intersection that is already operating at unacceptable LOS by more than 2.0 seconds.

APPENDIX C

ANALYSIS WORKSHEETS – EXISTING

Intersection	
Int Delay, s/veh	17.8

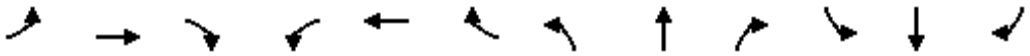
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	91	147	239	283	398	215
Future Vol, veh/h	91	147	239	283	398	215
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	103	167	272	322	452	244

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1440	574	696	0	-	0
Stage 1	574	-	-	-	-	-
Stage 2	866	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	146	518	900	-	-	-
Stage 1	563	-	-	-	-	-
Stage 2	412	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 92	518	900	-	-	-
Mov Cap-2 Maneuver	~ 92	-	-	-	-	-
Stage 1	356	-	-	-	-	-
Stage 2	412	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	91.8	4.9	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	900	-	92	518	-	-
HCM Lane V/C Ratio	0.302	-	1.124	0.322	-	-
HCM Control Delay (s)	10.7	0	215.5	15.2	-	-
HCM Lane LOS	B	A	F	C	-	-
HCM 95th %tile Q(veh)	1.3	-	7	1.4	-	-

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)	10	0	22	69	0	35	21	493	86	78	466	6
Future Volume (veh/h)	10	0	22	69	0	35	21	493	86	78	466	6
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	11	0	25	78	0	40	24	560	98	89	530	7
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	31	0	70	212	0	188	69	684	579	189	1555	21
Arrive On Green	0.06	0.00	0.06	0.12	0.00	0.12	0.04	0.37	0.37	0.11	0.43	0.43
Sat Flow, veh/h	501	0	1139	1781	0	1585	1781	1870	1585	1781	3591	47
Grp Volume(v), veh/h	36	0	0	78	0	40	24	560	98	89	262	275
Grp Sat Flow(s),veh/h/ln	1640	0	0	1781	0	1585	1781	1870	1585	1781	1777	1862
Q Serve(g_s), s	1.2	0.0	0.0	2.3	0.0	1.3	0.7	15.4	2.4	2.7	5.6	5.6
Cycle Q Clear(g_c), s	1.2	0.0	0.0	2.3	0.0	1.3	0.7	15.4	2.4	2.7	5.6	5.6
Prop In Lane	0.31		0.69	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	100	0	0	212	0	188	69	684	579	189	769	806
V/C Ratio(X)	0.36	0.00	0.00	0.37	0.00	0.21	0.35	0.82	0.17	0.47	0.34	0.34
Avail Cap(c_a), veh/h	837	0	0	251	0	223	260	1148	973	260	1091	1143
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.6	0.0	0.0	23.1	0.0	22.6	26.6	16.3	12.2	23.9	10.7	10.7
Incr Delay (d2), s/veh	2.2	0.0	0.0	1.1	0.0	0.6	3.0	2.5	0.1	1.8	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	1.0	0.0	0.5	0.3	5.6	0.7	1.1	1.7	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.8	0.0	0.0	24.1	0.0	23.2	29.6	18.8	12.3	25.7	11.0	11.0
LnGrp LOS	C	A	A	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		36			118			682			626	
Approach Delay, s/veh		27.8			23.8			18.3			13.1	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.2	26.2		9.0	6.4	30.0		11.5				
Change Period (Y+Rc), s	* 4.2	5.4		5.5	* 4.2	5.4		4.7				
Max Green Setting (Gmax), s	* 8.3	34.9		29.0	* 8.3	34.9		8.0				
Max Q Clear Time (g_c+I1), s	4.7	17.4		3.2	2.7	7.6		4.3				
Green Ext Time (p_c), s	0.1	3.4		0.1	0.0	2.9		0.1				

Intersection Summary			
HCM 6th Ctrl Delay		16.7	
HCM 6th LOS		B	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

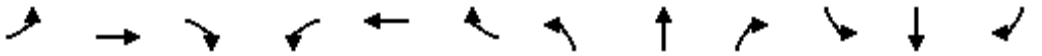
Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	662	6	10	601	9	7
Future Vol, veh/h	662	6	10	601	9	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	704	6	11	639	10	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	710	0	1049	355
Stage 1	-	-	-	-	707	-
Stage 2	-	-	-	-	342	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	885	-	223	641
Stage 1	-	-	-	-	450	-
Stage 2	-	-	-	-	691	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	885	-	220	641
Mov Cap-2 Maneuver	-	-	-	-	220	-
Stage 1	-	-	-	-	450	-
Stage 2	-	-	-	-	683	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	17.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	309	-	-	885	-
HCM Lane V/C Ratio	0.055	-	-	0.012	-
HCM Control Delay (s)	17.3	-	-	9.1	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	511	27	44	494	34	40	2	29	127	11	38
Future Volume (veh/h)	35	511	27	44	494	34	40	2	29	127	11	38
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	39	568	30	49	549	38	44	2	32	141	12	42
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	105	839	44	106	879	392	131	11	179	279	68	237
Arrive On Green	0.06	0.24	0.24	0.06	0.25	0.25	0.07	0.12	0.12	0.16	0.19	0.19
Sat Flow, veh/h	1781	3433	181	1781	3554	1585	1781	94	1505	1781	365	1276
Grp Volume(v), veh/h	39	294	304	49	549	38	44	0	34	141	0	54
Grp Sat Flow(s),veh/h/ln	1781	1777	1838	1781	1777	1585	1781	0	1599	1781	0	1641
Q Serve(g_s), s	1.0	7.3	7.4	1.3	6.7	0.9	1.2	0.0	0.9	3.6	0.0	1.4
Cycle Q Clear(g_c), s	1.0	7.3	7.4	1.3	6.7	0.9	1.2	0.0	0.9	3.6	0.0	1.4
Prop In Lane	1.00		0.10	1.00		1.00	1.00		0.94	1.00		0.78
Lane Grp Cap(c), veh/h	105	434	449	106	879	392	131	0	191	279	0	305
V/C Ratio(X)	0.37	0.68	0.68	0.46	0.62	0.10	0.34	0.00	0.18	0.51	0.00	0.18
Avail Cap(c_a), veh/h	258	797	825	222	1529	682	291	0	1142	411	0	1255
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.2	16.8	16.8	22.3	16.4	14.2	21.6	0.0	19.4	18.9	0.0	16.8
Incr Delay (d2), s/veh	2.2	1.8	1.8	3.1	0.7	0.1	1.5	0.0	0.4	1.4	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	0.4	2.6	2.7	0.6	2.3	0.3	0.5	0.0	0.3	1.5	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.4	18.6	18.6	25.4	17.2	14.3	23.1	0.0	19.9	20.3	0.0	17.1
LnGrp LOS	C	B	B	C	B	B	C	A	B	C	A	B
Approach Vol, veh/h		637			636			78			195	
Approach Delay, s/veh		18.9			17.6			21.7			19.4	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.4	17.4	9.1	15.1	7.3	17.5	12.4	11.8
Change Period (Y+Rc), s	4.5	5.4	5.5	6.0	4.4	5.4	* 4.7	6.0
Max Green Setting (Gmax), s	6.1	22.0	8.0	37.5	7.1	21.1	* 11	35.0
Max Q Clear Time (g_c+I1), s	3.3	9.4	3.2	3.4	3.0	8.7	5.6	2.9
Green Ext Time (p_c), s	0.0	2.6	0.0	0.3	0.0	2.7	0.2	0.1

Intersection Summary	
HCM 6th Ctrl Delay	18.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	25	51	4	12	61
Future Vol, veh/h	7	25	51	4	12	61
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	29	60	5	14	72

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	163	63	0	0	65	0
Stage 1	63	-	-	-	-	-
Stage 2	100	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	828	1002	-	-	1537	-
Stage 1	960	-	-	-	-	-
Stage 2	924	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	821	1002	-	-	1537	-
Mov Cap-2 Maneuver	821	-	-	-	-	-
Stage 1	960	-	-	-	-	-
Stage 2	916	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	1.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	956	1537	-
HCM Lane V/C Ratio	-	-	0.039	0.009	-
HCM Control Delay (s)	-	-	8.9	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	236	86	116	336	0	400	273
Future Volume (veh/h)	236	86	116	336	0	400	273
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	254	92	125	361		430	294
Peak Hour Factor	0.93	0.93	0.93	0.93		0.93	0.93
Percent Heavy Veh, %	2	2	2	2		2	2
Cap, veh/h	610	886	251	1924		1025	457
Arrive On Green	0.18	0.18	0.14	0.54		0.29	0.29
Sat Flow, veh/h	3456	2790	1781	3647		3647	1585
Grp Volume(v), veh/h	254	92	125	361		430	294
Grp Sat Flow(s),veh/h/ln	1728	1395	1781	1777		1777	1585
Q Serve(g_s), s	2.9	1.0	2.9	2.3		4.4	7.2
Cycle Q Clear(g_c), s	2.9	1.0	2.9	2.3		4.4	7.2
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	610	886	251	1924		1025	457
V/C Ratio(X)	0.42	0.10	0.50	0.19		0.42	0.64
Avail Cap(c_a), veh/h	1392	1517	399	3133		2736	1220
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	16.4	10.8	17.7	5.2		12.9	13.9
Incr Delay (d2), s/veh	0.5	0.1	1.5	0.0		0.3	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	1.0	1.1	0.5		1.3	2.1
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	16.8	10.8	19.2	5.3		13.1	15.4
LnGrp LOS	B	B	B	A		B	B
Approach Vol, veh/h	346			486		724	
Approach Delay, s/veh	15.2			8.9		14.1	
Approach LOS	B			A		B	

Timer - Assigned Phs		2		4	5	6	
Phs Duration (G+Y+Rc), s		30.3		14.4	11.3	19.0	
Change Period (Y+Rc), s		* 6.1		6.5	5.0	* 6.1	
Max Green Setting (Gmax), s		* 39		18.0	10.0	* 34	
Max Q Clear Time (g_c+I1), s		4.3		4.9	4.9	9.2	
Green Ext Time (p_c), s		2.3		1.0	0.1	3.7	

Intersection Summary	
HCM 6th Ctrl Delay	12.7
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

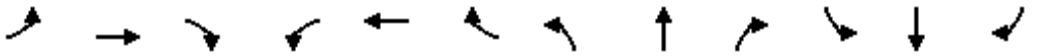
Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	187	67	48	104	5
Future Vol, veh/h	0	187	67	48	104	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	225	81	58	125	6

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	139	0	-	0	335	110
Stage 1	-	-	-	-	110	-
Stage 2	-	-	-	-	225	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1445	-	-	-	660	943
Stage 1	-	-	-	-	915	-
Stage 2	-	-	-	-	812	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1445	-	-	-	660	943
Mov Cap-2 Maneuver	-	-	-	-	660	-
Stage 1	-	-	-	-	915	-
Stage 2	-	-	-	-	812	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1445	-	-	-	669
HCM Lane V/C Ratio	-	-	-	-	0.196
HCM Control Delay (s)	0	-	-	-	11.7
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.7



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	16	231	85	12	17	154	327	115	12	361	6
Future Volume (veh/h)	5	16	231	85	12	17	154	327	115	12	361	6
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	6	18	257	94	13	19	171	363	128	13	401	7
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	42	370	313	329	671	568	212	688	239	20	566	10
Arrive On Green	0.02	0.20	0.20	0.18	0.36	0.36	0.12	0.27	0.27	0.01	0.16	0.16
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	2587	899	1781	3574	62
Grp Volume(v), veh/h	6	18	257	94	13	19	171	248	243	13	199	209
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1709	1781	1777	1859
Q Serve(g_s), s	0.2	0.5	10.4	3.1	0.3	0.5	6.3	8.0	8.2	0.5	7.1	7.2
Cycle Q Clear(g_c), s	0.2	0.5	10.4	3.1	0.3	0.5	6.3	8.0	8.2	0.5	7.1	7.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.53	1.00		0.03
Lane Grp Cap(c), veh/h	42	370	313	329	671	568	212	473	455	20	281	294
V/C Ratio(X)	0.14	0.05	0.82	0.29	0.02	0.03	0.81	0.52	0.54	0.65	0.71	0.71
Avail Cap(c_a), veh/h	410	834	707	410	834	707	212	610	587	93	491	514
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	32.2	21.9	25.8	23.6	13.9	14.0	28.9	21.0	21.1	33.1	26.8	26.8
Incr Delay (d2), s/veh	1.5	0.1	5.3	0.5	0.0	0.0	20.1	0.9	1.0	30.3	3.3	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.2	4.2	1.3	0.1	0.2	3.7	3.1	3.1	0.4	3.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.7	21.9	31.1	24.1	13.9	14.0	49.0	21.9	22.1	63.5	30.1	30.0
LnGrp LOS	C	C	C	C	B	B	D	C	C	E	C	C
Approach Vol, veh/h		281			126			662			421	
Approach Delay, s/veh		30.6			21.5			29.0			31.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	24.3	16.4	19.8	14.0	17.1	5.6	30.6
Change Period (Y+Rc), s	6.0	6.4	4.0	6.5	6.0	6.4	4.0	6.5
Max Green Setting (Gmax), s	3.5	23.1	15.5	30.0	8.0	18.6	15.5	30.0
Max Q Clear Time (g_c+I1), s	2.5	10.2	5.1	12.4	8.3	9.2	2.2	2.5
Green Ext Time (p_c), s	0.0	2.3	0.1	0.9	0.0	1.5	0.0	0.1

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

Intersection	
Int Delay, s/veh	34.8

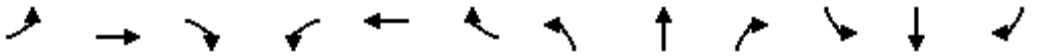
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	103	225	143	525	641	156
Future Vol, veh/h	103	225	143	525	641	156
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	117	256	163	597	728	177

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1740	817	905	0	-	0
Stage 1	817	-	-	-	-	-
Stage 2	923	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 96	376	752	-	-	-
Stage 1	434	-	-	-	-	-
Stage 2	387	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 65	376	752	-	-	-
Mov Cap-2 Maneuver	~ 65	-	-	-	-	-
Stage 1	293	-	-	-	-	-
Stage 2	387	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	185.3	2.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	752	-	65	376	-	-
HCM Lane V/C Ratio	0.216	-	1.801	0.68	-	-
HCM Control Delay (s)	11.1	0$	518.6	32.7	-	-
HCM Lane LOS	B	A	F	D	-	-
HCM 95th %tile Q(veh)	0.8	-	10.6	4.8	-	-

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)	7	0	11	93	0	82	39	622	38	14	877	11
Future Volume (veh/h)	7	0	11	93	0	82	39	622	38	14	877	11
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	8	0	12	106	0	93	44	707	43	16	997	12
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	25	0	38	242	0	215	110	829	702	56	1484	18
Arrive On Green	0.04	0.00	0.04	0.14	0.00	0.14	0.06	0.44	0.44	0.03	0.41	0.41
Sat Flow, veh/h	663	0	995	1781	0	1585	1781	1870	1585	1781	3596	43
Grp Volume(v), veh/h	20	0	0	106	0	93	44	707	43	16	493	516
Grp Sat Flow(s),veh/h/ln	1658	0	0	1781	0	1585	1781	1870	1585	1781	1777	1863
Q Serve(g_s), s	0.7	0.0	0.0	3.1	0.0	3.0	1.3	19.1	0.9	0.5	12.7	12.7
Cycle Q Clear(g_c), s	0.7	0.0	0.0	3.1	0.0	3.0	1.3	19.1	0.9	0.5	12.7	12.7
Prop In Lane	0.40		0.60	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	63	0	0	242	0	215	110	829	702	56	733	769
V/C Ratio(X)	0.32	0.00	0.00	0.44	0.00	0.43	0.40	0.85	0.06	0.29	0.67	0.67
Avail Cap(c_a), veh/h	854	0	0	253	0	225	263	1159	982	263	1101	1154
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.4	0.0	0.0	22.4	0.0	22.3	25.4	14.0	9.0	26.7	13.4	13.4
Incr Delay (d2), s/veh	2.8	0.0	0.0	1.2	0.0	1.4	2.3	4.6	0.0	2.8	1.1	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	1.3	0.0	1.1	0.6	6.9	0.2	0.2	4.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.2	0.0	0.0	23.6	0.0	23.7	27.7	18.6	9.0	29.4	14.5	14.5
LnGrp LOS	C	A	A	C	A	C	C	B	A	C	B	B
Approach Vol, veh/h		20			199			794			1025	
Approach Delay, s/veh		29.2			23.7			18.6			14.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.0	30.3		7.6	7.7	28.6		12.3				
Change Period (Y+Rc), s	* 4.2	5.4		5.5	* 4.2	5.4		4.7				
Max Green Setting (Gmax), s	* 8.3	34.9		29.0	* 8.3	34.9		8.0				
Max Q Clear Time (g_c+I1), s	2.5	21.1		2.7	3.3	14.7		5.1				
Green Ext Time (p_c), s	0.0	3.9		0.1	0.0	5.9		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		17.3	
HCM 6th LOS		B	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

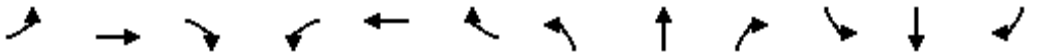
Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1034	6	37	720	6	4
Future Vol, veh/h	1034	6	37	720	6	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1100	6	39	766	6	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1106	0	1564	553
Stage 1	-	-	-	-	1103	-
Stage 2	-	-	-	-	461	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	627	-	102	477
Stage 1	-	-	-	-	279	-
Stage 2	-	-	-	-	601	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	627	-	96	477
Mov Cap-2 Maneuver	-	-	-	-	96	-
Stage 1	-	-	-	-	279	-
Stage 2	-	-	-	-	564	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	32.6
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	141	-	-	627	-
HCM Lane V/C Ratio	0.075	-	-	0.063	-
HCM Control Delay (s)	32.6	-	-	11.1	-
HCM Lane LOS	D	-	-	B	-
HCM 95th %tile Q(veh)	0.2	-	-	0.2	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	878	71	35	591	79	40	1	20	53	2	34
Future Volume (veh/h)	54	878	71	35	591	79	40	1	20	53	2	34
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	60	976	79	39	657	88	44	1	22	59	2	38
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	137	1191	96	88	1179	526	128	8	173	174	10	189
Arrive On Green	0.08	0.36	0.36	0.05	0.33	0.33	0.07	0.11	0.11	0.10	0.12	0.12
Sat Flow, veh/h	1781	3329	269	1781	3554	1585	1781	69	1526	1781	80	1517
Grp Volume(v), veh/h	60	521	534	39	657	88	44	0	23	59	0	40
Grp Sat Flow(s),veh/h/ln	1781	1777	1822	1781	1777	1585	1781	0	1596	1781	0	1597
Q Serve(g_s), s	1.7	14.4	14.4	1.1	8.2	2.1	1.3	0.0	0.7	1.7	0.0	1.2
Cycle Q Clear(g_c), s	1.7	14.4	14.4	1.1	8.2	2.1	1.3	0.0	0.7	1.7	0.0	1.2
Prop In Lane	1.00		0.15	1.00		1.00	1.00		0.96	1.00		0.95
Lane Grp Cap(c), veh/h	137	636	652	88	1179	526	128	0	180	174	0	199
V/C Ratio(X)	0.44	0.82	0.82	0.44	0.56	0.17	0.34	0.00	0.13	0.34	0.00	0.20
Avail Cap(c_a), veh/h	235	725	744	202	1391	620	264	0	1036	373	0	1111
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.8	15.7	15.7	24.9	14.8	12.7	23.8	0.0	21.5	22.7	0.0	21.2
Incr Delay (d2), s/veh	2.2	6.6	6.5	3.5	0.4	0.1	1.6	0.0	0.3	1.1	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	5.6	5.7	0.5	2.7	0.7	0.6	0.0	0.3	0.7	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.0	22.4	22.2	28.4	15.2	12.9	25.4	0.0	21.8	23.8	0.0	21.7
LnGrp LOS	C	C	C	C	B	B	C	A	C	C	A	C
Approach Vol, veh/h		1115			784			67			99	
Approach Delay, s/veh		22.5			15.6			24.2			23.0	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.2	24.7	9.4	12.7	8.5	23.3	10.0	12.1
Change Period (Y+Rc), s	4.5	5.4	5.5	6.0	4.4	5.4	* 4.7	6.0
Max Green Setting (Gmax), s	6.1	22.0	8.0	37.5	7.1	21.1	* 11	35.0
Max Q Clear Time (g_c+I1), s	3.1	16.4	3.3	3.2	3.7	10.2	3.7	2.7
Green Ext Time (p_c), s	0.0	2.9	0.0	0.2	0.0	3.3	0.1	0.1

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

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	11	54	5	31	77
Future Vol, veh/h	3	11	54	5	31	77
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	13	64	6	36	91

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	230	67	0	0	70	0
Stage 1	67	-	-	-	-	-
Stage 2	163	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	758	997	-	-	1531	-
Stage 1	956	-	-	-	-	-
Stage 2	866	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	739	997	-	-	1531	-
Mov Cap-2 Maneuver	739	-	-	-	-	-
Stage 1	956	-	-	-	-	-
Stage 2	844	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	2.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	928	1531	-
HCM Lane V/C Ratio	-	-	0.018	0.024	-
HCM Control Delay (s)	-	-	8.9	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	344	333	154	376	0	717	206
Future Volume (veh/h)	344	333	154	376	0	717	206
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	370	358	166	404		771	222
Peak Hour Factor	0.93	0.93	0.93	0.93		0.93	0.93
Percent Heavy Veh, %	2	2	2	2		2	2
Cap, veh/h	626	898	251	2040		1194	533
Arrive On Green	0.18	0.18	0.14	0.57		0.34	0.34
Sat Flow, veh/h	3456	2790	1781	3647		3647	1585
Grp Volume(v), veh/h	370	358	166	404		771	222
Grp Sat Flow(s),veh/h/ln	1728	1395	1781	1777		1777	1585
Q Serve(g_s), s	5.1	5.1	4.5	2.8		9.5	5.6
Cycle Q Clear(g_c), s	5.1	5.1	4.5	2.8		9.5	5.6
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	626	898	251	2040		1194	533
V/C Ratio(X)	0.59	0.40	0.66	0.20		0.65	0.42
Avail Cap(c_a), veh/h	1209	1369	346	2720		2375	1059
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	19.3	13.6	20.9	5.3		14.5	13.2
Incr Delay (d2), s/veh	0.9	0.3	3.0	0.0		0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	4.3	1.8	0.6		3.0	1.6
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	20.2	13.9	23.9	5.3		15.1	13.7
LnGrp LOS	C	B	C	A		B	B
Approach Vol, veh/h	728			570		993	
Approach Delay, s/veh	17.1			10.7		14.8	
Approach LOS	B			B		B	

Timer - Assigned Phs		2		4	5	6	
Phs Duration (G+Y+Rc), s		35.6		15.8	12.3	23.4	
Change Period (Y+Rc), s		* 6.1		6.5	5.0	* 6.1	
Max Green Setting (Gmax), s		* 39		18.0	10.0	* 34	
Max Q Clear Time (g_c+I1), s		4.8		7.1	6.5	11.5	
Green Ext Time (p_c), s		2.7		2.2	0.1	5.8	

Intersection Summary	
HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

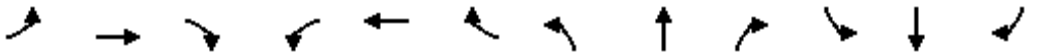
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	100	153	80	33	3
Future Vol, veh/h	2	100	153	80	33	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	120	184	96	40	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	280	0	-	0	356	232
Stage 1	-	-	-	-	232	-
Stage 2	-	-	-	-	124	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1283	-	-	-	642	807
Stage 1	-	-	-	-	807	-
Stage 2	-	-	-	-	902	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1283	-	-	-	641	807
Mov Cap-2 Maneuver	-	-	-	-	641	-
Stage 1	-	-	-	-	805	-
Stage 2	-	-	-	-	902	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	10.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1283	-	-	-	652
HCM Lane V/C Ratio	0.002	-	-	-	0.067
HCM Control Delay (s)	7.8	0	-	-	10.9
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	22	109	84	33	21	195	624	101	13	344	21
Future Volume (veh/h)	7	22	109	84	33	21	195	624	101	13	344	21
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	8	24	121	93	37	23	217	693	112	14	382	23
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	56	209	177	353	521	441	240	898	145	22	582	35
Arrive On Green	0.03	0.11	0.11	0.20	0.28	0.28	0.13	0.29	0.29	0.01	0.17	0.17
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3063	495	1781	3406	204
Grp Volume(v), veh/h	8	24	121	93	37	23	217	402	403	14	199	206
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1781	1781	1777	1834
Q Serve(g_s), s	0.3	0.7	4.4	2.6	0.9	0.6	7.1	12.3	12.3	0.5	6.2	6.3
Cycle Q Clear(g_c), s	0.3	0.7	4.4	2.6	0.9	0.6	7.1	12.3	12.3	0.5	6.2	6.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.28	1.00		0.11
Lane Grp Cap(c), veh/h	56	209	177	353	521	441	240	521	522	22	304	313
V/C Ratio(X)	0.14	0.11	0.68	0.26	0.07	0.05	0.91	0.77	0.77	0.65	0.65	0.66
Avail Cap(c_a), veh/h	464	943	799	464	943	799	240	690	692	105	556	573
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	28.0	23.8	25.4	20.2	15.8	15.7	25.4	19.2	19.2	29.3	23.0	23.0
Incr Delay (d2), s/veh	1.2	0.2	4.6	0.4	0.1	0.0	34.1	3.9	3.9	28.0	2.4	2.4
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	0.1	0.3	1.8	1.1	0.4	0.2	5.0	4.9	4.9	0.4	2.5	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.2	24.0	30.0	20.6	15.9	15.8	59.5	23.1	23.1	57.2	25.4	25.4
LnGrp LOS	C	C	C	C	B	B	E	C	C	E	C	C
Approach Vol, veh/h		153			153			1022			419	
Approach Delay, s/veh		29.0			18.7			30.8			26.5	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.7	23.8	15.8	13.1	14.0	16.6	5.9	23.1
Change Period (Y+Rc), s	6.0	6.4	4.0	6.5	6.0	6.4	4.0	6.5
Max Green Setting (Gmax), s	3.5	23.1	15.5	30.0	8.0	18.6	15.5	30.0
Max Q Clear Time (g_c+I1), s	2.5	14.3	4.6	6.4	9.1	8.3	2.3	2.9
Green Ext Time (p_c), s	0.0	3.1	0.1	0.5	0.0	1.6	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	28.6
HCM 6th LOS	C

APPENDIX D

K&D FACTORS DEFINITIONS

PEAK HOUR VOLUME DATA

Peak hour volume data consists of hourly volume relationships and data location. The hourly volumes are expressed as a percentage of the Annual Average Daily Traffic (AADT). The percentages are shown for both the AM and the PM peak periods.

The principle data described here are the K factor, the D factor and their product (KD). The K factor is the percentage of AADT during the peak hour for both directions of travel. The D factor is the percentage of the peak hour travel in the peak direction. KD multiplied with the AADT gives the one way peak period directional flow rate or the design hourly volume (DHV). The design hourly volume is used for either Operational Analysis or Design Analysis. Refer to the 2016 Highway Capacity Manual, 6th Edition A Guide for Multimodal Mobility Analysis for more details.

Following is a glossary of terms used in this listing of peak hour volume data:

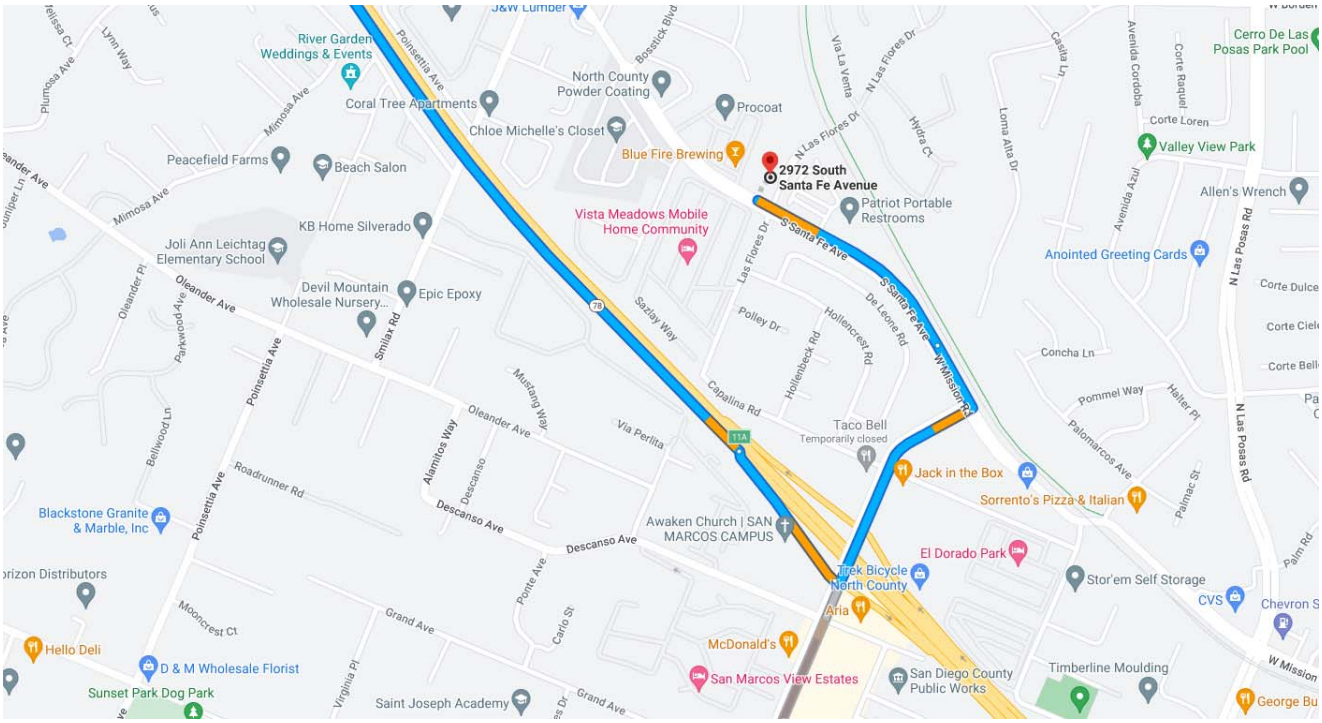
Dir	Indicates direction of travel for peak volume.
AADT	Annual Average Daily Traffic in vehicles per day (vpd).
AM Peak	Represents the morning peak period for traffic analysis.
CS	Control Station Number, Caltrans identification number for monitoring site.
CO	County abbreviation used by Caltrans.
D	D factor. The percentage of traffic in the peak direction during the peak hour. Values in this book are derived by dividing the measured PHV by the sum of both directions of travel during the peak hour.
DAY	Day of week for the peak volume.
DDHV	The directional design hour volume, in vehicles per hour (vph) DDHV=AADTxKxD. See Equation (3-1) on Page 3-13 of the 2016 Highway Capacity Manual.
DI	Caltrans has twelve transportation districts statewide. This abbreviation identifies the district in which the count station is located.
HR	The ending time for the peak hour volume listed. The volume observed from 1 to 2 would be recorded as 2.

K	The percentage of the AADT in both directions during the peak hour. Values in this table are derived by dividing the measured 2-way PHV by the AADT.
KD	The product of K and D. The percentage of AADT in the peak direction during the peak hour. Values in this table are derived by dividing the measured 1-way PHV by the AADT.
LEG	For traffic counting purposes, a highway intersection or interchange is assigned two legs according to increasing postmiles (route direction) and with a postmile reference at the center of the intersection or interchange. The volume of traffic on each leg is denoted by an A, B or O. A = ahead leg, B = back leg, and O – traffic volume being same for both back and ahead legs.
MNTH	The month that the peak volume occurred.
PHV	Peak Hour Volume in the peak direction. A one way volume in vehicles per hour (vph) as used here. The PHV is analogous to the DDHV as used for design purposes.
PM	The Post Mile is the mileage measured from the county line, or from the beginning of a route. Each postmile along a route in a county is a unique location on the state highway system.
PM Peak	Represents the afternoon peak period for traffic analysis.
PRE	The postmile may have a prefix like R, T, L, M, etc. When a length of highway is changed due to construction or realigment, new postmile values are assigned. To distinguish the new values from the old, an alpha code is prefixed to the new postmile.
RTE	The state highway route number.
YR	The year when the count was made. Traffic counting is on a 3-year cycle.

APPENDIX E

TRAVEL ROUTE MAPS

From Oceanside



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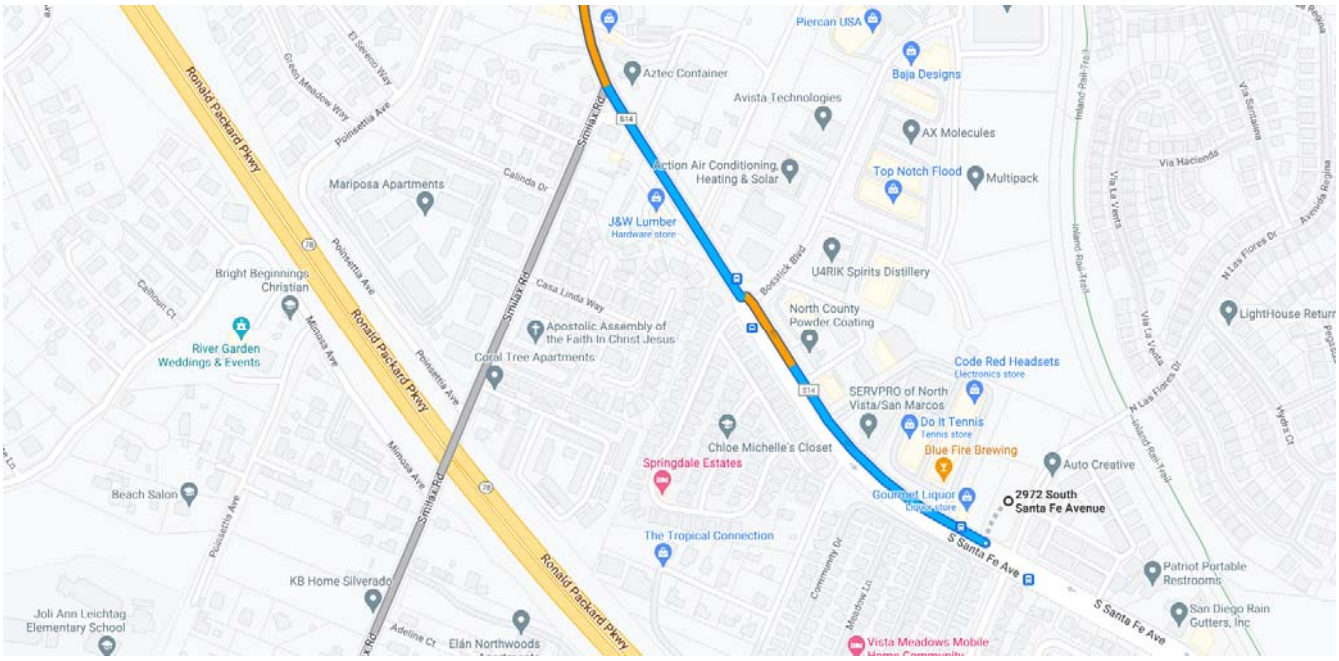
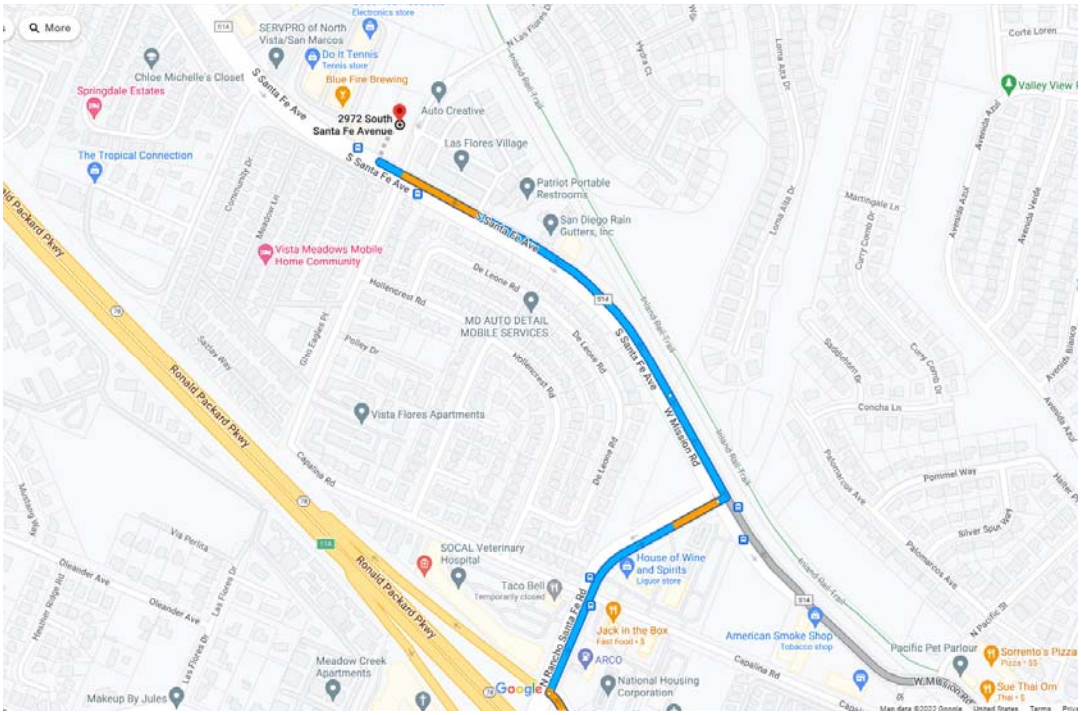
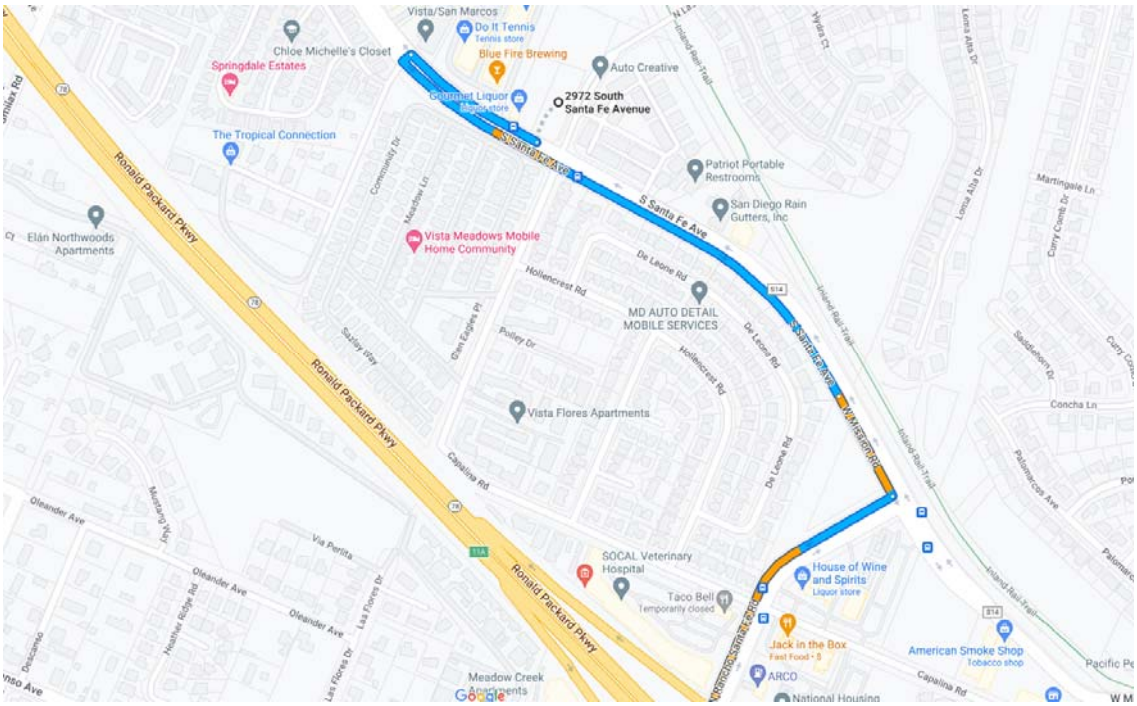


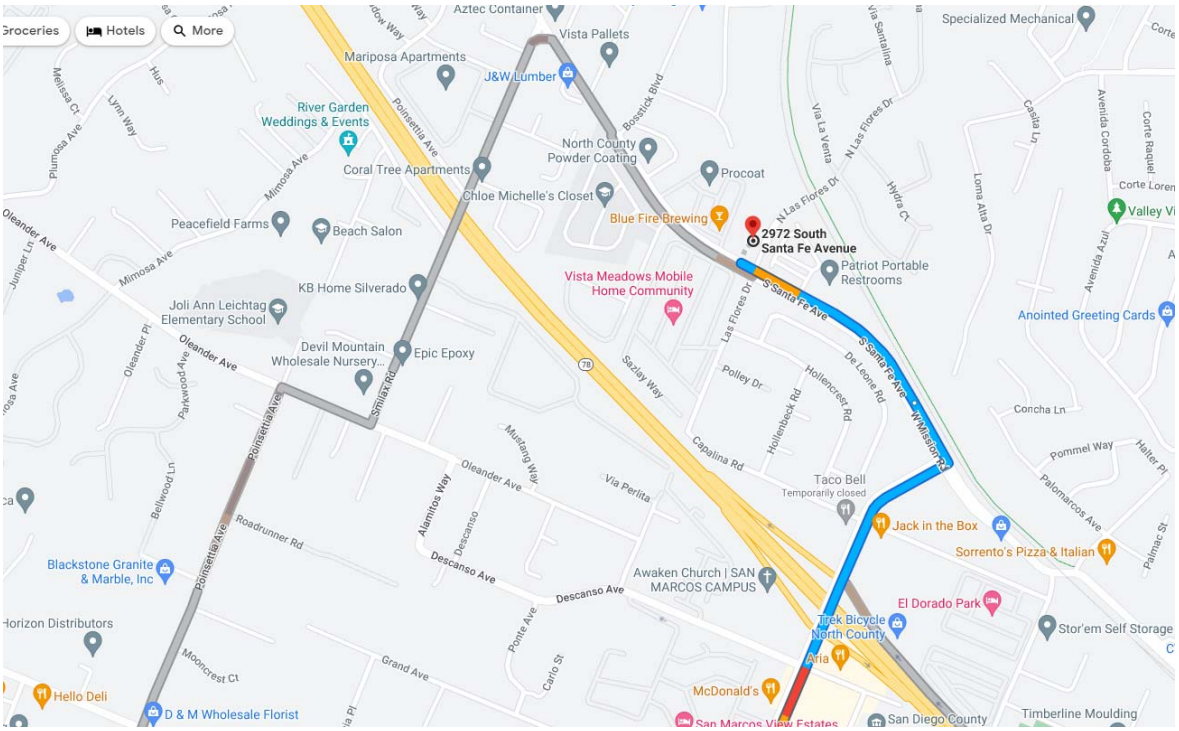
From Escondido



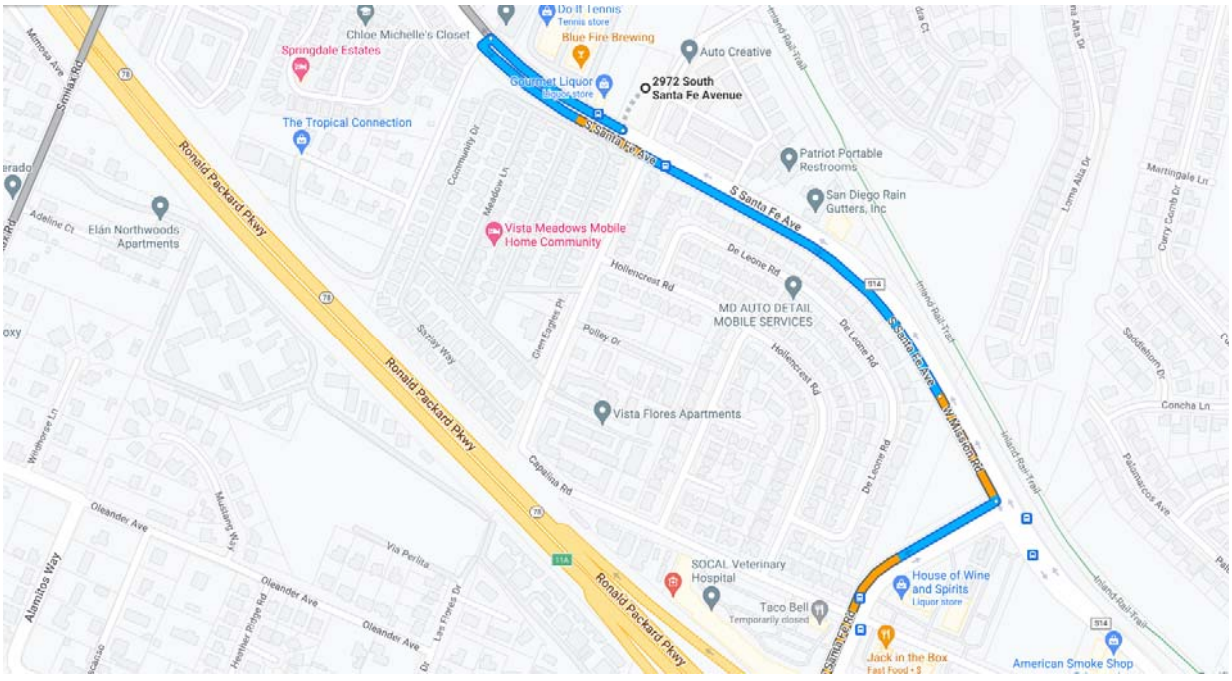
To Escondido



From Rancho Santa Fe



To Rancho Santa Fe



APPENDIX F

ANALYSIS WORKSHEETS – NEAR-TERM

Intersection	
Int Delay, s/veh	33.7

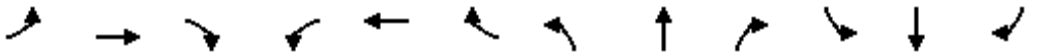
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	100	160	261	307	434	237
Future Vol, veh/h	100	160	261	307	434	237
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	114	182	297	349	493	269

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1571	628	762	0	-	0
Stage 1	628	-	-	-	-	-
Stage 2	943	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	122	483	850	-	-	-
Stage 1	532	-	-	-	-	-
Stage 2	379	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 69	483	850	-	-	-
Mov Cap-2 Maneuver	~ 69	-	-	-	-	-
Stage 1	302	-	-	-	-	-
Stage 2	379	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	182.5	5.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	850	-	69	483	-	-
HCM Lane V/C Ratio	0.349	-	1.647	0.376	-	-
HCM Control Delay (s)	11.5	0$	447.4	16.9	-	-
HCM Lane LOS	B	A	F	C	-	-
HCM 95th %tile Q(veh)	1.6	-	9.9	1.7	-	-

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)	10	0	23	82	0	41	23	517	103	93	490	7
Future Volume (veh/h)	10	0	23	82	0	41	23	517	103	93	490	7
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	11	0	26	93	0	47	26	588	117	106	557	8
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	30	0	71	215	0	191	73	706	598	197	1602	23
Arrive On Green	0.06	0.00	0.06	0.12	0.00	0.12	0.04	0.38	0.38	0.11	0.45	0.45
Sat Flow, veh/h	487	0	1152	1781	0	1585	1781	1870	1585	1781	3586	51
Grp Volume(v), veh/h	37	0	0	93	0	47	26	588	117	106	276	289
Grp Sat Flow(s),veh/h/ln	1639	0	0	1781	0	1585	1781	1870	1585	1781	1777	1861
Q Serve(g_s), s	1.3	0.0	0.0	2.9	0.0	1.6	0.9	17.1	3.0	3.4	6.1	6.1
Cycle Q Clear(g_c), s	1.3	0.0	0.0	2.9	0.0	1.6	0.9	17.1	3.0	3.4	6.1	6.1
Prop In Lane	0.30		0.70	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	101	0	0	215	0	191	73	706	598	197	794	832
V/C Ratio(X)	0.37	0.00	0.00	0.43	0.00	0.25	0.36	0.83	0.20	0.54	0.35	0.35
Avail Cap(c_a), veh/h	793	0	0	238	0	212	247	1089	923	247	1034	1084
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.0	0.0	0.0	24.5	0.0	23.9	28.0	17.0	12.6	25.2	10.9	10.9
Incr Delay (d2), s/veh	2.2	0.0	0.0	1.4	0.0	0.7	2.9	3.4	0.2	2.3	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	1.2	0.0	0.6	0.4	6.5	0.9	1.4	1.9	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.2	0.0	0.0	25.8	0.0	24.6	30.9	20.4	12.7	27.5	11.1	11.1
LnGrp LOS	C	A	A	C	A	C	C	C	B	C	B	B
Approach Vol, veh/h		37			140			731			671	
Approach Delay, s/veh		29.2			25.4			19.5			13.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.8	28.0		9.2	6.7	32.2		11.9				
Change Period (Y+Rc), s	* 4.2	5.4		5.5	* 4.2	5.4		4.7				
Max Green Setting (Gmax), s	* 8.3	34.9		29.0	* 8.3	34.9		8.0				
Max Q Clear Time (g_c+I1), s	5.4	19.1		3.3	2.9	8.1		4.9				
Green Ext Time (p_c), s	0.1	3.5		0.1	0.0	3.1		0.1				

Intersection Summary			
HCM 6th Ctrl Delay		17.8	
HCM 6th LOS		B	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

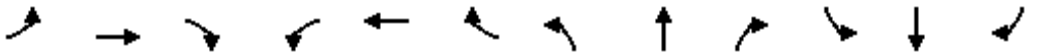
Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	681	7	10	619	9	8
Future Vol, veh/h	681	7	10	619	9	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	724	7	11	659	10	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	731	0	1080	366
Stage 1	-	-	-	-	728	-
Stage 2	-	-	-	-	352	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	869	-	213	631
Stage 1	-	-	-	-	439	-
Stage 2	-	-	-	-	683	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	869	-	210	631
Mov Cap-2 Maneuver	-	-	-	-	210	-
Stage 1	-	-	-	-	439	-
Stage 2	-	-	-	-	674	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	17.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	306	-	-	869	-
HCM Lane V/C Ratio	0.059	-	-	0.012	-
HCM Control Delay (s)	17.5	-	-	9.2	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	530	28	47	513	35	42	3	31	131	13	40
Future Volume (veh/h)	36	530	28	47	513	35	42	3	31	131	13	40
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	40	589	31	52	570	39	47	3	34	146	14	44
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	106	857	45	110	901	402	137	16	178	278	73	230
Arrive On Green	0.06	0.25	0.25	0.06	0.25	0.25	0.08	0.12	0.12	0.16	0.18	0.18
Sat Flow, veh/h	1781	3434	181	1781	3554	1585	1781	130	1475	1781	397	1248
Grp Volume(v), veh/h	40	304	316	52	570	39	47	0	37	146	0	58
Grp Sat Flow(s),veh/h/ln	1781	1777	1838	1781	1777	1585	1781	0	1605	1781	0	1646
Q Serve(g_s), s	1.1	7.8	7.8	1.4	7.1	0.9	1.3	0.0	1.0	3.8	0.0	1.5
Cycle Q Clear(g_c), s	1.1	7.8	7.8	1.4	7.1	0.9	1.3	0.0	1.0	3.8	0.0	1.5
Prop In Lane	1.00		0.10	1.00		1.00	1.00		0.92	1.00		0.76
Lane Grp Cap(c), veh/h	106	443	459	110	901	402	137	0	193	278	0	303
V/C Ratio(X)	0.38	0.69	0.69	0.47	0.63	0.10	0.34	0.00	0.19	0.52	0.00	0.19
Avail Cap(c_a), veh/h	253	782	809	217	1499	669	285	0	1123	403	0	1234
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.6	17.0	17.0	22.7	16.6	14.3	21.9	0.0	19.8	19.4	0.0	17.3
Incr Delay (d2), s/veh	2.2	1.9	1.8	3.1	0.7	0.1	1.5	0.0	0.5	1.5	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	0.5	2.8	2.8	0.6	2.4	0.3	0.5	0.0	0.4	1.6	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.8	18.9	18.8	25.8	17.3	14.4	23.4	0.0	20.3	20.9	0.0	17.6
LnGrp LOS	C	B	B	C	B	B	C	A	C	C	A	B
Approach Vol, veh/h		660			661			84			204	
Approach Delay, s/veh		19.2			17.8			22.0			20.0	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	17.9	9.3	15.2	7.4	18.1	12.5	12.0
Change Period (Y+Rc), s	4.5	5.4	5.5	6.0	4.4	5.4	* 4.7	6.0
Max Green Setting (Gmax), s	6.1	22.0	8.0	37.5	7.1	21.1	* 11	35.0
Max Q Clear Time (g_c+I1), s	3.4	9.8	3.3	3.5	3.1	9.1	5.8	3.0
Green Ext Time (p_c), s	0.0	2.7	0.0	0.3	0.0	2.8	0.2	0.2

Intersection Summary	
HCM 6th Ctrl Delay	18.9
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	26	54	5	13	66
Future Vol, veh/h	8	26	54	5	13	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	31	64	6	15	78

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	175	67	0	0	70	0
Stage 1	67	-	-	-	-	-
Stage 2	108	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	815	997	-	-	1531	-
Stage 1	956	-	-	-	-	-
Stage 2	916	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	807	997	-	-	1531	-
Mov Cap-2 Maneuver	807	-	-	-	-	-
Stage 1	956	-	-	-	-	-
Stage 2	907	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	1.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	945	1531	-
HCM Lane V/C Ratio	-	-	0.042	0.01	-
HCM Control Delay (s)	-	-	9	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	249	94	126	358	0	427	289
Future Volume (veh/h)	249	94	126	358	0	427	289
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	268	101	135	385		459	311
Peak Hour Factor	0.93	0.93	0.93	0.93		0.93	0.93
Percent Heavy Veh, %	2	2	2	2		2	2
Cap, veh/h	598	882	255	1962		1066	475
Arrive On Green	0.17	0.17	0.14	0.55		0.30	0.30
Sat Flow, veh/h	3456	2790	1781	3647		3647	1585
Grp Volume(v), veh/h	268	101	135	385		459	311
Grp Sat Flow(s),veh/h/ln	1728	1395	1781	1777		1777	1585
Q Serve(g_s), s	3.2	1.2	3.2	2.5		4.8	7.8
Cycle Q Clear(g_c), s	3.2	1.2	3.2	2.5		4.8	7.8
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	598	882	255	1962		1066	475
V/C Ratio(X)	0.45	0.11	0.53	0.20		0.43	0.65
Avail Cap(c_a), veh/h	1357	1495	389	3055		2667	1190
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	17.0	11.1	18.2	5.2		12.9	14.0
Incr Delay (d2), s/veh	0.5	0.1	1.7	0.0		0.3	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	1.2	0.5		1.4	2.3
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	17.5	11.2	19.9	5.2		13.2	15.5
LnGrp LOS	B	B	B	A		B	B
Approach Vol, veh/h	369			520		770	
Approach Delay, s/veh	15.8			9.0		14.1	
Approach LOS	B			A		B	

Timer - Assigned Phs		2		4	5	6	
Phs Duration (G+Y+Rc), s		31.4		14.4	11.6	19.8	
Change Period (Y+Rc), s		* 6.1		6.5	5.0	* 6.1	
Max Green Setting (Gmax), s		* 39		18.0	10.0	* 34	
Max Q Clear Time (g_c+I1), s		4.5		5.2	5.2	9.8	
Green Ext Time (p_c), s		2.5		1.1	0.1	3.9	

Intersection Summary	
HCM 6th Ctrl Delay	12.9
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

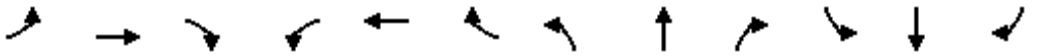
Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	189	68	48	105	6
Future Vol, veh/h	0	189	68	48	105	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	228	82	58	127	7

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	140	0	-	0	339	111
Stage 1	-	-	-	-	111	-
Stage 2	-	-	-	-	228	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1443	-	-	-	657	942
Stage 1	-	-	-	-	914	-
Stage 2	-	-	-	-	810	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1443	-	-	-	657	942
Mov Cap-2 Maneuver	-	-	-	-	657	-
Stage 1	-	-	-	-	914	-
Stage 2	-	-	-	-	810	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1443	-	-	-	668
HCM Lane V/C Ratio	-	-	-	-	0.2
HCM Control Delay (s)	0	-	-	-	11.7
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.7



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	17	234	86	13	19	157	349	118	13	386	7
Future Volume (veh/h)	6	17	234	86	13	19	157	349	118	13	386	7
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	7	19	260	96	14	21	174	388	131	14	429	8
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	49	372	316	327	665	564	208	709	236	21	592	11
Arrive On Green	0.03	0.20	0.20	0.18	0.36	0.36	0.12	0.27	0.27	0.01	0.17	0.17
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	2617	873	1781	3569	66
Grp Volume(v), veh/h	7	19	260	96	14	21	174	262	257	14	213	224
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1713	1781	1777	1858
Q Serve(g_s), s	0.3	0.6	10.8	3.2	0.3	0.6	6.5	8.6	8.8	0.5	7.8	7.8
Cycle Q Clear(g_c), s	0.3	0.6	10.8	3.2	0.3	0.6	6.5	8.6	8.8	0.5	7.8	7.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.51	1.00		0.04
Lane Grp Cap(c), veh/h	49	372	316	327	665	564	208	481	464	21	295	308
V/C Ratio(X)	0.14	0.05	0.82	0.29	0.02	0.04	0.84	0.54	0.55	0.66	0.72	0.73
Avail Cap(c_a), veh/h	403	819	694	403	819	694	208	599	578	91	483	505
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	32.5	22.2	26.3	24.1	14.3	14.4	29.6	21.4	21.4	33.7	27.1	27.1
Incr Delay (d2), s/veh	1.3	0.1	5.4	0.5	0.0	0.0	24.6	1.0	1.0	29.5	3.4	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.2	4.4	1.3	0.1	0.2	4.0	3.4	3.3	0.4	3.3	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	22.2	31.7	24.6	14.3	14.4	54.2	22.3	22.5	63.2	30.4	30.3
LnGrp LOS	C	C	C	C	B	B	D	C	C	E	C	C
Approach Vol, veh/h		286			131			693			451	
Approach Delay, s/veh		31.1			21.9			30.4			31.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	24.9	16.6	20.1	14.0	17.8	5.9	30.9
Change Period (Y+Rc), s	6.0	6.4	4.0	6.5	6.0	6.4	4.0	6.5
Max Green Setting (Gmax), s	3.5	23.1	15.5	30.0	8.0	18.6	15.5	30.0
Max Q Clear Time (g_c+I1), s	2.5	10.8	5.2	12.8	8.5	9.8	2.3	2.6
Green Ext Time (p_c), s	0.0	2.3	0.1	0.9	0.0	1.5	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	30.1
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	63

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	113	246	155	572	698	173
Future Vol, veh/h	113	246	155	572	698	173
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	128	280	176	650	793	197

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1894	892	990	0	-	0
Stage 1	892	-	-	-	-	-
Stage 2	1002	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 77	341	698	-	-	-
Stage 1	400	-	-	-	-	-
Stage 2	355	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 47	341	698	-	-	-
Mov Cap-2 Maneuver	~ 47	-	-	-	-	-
Stage 1	242	-	-	-	-	-
Stage 2	355	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 338.4	2.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	698	-	47	341	-	-
HCM Lane V/C Ratio	0.252	-	2.732	0.82	-	-
HCM Control Delay (s)	11.9	0	$ 967.4	49.4	-	-
HCM Lane LOS	B	A	F	E	-	-
HCM 95th %tile Q(veh)	1	-	13.7	7.1	-	-

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)	8	0	13	110	0	98	41	654	46	17	922	13
Future Volume (veh/h)	8	0	13	110	0	98	41	654	46	17	922	13
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	9	0	15	125	0	111	47	743	52	19	1048	15
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	27	0	45	234	0	209	113	853	723	65	1537	22
Arrive On Green	0.04	0.00	0.04	0.13	0.00	0.13	0.06	0.46	0.46	0.04	0.43	0.43
Sat Flow, veh/h	620	0	1033	1781	0	1585	1781	1870	1585	1781	3587	51
Grp Volume(v), veh/h	24	0	0	125	0	111	47	743	52	19	519	544
Grp Sat Flow(s),veh/h/ln	1653	0	0	1781	0	1585	1781	1870	1585	1781	1777	1861
Q Serve(g_s), s	0.8	0.0	0.0	3.9	0.0	3.9	1.5	21.4	1.1	0.6	14.1	14.1
Cycle Q Clear(g_c), s	0.8	0.0	0.0	3.9	0.0	3.9	1.5	21.4	1.1	0.6	14.1	14.1
Prop In Lane	0.37		0.62	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	73	0	0	234	0	209	113	853	723	65	761	798
V/C Ratio(X)	0.33	0.00	0.00	0.53	0.00	0.53	0.42	0.87	0.07	0.29	0.68	0.68
Avail Cap(c_a), veh/h	805	0	0	239	0	213	248	1096	929	248	1041	1090
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.6	0.0	0.0	24.2	0.0	24.2	26.8	14.6	9.1	28.0	13.7	13.7
Incr Delay (d2), s/veh	2.6	0.0	0.0	2.2	0.0	2.4	2.4	6.4	0.0	2.5	1.1	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	1.7	0.0	1.5	0.7	8.2	0.3	0.3	4.6	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.2	0.0	0.0	26.3	0.0	26.6	29.3	21.0	9.2	30.5	14.8	14.8
LnGrp LOS	C	A	A	C	A	C	C	C	A	C	B	B
Approach Vol, veh/h		24			236			842			1082	
Approach Delay, s/veh		30.2			26.5			20.7			15.1	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.4	32.6		8.1	8.0	30.9		12.5				
Change Period (Y+Rc), s	* 4.2	5.4		5.5	* 4.2	5.4		4.7				
Max Green Setting (Gmax), s	* 8.3	34.9		29.0	* 8.3	34.9		8.0				
Max Q Clear Time (g_c+I1), s	2.6	23.4		2.8	3.5	16.1		5.9				
Green Ext Time (p_c), s	0.0	3.8		0.1	0.0	6.2		0.2				

Intersection Summary		
HCM 6th Ctrl Delay		18.7
HCM 6th LOS		B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

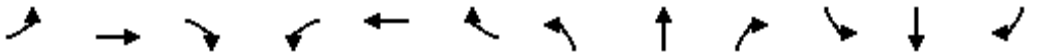
Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1064	7	38	741	7	5
Future Vol, veh/h	1064	7	38	741	7	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1132	7	40	788	7	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1139	0	1610	570
Stage 1	-	-	-	-	1136	-
Stage 2	-	-	-	-	474	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	609	-	95	465
Stage 1	-	-	-	-	268	-
Stage 2	-	-	-	-	592	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	609	-	89	465
Mov Cap-2 Maneuver	-	-	-	-	89	-
Stage 1	-	-	-	-	268	-
Stage 2	-	-	-	-	553	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	34.7
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	134	-	-	609	-
HCM Lane V/C Ratio	0.095	-	-	0.066	-
HCM Control Delay (s)	34.7	-	-	11.3	-
HCM Lane LOS	D	-	-	B	-
HCM 95th %tile Q(veh)	0.3	-	-	0.2	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	912	74	36	614	81	42	3	22	54	3	35
Future Volume (veh/h)	55	912	74	36	614	81	42	3	22	54	3	35
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	61	1013	82	40	682	90	47	3	24	60	3	39
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	137	1206	98	89	1197	534	133	21	166	175	14	186
Arrive On Green	0.08	0.36	0.36	0.05	0.34	0.34	0.07	0.12	0.12	0.10	0.13	0.13
Sat Flow, veh/h	1781	3329	269	1781	3554	1585	1781	179	1433	1781	114	1488
Grp Volume(v), veh/h	61	541	554	40	682	90	47	0	27	60	0	42
Grp Sat Flow(s),veh/h/ln	1781	1777	1822	1781	1777	1585	1781	0	1612	1781	0	1603
Q Serve(g_s), s	1.8	15.4	15.4	1.2	8.7	2.2	1.4	0.0	0.8	1.7	0.0	1.3
Cycle Q Clear(g_c), s	1.8	15.4	15.4	1.2	8.7	2.2	1.4	0.0	0.8	1.7	0.0	1.3
Prop In Lane	1.00		0.15	1.00		1.00	1.00		0.89	1.00		0.93
Lane Grp Cap(c), veh/h	137	643	660	89	1197	534	133	0	187	175	0	200
V/C Ratio(X)	0.44	0.84	0.84	0.45	0.57	0.17	0.35	0.00	0.14	0.34	0.00	0.21
Avail Cap(c_a), veh/h	230	710	728	197	1361	607	259	0	1024	365	0	1091
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.3	16.1	16.1	25.4	15.0	12.8	24.2	0.0	21.9	23.2	0.0	21.7
Incr Delay (d2), s/veh	2.2	8.3	8.1	3.5	0.4	0.1	1.6	0.0	0.4	1.2	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	6.3	6.4	0.5	2.9	0.7	0.6	0.0	0.3	0.7	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.5	24.4	24.2	29.0	15.4	13.0	25.8	0.0	22.2	24.3	0.0	22.2
LnGrp LOS	C	C	C	C	B	B	C	A	C	C	A	C
Approach Vol, veh/h		1156			812			74			102	
Approach Delay, s/veh		24.4			15.8			24.5			23.4	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.2	25.4	9.6	12.9	8.6	23.9	10.1	12.4
Change Period (Y+Rc), s	4.5	5.4	5.5	6.0	4.4	5.4	* 4.7	6.0
Max Green Setting (Gmax), s	6.1	22.0	8.0	37.5	7.1	21.1	* 11	35.0
Max Q Clear Time (g_c+I1), s	3.2	17.4	3.4	3.3	3.8	10.7	3.7	2.8
Green Ext Time (p_c), s	0.0	2.6	0.0	0.2	0.0	3.3	0.1	0.1

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

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	13	59	6	33	83
Future Vol, veh/h	4	13	59	6	33	83
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	15	69	7	39	98

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	249	73	0	0	76	0
Stage 1	73	-	-	-	-	-
Stage 2	176	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	739	989	-	-	1523	-
Stage 1	950	-	-	-	-	-
Stage 2	855	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	719	989	-	-	1523	-
Mov Cap-2 Maneuver	719	-	-	-	-	-
Stage 1	950	-	-	-	-	-
Stage 2	832	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	2.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	909	1523	-
HCM Lane V/C Ratio	-	-	0.022	0.025	-
HCM Control Delay (s)	-	-	9	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	365	361	168	402	0	766	217
Future Volume (veh/h)	365	361	168	402	0	766	217
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	392	388	181	432		824	233
Peak Hour Factor	0.93	0.93	0.93	0.93		0.93	0.93
Percent Heavy Veh, %	2	2	2	2		2	2
Cap, veh/h	650	910	246	2057		1238	552
Arrive On Green	0.19	0.19	0.14	0.58		0.35	0.35
Sat Flow, veh/h	3456	2790	1781	3647		3647	1585
Grp Volume(v), veh/h	392	388	181	432		824	233
Grp Sat Flow(s),veh/h/ln	1728	1395	1781	1777		1777	1585
Q Serve(g_s), s	5.6	5.9	5.3	3.2		10.6	6.1
Cycle Q Clear(g_c), s	5.6	5.9	5.3	3.2		10.6	6.1
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	650	910	246	2057		1238	552
V/C Ratio(X)	0.60	0.43	0.74	0.21		0.67	0.42
Avail Cap(c_a), veh/h	1150	1314	329	2589		2261	1008
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	20.1	14.3	22.4	5.5		14.9	13.5
Incr Delay (d2), s/veh	0.9	0.3	5.7	0.1		0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	4.9	2.3	0.7		3.4	1.8
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	21.0	14.6	28.0	5.5		15.6	14.0
LnGrp LOS	C	B	C	A		B	B
Approach Vol, veh/h	780			613		1057	
Approach Delay, s/veh	17.8			12.2		15.2	
Approach LOS	B			B		B	

Timer - Assigned Phs		2		4	5	6	
Phs Duration (G+Y+Rc), s		37.4		16.7	12.5	24.9	
Change Period (Y+Rc), s		* 6.1		6.5	5.0	* 6.1	
Max Green Setting (Gmax), s		* 39		18.0	10.0	* 34	
Max Q Clear Time (g_c+I1), s		5.2		7.9	7.3	12.6	
Green Ext Time (p_c), s		2.9		2.3	0.1	6.2	

Intersection Summary	
HCM 6th Ctrl Delay	15.3
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

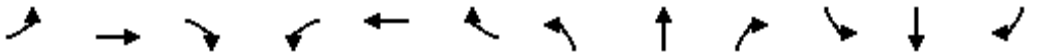
Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	102	156	82	34	4
Future Vol, veh/h	2	102	156	82	34	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	123	188	99	41	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	287	0	-	0	365	238
Stage 1	-	-	-	-	238	-
Stage 2	-	-	-	-	127	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1275	-	-	-	635	801
Stage 1	-	-	-	-	802	-
Stage 2	-	-	-	-	899	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1275	-	-	-	634	801
Mov Cap-2 Maneuver	-	-	-	-	634	-
Stage 1	-	-	-	-	800	-
Stage 2	-	-	-	-	899	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	11
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1275	-	-	-	648
HCM Lane V/C Ratio	0.002	-	-	-	0.071
HCM Control Delay (s)	7.8	0	-	-	11
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	23	111	85	34	23	198	666	103	14	368	23
Future Volume (veh/h)	8	23	111	85	34	23	198	666	103	14	368	23
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	9	26	123	94	38	26	220	740	114	16	409	26
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	62	211	179	349	512	434	233	934	144	24	629	40
Arrive On Green	0.03	0.11	0.11	0.20	0.27	0.27	0.13	0.30	0.30	0.01	0.19	0.19
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3086	475	1781	3393	215
Grp Volume(v), veh/h	9	26	123	94	38	26	220	426	428	16	214	221
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1785	1781	1777	1832
Q Serve(g_s), s	0.3	0.8	4.6	2.7	0.9	0.7	7.5	13.4	13.4	0.5	6.8	6.8
Cycle Q Clear(g_c), s	0.3	0.8	4.6	2.7	0.9	0.7	7.5	13.4	13.4	0.5	6.8	6.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.27	1.00		0.12
Lane Grp Cap(c), veh/h	62	211	179	349	512	434	233	538	540	24	329	340
V/C Ratio(X)	0.15	0.12	0.69	0.27	0.07	0.06	0.94	0.79	0.79	0.66	0.65	0.65
Avail Cap(c_a), veh/h	452	919	779	452	919	779	233	672	675	102	541	558
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	28.6	24.4	26.1	20.8	16.4	16.4	26.3	19.5	19.5	30.0	23.0	23.1
Incr Delay (d2), s/veh	1.1	0.3	4.6	0.4	0.1	0.1	43.2	5.1	5.1	26.5	2.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.3	1.9	1.1	0.4	0.3	5.7	5.5	5.5	0.4	2.7	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.7	24.6	30.7	21.3	16.5	16.4	69.5	24.7	24.7	56.4	25.2	25.2
LnGrp LOS	C	C	C	C	B	B	E	C	C	E	C	C
Approach Vol, veh/h		158			158			1074			451	
Approach Delay, s/veh		29.6			19.3			33.9			26.3	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	24.9	16.0	13.4	14.0	17.7	6.1	23.2
Change Period (Y+Rc), s	6.0	6.4	4.0	6.5	6.0	6.4	4.0	6.5
Max Green Setting (Gmax), s	3.5	23.1	15.5	30.0	8.0	18.6	15.5	30.0
Max Q Clear Time (g_c+I1), s	2.5	15.4	4.7	6.6	9.5	8.8	2.3	2.9
Green Ext Time (p_c), s	0.0	3.1	0.1	0.5	0.0	1.6	0.0	0.2

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

APPENDIX G

ANALYSIS WORKSHEETS – NEAR-TERM + PROJECT

Intersection	
Int Delay, s/veh	35.1

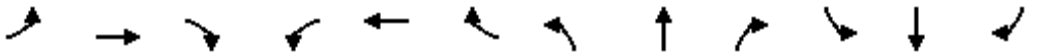
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	100	160	263	312	435	237
Future Vol, veh/h	100	160	263	312	435	237
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	114	182	299	355	494	269

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1582	629	763	0	-	0
Stage 1	629	-	-	-	-	-
Stage 2	953	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	120	482	850	-	-	-
Stage 1	531	-	-	-	-	-
Stage 2	375	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 67	482	850	-	-	-
Mov Cap-2 Maneuver	~ 67	-	-	-	-	-
Stage 1	298	-	-	-	-	-
Stage 2	375	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	191.7	5.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	850	-	67	482	-	-
HCM Lane V/C Ratio	0.352	-	1.696	0.377	-	-
HCM Control Delay (s)	11.5	0$	471.3	16.9	-	-
HCM Lane LOS	B	A	F	C	-	-
HCM 95th %tile Q(veh)	1.6	-	10.1	1.7	-	-

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)	10	0	23	82	0	41	23	524	103	93	492	7
Future Volume (veh/h)	10	0	23	82	0	41	23	524	103	93	492	7
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	11	0	26	93	0	47	26	595	117	106	559	8
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	30	0	71	214	0	190	73	712	603	196	1613	23
Arrive On Green	0.06	0.00	0.06	0.12	0.00	0.12	0.04	0.38	0.38	0.11	0.45	0.45
Sat Flow, veh/h	487	0	1152	1781	0	1585	1781	1870	1585	1781	3587	51
Grp Volume(v), veh/h	37	0	0	93	0	47	26	595	117	106	277	290
Grp Sat Flow(s),veh/h/ln	1639	0	0	1781	0	1585	1781	1870	1585	1781	1777	1861
Q Serve(g_s), s	1.3	0.0	0.0	2.9	0.0	1.6	0.9	17.4	3.0	3.4	6.1	6.1
Cycle Q Clear(g_c), s	1.3	0.0	0.0	2.9	0.0	1.6	0.9	17.4	3.0	3.4	6.1	6.1
Prop In Lane	0.30		0.70	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	100	0	0	214	0	190	73	712	603	196	799	837
V/C Ratio(X)	0.37	0.00	0.00	0.44	0.00	0.25	0.36	0.84	0.19	0.54	0.35	0.35
Avail Cap(c_a), veh/h	788	0	0	236	0	210	245	1082	917	245	1028	1077
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.2	0.0	0.0	24.7	0.0	24.1	28.2	17.0	12.5	25.4	10.8	10.8
Incr Delay (d2), s/veh	2.2	0.0	0.0	1.4	0.0	0.7	2.9	3.6	0.2	2.3	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	1.2	0.0	0.6	0.4	6.6	0.9	1.4	1.9	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.4	0.0	0.0	26.0	0.0	24.7	31.1	20.6	12.7	27.7	11.1	11.1
LnGrp LOS	C	A	A	C	A	C	C	C	B	C	B	B
Approach Vol, veh/h		37			140			738			673	
Approach Delay, s/veh		29.4			25.6			19.7			13.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.8	28.4		9.2	6.7	32.5		11.9				
Change Period (Y+Rc), s	* 4.2	5.4		5.5	* 4.2	5.4		4.7				
Max Green Setting (Gmax), s	* 8.3	34.9		29.0	* 8.3	34.9		8.0				
Max Q Clear Time (g_c+I1), s	5.4	19.4		3.3	2.9	8.1		4.9				
Green Ext Time (p_c), s	0.1	3.5		0.1	0.0	3.1		0.1				

Intersection Summary			
HCM 6th Ctrl Delay		17.9	
HCM 6th LOS		B	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

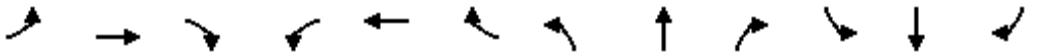
Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	683	7	26	626	9	8
Future Vol, veh/h	683	7	26	626	9	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	727	7	28	666	10	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	734	0	1120	367
Stage 1	-	-	-	-	731	-
Stage 2	-	-	-	-	389	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	867	-	200	630
Stage 1	-	-	-	-	437	-
Stage 2	-	-	-	-	654	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	867	-	194	630
Mov Cap-2 Maneuver	-	-	-	-	194	-
Stage 1	-	-	-	-	437	-
Stage 2	-	-	-	-	633	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	18.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	288	-	-	867	-
HCM Lane V/C Ratio	0.063	-	-	0.032	-
HCM Control Delay (s)	18.3	-	-	9.3	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	541	32	47	515	35	44	3	31	131	13	40
Future Volume (veh/h)	38	541	32	47	515	35	44	3	31	131	13	40
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	42	601	36	52	572	39	49	3	34	146	14	44
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	110	866	52	110	910	406	140	16	177	277	72	226
Arrive On Green	0.06	0.25	0.25	0.06	0.26	0.26	0.08	0.12	0.12	0.16	0.18	0.18
Sat Flow, veh/h	1781	3407	204	1781	3554	1585	1781	130	1475	1781	397	1248
Grp Volume(v), veh/h	42	313	324	52	572	39	49	0	37	146	0	58
Grp Sat Flow(s),veh/h/ln	1781	1777	1834	1781	1777	1585	1781	0	1605	1781	0	1646
Q Serve(g_s), s	1.1	8.0	8.1	1.4	7.2	0.9	1.3	0.0	1.0	3.8	0.0	1.5
Cycle Q Clear(g_c), s	1.1	8.0	8.1	1.4	7.2	0.9	1.3	0.0	1.0	3.8	0.0	1.5
Prop In Lane	1.00		0.11	1.00		1.00	1.00		0.92	1.00		0.76
Lane Grp Cap(c), veh/h	110	452	466	110	910	406	140	0	193	277	0	298
V/C Ratio(X)	0.38	0.69	0.69	0.47	0.63	0.10	0.35	0.00	0.19	0.53	0.00	0.19
Avail Cap(c_a), veh/h	251	775	800	215	1487	663	283	0	1114	399	0	1224
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.7	17.0	17.0	22.9	16.6	14.3	22.0	0.0	20.0	19.6	0.0	17.5
Incr Delay (d2), s/veh	2.2	1.9	1.9	3.2	0.7	0.1	1.5	0.0	0.5	1.6	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	0.5	2.9	3.0	0.6	2.4	0.3	0.6	0.0	0.4	1.6	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.9	18.9	18.9	26.0	17.4	14.4	23.5	0.0	20.4	21.2	0.0	17.8
LnGrp LOS	C	B	B	C	B	B	C	A	C	C	A	B
Approach Vol, veh/h		679			663			86			204	
Approach Delay, s/veh		19.3			17.9			22.2			20.2	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	18.2	9.5	15.1	7.5	18.3	12.5	12.1
Change Period (Y+Rc), s	4.5	5.4	5.5	6.0	4.4	5.4	* 4.7	6.0
Max Green Setting (Gmax), s	6.1	22.0	8.0	37.5	7.1	21.1	* 11	35.0
Max Q Clear Time (g_c+I1), s	3.4	10.1	3.3	3.5	3.1	9.2	5.8	3.0
Green Ext Time (p_c), s	0.0	2.8	0.0	0.3	0.0	2.8	0.2	0.2

Intersection Summary	
HCM 6th Ctrl Delay	19.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	27	55	5	15	68
Future Vol, veh/h	8	27	55	5	15	68
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	32	65	6	18	80

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	184	68	0	0	71	0
Stage 1	68	-	-	-	-	-
Stage 2	116	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	805	995	-	-	1529	-
Stage 1	955	-	-	-	-	-
Stage 2	909	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	795	995	-	-	1529	-
Mov Cap-2 Maneuver	795	-	-	-	-	-
Stage 1	955	-	-	-	-	-
Stage 2	898	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	1.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	941	1529	-
HCM Lane V/C Ratio	-	-	0.044	0.012	-
HCM Control Delay (s)	-	-	9	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	251	94	126	358	0	431	296
Future Volume (veh/h)	251	94	126	358	0	431	296
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	270	101	135	385		463	318
Peak Hour Factor	0.93	0.93	0.93	0.93		0.93	0.93
Percent Heavy Veh, %	2	2	2	2		2	2
Cap, veh/h	594	878	254	1972		1080	482
Arrive On Green	0.17	0.17	0.14	0.55		0.30	0.30
Sat Flow, veh/h	3456	2790	1781	3647		3647	1585
Grp Volume(v), veh/h	270	101	135	385		463	318
Grp Sat Flow(s),veh/h/ln	1728	1395	1781	1777		1777	1585
Q Serve(g_s), s	3.2	1.2	3.2	2.5		4.8	8.1
Cycle Q Clear(g_c), s	3.2	1.2	3.2	2.5		4.8	8.1
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	594	878	254	1972		1080	482
V/C Ratio(X)	0.45	0.12	0.53	0.20		0.43	0.66
Avail Cap(c_a), veh/h	1348	1486	386	3035		2650	1182
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	17.2	11.2	18.3	5.1		12.9	14.0
Incr Delay (d2), s/veh	0.5	0.1	1.7	0.0		0.3	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	1.2	0.5		1.5	2.3
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	17.7	11.3	20.1	5.2		13.1	15.5
LnGrp LOS	B	B	C	A		B	B
Approach Vol, veh/h	371			520		781	
Approach Delay, s/veh	16.0			9.0		14.1	
Approach LOS	B			A		B	

Timer - Assigned Phs		2		4	5	6	
Phs Duration (G+Y+Rc), s		31.7		14.4	11.6	20.1	
Change Period (Y+Rc), s		* 6.1		6.5	5.0	* 6.1	
Max Green Setting (Gmax), s		* 39		18.0	10.0	* 34	
Max Q Clear Time (g_c+I1), s		4.5		5.2	5.2	10.1	
Green Ext Time (p_c), s		2.5		1.1	0.1	4.0	

Intersection Summary	
HCM 6th Ctrl Delay	12.9
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

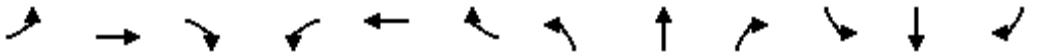
Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	191	69	49	107	6
Future Vol, veh/h	0	191	69	49	107	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	230	83	59	129	7

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	142	0	-	0	343	113
Stage 1	-	-	-	-	113	-
Stage 2	-	-	-	-	230	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1441	-	-	-	653	940
Stage 1	-	-	-	-	912	-
Stage 2	-	-	-	-	808	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1441	-	-	-	653	940
Mov Cap-2 Maneuver	-	-	-	-	653	-
Stage 1	-	-	-	-	912	-
Stage 2	-	-	-	-	808	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1441	-	-	-	664
HCM Lane V/C Ratio	-	-	-	-	0.205
HCM Control Delay (s)	0	-	-	-	11.8
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.8



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	17	238	86	13	19	159	351	118	13	393	7
Future Volume (veh/h)	6	17	238	86	13	19	159	351	118	13	393	7
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	7	19	264	96	14	21	177	390	131	14	437	8
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	49	377	319	326	668	566	207	712	236	21	599	11
Arrive On Green	0.03	0.20	0.20	0.18	0.36	0.36	0.12	0.27	0.27	0.01	0.17	0.17
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	2621	870	1781	3570	65
Grp Volume(v), veh/h	7	19	264	96	14	21	177	263	258	14	217	228
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1714	1781	1777	1859
Q Serve(g_s), s	0.3	0.6	11.0	3.2	0.3	0.6	6.7	8.7	8.9	0.5	8.0	8.0
Cycle Q Clear(g_c), s	0.3	0.6	11.0	3.2	0.3	0.6	6.7	8.7	8.9	0.5	8.0	8.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.51	1.00		0.04
Lane Grp Cap(c), veh/h	49	377	319	326	668	566	207	483	466	21	298	312
V/C Ratio(X)	0.14	0.05	0.83	0.29	0.02	0.04	0.86	0.54	0.55	0.66	0.73	0.73
Avail Cap(c_a), veh/h	400	813	689	400	813	689	207	595	574	90	479	501
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	32.8	22.2	26.4	24.3	14.4	14.5	29.9	21.5	21.5	33.9	27.2	27.2
Incr Delay (d2), s/veh	1.3	0.1	5.4	0.5	0.0	0.0	28.2	1.0	1.0	29.6	3.4	3.3
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	0.2	4.5	1.4	0.1	0.2	4.3	3.4	3.4	0.4	3.4	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.1	22.3	31.8	24.8	14.4	14.5	58.1	22.4	22.6	63.5	30.6	30.5
LnGrp LOS	C	C	C	C	B	B	E	C	C	E	C	C
Approach Vol, veh/h		290			131			698			459	
Approach Delay, s/veh		31.3			22.1			31.5			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	6.8	25.2	16.6	20.4	14.0	18.0	5.9	31.1
Change Period (Y+Rc), s	6.0	6.4	4.0	6.5	6.0	6.4	4.0	6.5
Max Green Setting (Gmax), s	3.5	23.1	15.5	30.0	8.0	18.6	15.5	30.0
Max Q Clear Time (g_c+I1), s	2.5	10.9	5.2	13.0	8.7	10.0	2.3	2.6
Green Ext Time (p_c), s	0.0	2.3	0.1	0.9	0.0	1.6	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	30.7
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	64.8

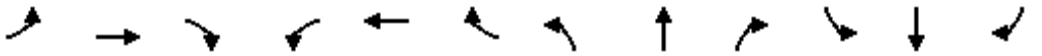
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	113	249	156	574	703	173
Future Vol, veh/h	113	249	156	574	703	173
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	128	283	177	652	799	197

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1904	898	996	0	-	0
Stage 1	898	-	-	-	-	-
Stage 2	1006	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 76	338	695	-	-	-
Stage 1	398	-	-	-	-	-
Stage 2	353	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 46	338	695	-	-	-
Mov Cap-2 Maneuver	~ 46	-	-	-	-	-
Stage 1	239	-	-	-	-	-
Stage 2	353	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s$	347.1	2.6	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	695	-	46	338	-	-
HCM Lane V/C Ratio	0.255	-	2.792	0.837	-	-
HCM Control Delay (s)	11.9	0	$ 997	52.2	-	-
HCM Lane LOS	B	A	F	F	-	-
HCM 95th %tile Q(veh)	1	-	13.8	7.4	-	-

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)	8	0	13	110	0	98	41	657	46	17	930	13
Future Volume (veh/h)	8	0	13	110	0	98	41	657	46	17	930	13
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	9	0	15	125	0	111	47	747	52	19	1057	15
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	27	0	45	234	0	208	113	856	725	65	1543	22
Arrive On Green	0.04	0.00	0.04	0.13	0.00	0.13	0.06	0.46	0.46	0.04	0.43	0.43
Sat Flow, veh/h	620	0	1033	1781	0	1585	1781	1870	1585	1781	3587	51
Grp Volume(v), veh/h	24	0	0	125	0	111	47	747	52	19	524	548
Grp Sat Flow(s),veh/h/ln	1653	0	0	1781	0	1585	1781	1870	1585	1781	1777	1861
Q Serve(g_s), s	0.8	0.0	0.0	3.9	0.0	3.9	1.5	21.6	1.1	0.6	14.2	14.2
Cycle Q Clear(g_c), s	0.8	0.0	0.0	3.9	0.0	3.9	1.5	21.6	1.1	0.6	14.2	14.2
Prop In Lane	0.37		0.62	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	73	0	0	234	0	208	113	856	725	65	764	801
V/C Ratio(X)	0.33	0.00	0.00	0.54	0.00	0.53	0.42	0.87	0.07	0.29	0.68	0.68
Avail Cap(c_a), veh/h	802	0	0	238	0	212	247	1092	925	247	1037	1087
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.7	0.0	0.0	24.3	0.0	24.3	26.9	14.7	9.1	28.1	13.8	13.8
Incr Delay (d2), s/veh	2.6	0.0	0.0	2.2	0.0	2.5	2.4	6.6	0.0	2.5	1.1	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	0.4	0.0	0.0	1.7	0.0	1.5	0.7	8.4	0.3	0.3	4.6	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.3	0.0	0.0	26.5	0.0	26.7	29.4	21.2	9.1	30.6	14.9	14.8
LnGrp LOS	C	A	A	C	A	C	C	C	A	C	B	B
Approach Vol, veh/h		24			236			846			1091	
Approach Delay, s/veh		30.3			26.6			20.9			15.1	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.4	32.7		8.1	8.0	31.1		12.5				
Change Period (Y+Rc), s	* 4.2	5.4		5.5	* 4.2	5.4		4.7				
Max Green Setting (Gmax), s	* 8.3	34.9		29.0	* 8.3	34.9		8.0				
Max Q Clear Time (g_c+I1), s	2.6	23.6		2.8	3.5	16.2		5.9				
Green Ext Time (p_c), s	0.0	3.8		0.1	0.0	6.2		0.2				

Intersection Summary		
HCM 6th Ctrl Delay		18.8
HCM 6th LOS		B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

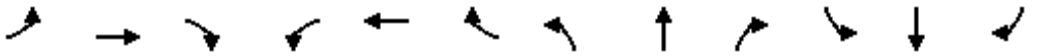
Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1072	7	46	744	7	5
Future Vol, veh/h	1072	7	46	744	7	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1140	7	49	791	7	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1147	0	1638	574
Stage 1	-	-	-	-	1144	-
Stage 2	-	-	-	-	494	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	605	-	91	462
Stage 1	-	-	-	-	266	-
Stage 2	-	-	-	-	579	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	605	-	84	462
Mov Cap-2 Maneuver	-	-	-	-	84	-
Stage 1	-	-	-	-	266	-
Stage 2	-	-	-	-	532	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	36.5
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	127	-	-	605	-
HCM Lane V/C Ratio	0.101	-	-	0.081	-
HCM Control Delay (s)	36.5	-	-	11.5	-
HCM Lane LOS	E	-	-	B	-
HCM 95th %tile Q(veh)	0.3	-	-	0.3	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	918	76	36	627	81	47	3	22	54	3	35
Future Volume (veh/h)	63	918	76	36	627	81	47	3	22	54	3	35
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	70	1020	84	40	697	90	52	3	24	60	3	39
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	148	1204	99	89	1175	524	141	22	172	174	14	185
Arrive On Green	0.08	0.36	0.36	0.05	0.33	0.33	0.08	0.12	0.12	0.10	0.12	0.12
Sat Flow, veh/h	1781	3324	274	1781	3554	1585	1781	179	1433	1781	114	1488
Grp Volume(v), veh/h	70	545	559	40	697	90	52	0	27	60	0	42
Grp Sat Flow(s),veh/h/ln	1781	1777	1821	1781	1777	1585	1781	0	1612	1781	0	1603
Q Serve(g_s), s	2.1	15.7	15.7	1.2	9.1	2.2	1.5	0.0	0.8	1.8	0.0	1.3
Cycle Q Clear(g_c), s	2.1	15.7	15.7	1.2	9.1	2.2	1.5	0.0	0.8	1.8	0.0	1.3
Prop In Lane	1.00		0.15	1.00		1.00	1.00		0.89	1.00		0.93
Lane Grp Cap(c), veh/h	148	643	660	89	1175	524	141	0	194	174	0	199
V/C Ratio(X)	0.47	0.85	0.85	0.45	0.59	0.17	0.37	0.00	0.14	0.34	0.00	0.21
Avail Cap(c_a), veh/h	227	702	720	195	1347	601	256	0	1014	362	0	1080
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.3	16.3	16.3	25.7	15.5	13.2	24.3	0.0	21.9	23.4	0.0	21.9
Incr Delay (d2), s/veh	2.3	8.9	8.7	3.6	0.5	0.2	1.6	0.0	0.3	1.2	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	6.5	6.7	0.5	3.0	0.8	0.7	0.0	0.3	0.8	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.7	25.2	25.1	29.3	16.1	13.4	25.9	0.0	22.2	24.6	0.0	22.4
LnGrp LOS	C	C	C	C	B	B	C	A	C	C	A	C
Approach Vol, veh/h		1174			827			79			102	
Approach Delay, s/veh		25.2			16.4			24.6			23.7	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	25.6	9.9	12.9	9.0	23.8	10.1	12.7
Change Period (Y+Rc), s	4.5	5.4	5.5	6.0	4.4	5.4	* 4.7	6.0
Max Green Setting (Gmax), s	6.1	22.0	8.0	37.5	7.1	21.1	* 11	35.0
Max Q Clear Time (g_c+I1), s	3.2	17.7	3.5	3.3	4.1	11.1	3.8	2.8
Green Ext Time (p_c), s	0.0	2.4	0.0	0.2	0.0	3.3	0.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	21.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	16	61	6	34	84
Future Vol, veh/h	4	16	61	6	34	84
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	19	72	7	40	99

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	255	76	0	0	79	0
Stage 1	76	-	-	-	-	-
Stage 2	179	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	734	985	-	-	1519	-
Stage 1	947	-	-	-	-	-
Stage 2	852	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	713	985	-	-	1519	-
Mov Cap-2 Maneuver	713	-	-	-	-	-
Stage 1	947	-	-	-	-	-
Stage 2	828	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	2.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	915	1519	-
HCM Lane V/C Ratio	-	-	0.026	0.026	-
HCM Control Delay (s)	-	-	9	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	373	361	168	407	0	769	220
Future Volume (veh/h)	373	361	168	407	0	769	220
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	401	388	181	438		827	237
Peak Hour Factor	0.93	0.93	0.93	0.93		0.93	0.93
Percent Heavy Veh, %	2	2	2	2		2	2
Cap, veh/h	651	910	246	2059		1241	553
Arrive On Green	0.19	0.19	0.14	0.58		0.35	0.35
Sat Flow, veh/h	3456	2790	1781	3647		3647	1585
Grp Volume(v), veh/h	401	388	181	438		827	237
Grp Sat Flow(s),veh/h/ln	1728	1395	1781	1777		1777	1585
Q Serve(g_s), s	5.8	5.9	5.3	3.2		10.7	6.2
Cycle Q Clear(g_c), s	5.8	5.9	5.3	3.2		10.7	6.2
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	651	910	246	2059		1241	553
V/C Ratio(X)	0.62	0.43	0.74	0.21		0.67	0.43
Avail Cap(c_a), veh/h	1147	1311	329	2582		2255	1006
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	20.2	14.3	22.4	5.5		15.0	13.5
Incr Delay (d2), s/veh	1.0	0.3	5.8	0.1		0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	2.3	0.8		3.5	1.8
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	21.2	14.6	28.2	5.5		15.6	14.0
LnGrp LOS	C	B	C	A		B	B
Approach Vol, veh/h	789			619		1064	
Approach Delay, s/veh	17.9			12.2		15.2	
Approach LOS	B			B		B	

Timer - Assigned Phs		2		4	5	6	
Phs Duration (G+Y+Rc), s		37.5		16.7	12.5	25.0	
Change Period (Y+Rc), s		* 6.1		6.5	5.0	* 6.1	
Max Green Setting (Gmax), s		* 39		18.0	10.0	* 34	
Max Q Clear Time (g_c+I1), s		5.2		7.9	7.3	12.7	
Green Ext Time (p_c), s		2.9		2.3	0.1	6.2	

Intersection Summary		
HCM 6th Ctrl Delay		15.3
HCM 6th LOS		B

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

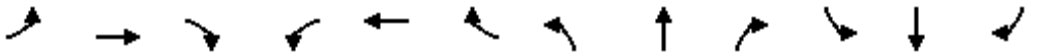
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	103	158	85	35	4
Future Vol, veh/h	2	103	158	85	35	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	124	190	102	42	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	292	0	-	0	369	241
Stage 1	-	-	-	-	241	-
Stage 2	-	-	-	-	128	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1270	-	-	-	631	798
Stage 1	-	-	-	-	799	-
Stage 2	-	-	-	-	898	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1270	-	-	-	630	798
Mov Cap-2 Maneuver	-	-	-	-	630	-
Stage 1	-	-	-	-	797	-
Stage 2	-	-	-	-	898	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	11
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1270	-	-	-	644
HCM Lane V/C Ratio	0.002	-	-	-	0.073
HCM Control Delay (s)	7.8	0	-	-	11
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	23	113	85	34	23	203	674	103	14	371	23
Future Volume (veh/h)	8	23	113	85	34	23	203	674	103	14	371	23
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	9	26	126	94	38	26	226	749	114	16	412	26
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	62	215	182	347	514	436	232	940	143	24	637	40
Arrive On Green	0.03	0.11	0.11	0.19	0.27	0.27	0.13	0.30	0.30	0.01	0.19	0.19
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3092	470	1781	3395	214
Grp Volume(v), veh/h	9	26	126	94	38	26	226	430	433	16	215	223
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1786	1781	1777	1832
Q Serve(g_s), s	0.3	0.8	4.7	2.8	0.9	0.7	7.8	13.7	13.7	0.5	6.9	6.9
Cycle Q Clear(g_c), s	0.3	0.8	4.7	2.8	0.9	0.7	7.8	13.7	13.7	0.5	6.9	6.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.26	1.00		0.12
Lane Grp Cap(c), veh/h	62	215	182	347	514	436	232	540	543	24	333	344
V/C Ratio(X)	0.15	0.12	0.69	0.27	0.07	0.06	0.97	0.80	0.80	0.66	0.64	0.65
Avail Cap(c_a), veh/h	449	913	773	449	913	773	232	668	671	101	538	554
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	28.8	24.4	26.2	21.0	16.5	16.4	26.6	19.6	19.6	30.2	23.1	23.1
Incr Delay (d2), s/veh	1.1	0.2	4.7	0.4	0.1	0.1	51.9	5.4	5.4	26.5	2.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.3	1.9	1.1	0.4	0.3	6.3	5.7	5.7	0.4	2.8	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.8	24.7	30.8	21.4	16.6	16.5	78.5	25.1	25.1	56.7	25.2	25.2
LnGrp LOS	C	C	C	C	B	B	E	C	C	E	C	C
Approach Vol, veh/h		161			158			1089			454	
Approach Delay, s/veh		29.8			19.5			36.2			26.3	
Approach LOS		C			B			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	25.1	16.0	13.6	14.0	17.9	6.1	23.4
Change Period (Y+Rc), s	6.0	6.4	4.0	6.5	6.0	6.4	4.0	6.5
Max Green Setting (Gmax), s	3.5	23.1	15.5	30.0	8.0	18.6	15.5	30.0
Max Q Clear Time (g_c+I1), s	2.5	15.7	4.8	6.7	9.8	8.9	2.3	2.9
Green Ext Time (p_c), s	0.0	3.0	0.1	0.5	0.0	1.7	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	31.8
HCM 6th LOS	C

APPENDIX H

ANALYSIS WORKSHEETS – LONG-TERM

Intersection	
Int Delay, s/veh	640.3

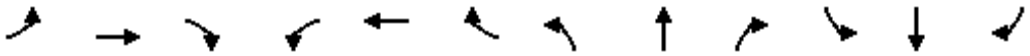
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	140	220	360	420	600	340
Future Vol, veh/h	140	220	360	420	600	340
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	159	250	409	477	682	386

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2170	875	1068	0	-	0
Stage 1	875	-	-	-	-	-
Stage 2	1295	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 51	349	653	-	-	-
Stage 1	408	-	-	-	-	-
Stage 2	257	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 8	349	653	-	-	-
Mov Cap-2 Maneuver	~ 8	-	-	-	-	-
Stage 1	~ 60	-	-	-	-	-
Stage 2	257	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 3680	8.9	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	653	-	8	349	-	-
HCM Lane V/C Ratio	0.626	-	19.886	0.716	-	-
HCM Control Delay (s)	19.3	$ 9	403.9	37.5	-	-
HCM Lane LOS	C	A	F	E	-	-
HCM 95th %tile Q(veh)	4.4	-	21.6	5.3	-	-

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)	10	0	30	140	0	70	30	630	180	160	600	10
Future Volume (veh/h)	10	0	30	140	0	70	30	630	180	160	600	10
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	11	0	34	159	0	80	34	716	205	182	682	11
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	26	0	81	200	0	178	86	799	677	208	1773	29
Arrive On Green	0.07	0.00	0.07	0.11	0.00	0.11	0.05	0.43	0.43	0.12	0.50	0.50
Sat Flow, veh/h	398	0	1231	1781	0	1585	1781	1870	1585	1781	3579	58
Grp Volume(v), veh/h	45	0	0	159	0	80	34	716	205	182	339	354
Grp Sat Flow(s),veh/h/ln	1629	0	0	1781	0	1585	1781	1870	1585	1781	1777	1860
Q Serve(g_s), s	1.9	0.0	0.0	6.2	0.0	3.4	1.3	25.3	6.1	7.2	8.5	8.5
Cycle Q Clear(g_c), s	1.9	0.0	0.0	6.2	0.0	3.4	1.3	25.3	6.1	7.2	8.5	8.5
Prop In Lane	0.24		0.76	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	108	0	0	200	0	178	86	799	677	208	880	922
V/C Ratio(X)	0.42	0.00	0.00	0.79	0.00	0.45	0.40	0.90	0.30	0.88	0.38	0.38
Avail Cap(c_a), veh/h	663	0	0	200	0	178	208	916	776	208	880	922
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.9	0.0	0.0	30.8	0.0	29.6	32.9	18.9	13.4	31.0	11.2	11.2
Incr Delay (d2), s/veh	2.6	0.0	0.0	19.5	0.0	1.8	3.0	10.5	0.2	31.7	0.3	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	0.8	0.0	0.0	3.6	0.0	1.3	0.6	11.4	1.9	4.7	2.7	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.5	0.0	0.0	50.4	0.0	31.3	35.9	29.4	13.7	62.7	11.5	11.5
LnGrp LOS	C	A	A	D	A	C	D	C	B	E	B	B
Approach Vol, veh/h		45			239			955			875	
Approach Delay, s/veh		34.5			44.0			26.3			22.1	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.5	35.8		10.2	7.6	40.7		12.7				
Change Period (Y+Rc), s	* 4.2	5.4		5.5	* 4.2	5.4		4.7				
Max Green Setting (Gmax), s	* 8.3	34.9		29.0	* 8.3	34.9		8.0				
Max Q Clear Time (g_c+I1), s	9.2	27.3		3.9	3.3	10.5		8.2				
Green Ext Time (p_c), s	0.0	3.1		0.2	0.0	3.9		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		26.7	
HCM 6th LOS		C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

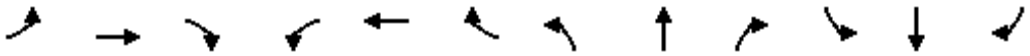
Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	770	10	10	700	10	10
Future Vol, veh/h	770	10	10	700	10	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	819	11	11	745	11	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	830	0	1220	415
Stage 1	-	-	-	-	825	-
Stage 2	-	-	-	-	395	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	798	-	172	586
Stage 1	-	-	-	-	391	-
Stage 2	-	-	-	-	650	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	798	-	170	586
Mov Cap-2 Maneuver	-	-	-	-	170	-
Stage 1	-	-	-	-	391	-
Stage 2	-	-	-	-	641	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	19.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	264	-	-	798	-
HCM Lane V/C Ratio	0.081	-	-	0.013	-
HCM Control Delay (s)	19.8	-	-	9.6	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	620	30	60	600	40	50	10	40	150	20	50
Future Volume (veh/h)	40	620	30	60	600	40	50	10	40	150	20	50
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	44	689	33	67	667	44	56	11	44	167	22	56
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	112	941	45	126	1003	447	150	40	160	273	82	209
Arrive On Green	0.06	0.27	0.27	0.07	0.28	0.28	0.08	0.12	0.12	0.15	0.18	0.18
Sat Flow, veh/h	1781	3452	165	1781	3554	1585	1781	327	1308	1781	467	1189
Grp Volume(v), veh/h	44	354	368	67	667	44	56	0	55	167	0	78
Grp Sat Flow(s),veh/h/ln	1781	1777	1841	1781	1777	1585	1781	0	1635	1781	0	1656
Q Serve(g_s), s	1.3	9.8	9.8	2.0	8.9	1.1	1.6	0.0	1.6	4.7	0.0	2.2
Cycle Q Clear(g_c), s	1.3	9.8	9.8	2.0	8.9	1.1	1.6	0.0	1.6	4.7	0.0	2.2
Prop In Lane	1.00		0.09	1.00		1.00	1.00		0.80	1.00		0.72
Lane Grp Cap(c), veh/h	112	484	502	126	1003	447	150	0	200	273	0	292
V/C Ratio(X)	0.39	0.73	0.73	0.53	0.66	0.10	0.37	0.00	0.28	0.61	0.00	0.27
Avail Cap(c_a), veh/h	234	724	750	201	1389	620	264	0	1060	373	0	1151
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.3	17.8	17.8	24.2	17.1	14.3	23.4	0.0	21.5	21.4	0.0	19.2
Incr Delay (d2), s/veh	2.3	2.2	2.1	3.5	0.8	0.1	1.5	0.0	0.7	2.2	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	3.5	3.7	0.8	3.1	0.4	0.7	0.0	0.6	2.0	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.6	20.0	19.9	27.7	17.9	14.4	24.9	0.0	22.3	23.6	0.0	19.7
LnGrp LOS	C	B	B	C	B	B	C	A	C	C	A	B
Approach Vol, veh/h		766			778			111			245	
Approach Delay, s/veh		20.3			18.5			23.6			22.3	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	20.1	10.0	15.5	7.8	20.6	13.0	12.6
Change Period (Y+Rc), s	4.5	5.4	5.5	6.0	4.4	5.4	* 4.7	6.0
Max Green Setting (Gmax), s	6.1	22.0	8.0	37.5	7.1	21.1	* 11	35.0
Max Q Clear Time (g_c+I1), s	4.0	11.8	3.6	4.2	3.3	10.9	6.7	3.6
Green Ext Time (p_c), s	0.0	2.9	0.0	0.5	0.0	3.1	0.2	0.3

Intersection Summary	
HCM 6th Ctrl Delay	20.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	30	70	10	20	90
Future Vol, veh/h	10	30	70	10	20	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	35	82	12	24	106

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	242	88	0	0	94	0
Stage 1	88	-	-	-	-	-
Stage 2	154	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	746	970	-	-	1500	-
Stage 1	935	-	-	-	-	-
Stage 2	874	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	733	970	-	-	1500	-
Mov Cap-2 Maneuver	733	-	-	-	-	-
Stage 1	935	-	-	-	-	-
Stage 2	859	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	1.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	897	1500	-
HCM Lane V/C Ratio	-	-	0.052	0.016	-
HCM Control Delay (s)	-	-	9.2	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	310	130	170	460	0	550	360
Future Volume (veh/h)	310	130	170	460	0	550	360
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	333	140	183	495		591	387
Peak Hour Factor	0.93	0.93	0.93	0.93		0.93	0.93
Percent Heavy Veh, %	2	2	2	2		2	2
Cap, veh/h	544	846	260	2111		1242	554
Arrive On Green	0.16	0.16	0.15	0.59		0.35	0.35
Sat Flow, veh/h	3456	2790	1781	3647		3647	1585
Grp Volume(v), veh/h	333	140	183	495		591	387
Grp Sat Flow(s),veh/h/ln	1728	1395	1781	1777		1777	1585
Q Serve(g_s), s	4.6	1.9	5.0	3.3		6.6	10.7
Cycle Q Clear(g_c), s	4.6	1.9	5.0	3.3		6.6	10.7
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	544	846	260	2111		1242	554
V/C Ratio(X)	0.61	0.17	0.70	0.23		0.48	0.70
Avail Cap(c_a), veh/h	1227	1397	351	2761		2411	1075
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	19.9	13.0	20.6	4.9		12.9	14.2
Incr Delay (d2), s/veh	1.1	0.1	4.0	0.1		0.3	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	2.1	0.7		2.0	3.1
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	21.0	13.0	24.6	4.9		13.1	15.8
LnGrp LOS	C	B	C	A		B	B
Approach Vol, veh/h	473			678		978	
Approach Delay, s/veh	18.7			10.2		14.2	
Approach LOS	B			B		B	

Timer - Assigned Phs		2		4	5	6	
Phs Duration (G+Y+Rc), s		36.2		14.5	12.4	23.8	
Change Period (Y+Rc), s		* 6.1		6.5	5.0	* 6.1	
Max Green Setting (Gmax), s		* 39		18.0	10.0	* 34	
Max Q Clear Time (g_c+I1), s		5.3		6.6	7.0	12.7	
Green Ext Time (p_c), s		3.3		1.3	0.1	5.1	

Intersection Summary	
HCM 6th Ctrl Delay	13.9
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

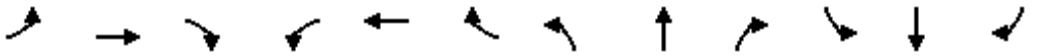
Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	200	70	50	110	10
Future Vol, veh/h	0	200	70	50	110	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	241	84	60	133	12

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	144	0	-	0	355	114
Stage 1	-	-	-	-	114	-
Stage 2	-	-	-	-	241	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1438	-	-	-	643	939
Stage 1	-	-	-	-	911	-
Stage 2	-	-	-	-	799	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1438	-	-	-	643	939
Mov Cap-2 Maneuver	-	-	-	-	643	-
Stage 1	-	-	-	-	911	-
Stage 2	-	-	-	-	799	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1438	-	-	-	660
HCM Lane V/C Ratio	-	-	-	-	0.219
HCM Control Delay (s)	0	-	-	-	12
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.8



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	20	250	90	20	30	170	450	130	20	500	10
Future Volume (veh/h)	10	20	250	90	20	30	170	450	130	20	500	10
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	11	22	278	100	22	33	189	500	144	22	556	11
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	73	390	330	315	644	546	193	784	225	31	701	14
Arrive On Green	0.04	0.21	0.21	0.18	0.34	0.34	0.11	0.29	0.29	0.02	0.20	0.20
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	2726	781	1781	3564	70
Grp Volume(v), veh/h	11	22	278	100	22	33	189	325	319	22	277	290
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1730	1781	1777	1858
Q Serve(g_s), s	0.4	0.7	12.4	3.6	0.6	1.0	7.8	11.8	11.9	0.9	11.0	11.0
Cycle Q Clear(g_c), s	0.4	0.7	12.4	3.6	0.6	1.0	7.8	11.8	11.9	0.9	11.0	11.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		0.04
Lane Grp Cap(c), veh/h	73	390	330	315	644	546	193	511	498	31	349	365
V/C Ratio(X)	0.15	0.06	0.84	0.32	0.03	0.06	0.98	0.64	0.64	0.72	0.79	0.79
Avail Cap(c_a), veh/h	374	759	644	374	759	644	193	555	541	84	447	468
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	34.2	23.4	28.1	26.5	16.1	16.2	32.9	22.9	23.0	36.1	28.3	28.3
Incr Delay (d2), s/veh	0.9	0.1	5.8	0.6	0.0	0.0	58.8	2.1	2.3	26.6	7.4	7.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.3	5.1	1.6	0.2	0.4	6.3	4.8	4.7	0.6	5.0	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.1	23.5	33.9	27.1	16.1	16.3	91.7	25.1	25.3	62.8	35.6	35.4
LnGrp LOS	D	C	C	C	B	B	F	C	C	E	D	D
Approach Vol, veh/h		311			155			833			589	
Approach Delay, s/veh		33.2			23.2			40.3			36.5	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	27.7	17.1	21.9	14.0	20.9	7.0	31.9
Change Period (Y+Rc), s	6.0	6.4	4.0	6.5	6.0	6.4	4.0	6.5
Max Green Setting (Gmax), s	3.5	23.1	15.5	30.0	8.0	18.6	15.5	30.0
Max Q Clear Time (g_c+I1), s	2.9	13.9	5.6	14.4	9.8	13.0	2.4	3.0
Green Ext Time (p_c), s	0.0	2.5	0.1	1.0	0.0	1.5	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	36.5
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	5274.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	160	340	210	790	960	250
Future Vol, veh/h	160	340	210	790	960	250
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	182	386	239	898	1091	284

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2609	1233	1375	0	-	0
Stage 1	1233	-	-	-	-	-
Stage 2	1376	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 27	~ 216	499	-	-	-
Stage 1	275	-	-	-	-	-
Stage 2	234	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 1	~ 216	499	-	-	-
Mov Cap-2 Maneuver	~ 1	-	-	-	-	-
Stage 1	~ 12	-	-	-	-	-
Stage 2	234	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 28581.9	3.9	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	499	-	1	216	-	-
HCM Lane V/C Ratio	0.478	-	181.818	1.789	-	-
HCM Control Delay (s)	18.6	0	$ 88445	$ 411	-	-
HCM Lane LOS	C	A	F	F	-	-
HCM 95th %tile Q(veh)	2.5	-	25.3	26.7	-	-

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)	10	0	20	190	0	170	50	800	80	30	1130	20
Future Volume (veh/h)	10	0	20	190	0	170	50	800	80	30	1130	20
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	11	0	23	216	0	193	57	909	91	34	1284	23
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	29	0	61	202	0	180	119	926	785	98	1727	31
Arrive On Green	0.06	0.00	0.06	0.11	0.00	0.11	0.07	0.50	0.50	0.06	0.48	0.48
Sat Flow, veh/h	532	0	1112	1781	0	1585	1781	1870	1585	1781	3572	64
Grp Volume(v), veh/h	34	0	0	216	0	193	57	909	91	34	639	668
Grp Sat Flow(s),veh/h/ln	1644	0	0	1781	0	1585	1781	1870	1585	1781	1777	1859
Q Serve(g_s), s	1.4	0.0	0.0	8.0	0.0	8.0	2.2	33.6	2.2	1.3	20.4	20.4
Cycle Q Clear(g_c), s	1.4	0.0	0.0	8.0	0.0	8.0	2.2	33.6	2.2	1.3	20.4	20.4
Prop In Lane	0.32		0.68	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	91	0	0	202	0	180	119	926	785	98	859	899
V/C Ratio(X)	0.37	0.00	0.00	1.07	0.00	1.07	0.48	0.98	0.12	0.35	0.74	0.74
Avail Cap(c_a), veh/h	676	0	0	202	0	180	210	926	785	210	880	921
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.1	0.0	0.0	31.2	0.0	31.2	31.7	17.5	9.5	32.1	14.7	14.7
Incr Delay (d2), s/veh	2.5	0.0	0.0	82.6	0.0	87.7	3.0	25.0	0.1	2.1	3.4	3.2
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	0.6	0.0	0.0	7.9	0.0	7.3	1.0	17.6	0.6	0.6	7.3	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.7	0.0	0.0	113.8	0.0	119.0	34.7	42.5	9.6	34.1	18.0	17.9
LnGrp LOS	C	A	A	F	A	F	C	D	A	C	B	B
Approach Vol, veh/h		34			409			1057			1341	
Approach Delay, s/veh		34.7			116.2			39.2			18.4	
Approach LOS		C			F			D			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.1	40.3		9.4	8.9	39.5		12.7				
Change Period (Y+Rc), s	* 4.2	5.4		5.5	* 4.2	5.4		4.7				
Max Green Setting (Gmax), s	* 8.3	34.9		29.0	* 8.3	34.9		8.0				
Max Q Clear Time (g_c+I1), s	3.3	35.6		3.4	4.2	22.4		10.0				
Green Ext Time (p_c), s	0.0	0.0		0.1	0.0	6.4		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		40.4	
HCM 6th LOS		D	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

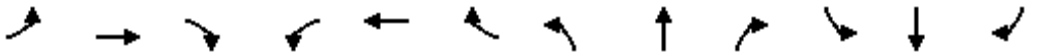
Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1200	10	40	840	10	10
Future Vol, veh/h	1200	10	40	840	10	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1277	11	43	894	11	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1288	0	1816	644
Stage 1	-	-	-	-	1283	-
Stage 2	-	-	-	-	533	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	534	-	69	416
Stage 1	-	-	-	-	224	-
Stage 2	-	-	-	-	553	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	534	-	63	416
Mov Cap-2 Maneuver	-	-	-	-	63	-
Stage 1	-	-	-	-	224	-
Stage 2	-	-	-	-	508	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	45.9
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	109	-	-	534	-
HCM Lane V/C Ratio	0.195	-	-	0.08	-
HCM Control Delay (s)	45.9	-	-	12.3	-
HCM Lane LOS	E	-	-	B	-
HCM 95th %tile Q(veh)	0.7	-	-	0.3	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1070	90	40	720	90	50	10	30	60	10	40
Future Volume (veh/h)	60	1070	90	40	720	90	50	10	30	60	10	40
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	67	1189	100	44	800	100	56	11	33	67	11	44
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	141	1243	104	93	1242	554	145	50	149	181	42	166
Arrive On Green	0.08	0.37	0.37	0.05	0.35	0.35	0.08	0.12	0.12	0.10	0.13	0.13
Sat Flow, veh/h	1781	3318	279	1781	3554	1585	1781	412	1236	1781	327	1308
Grp Volume(v), veh/h	67	636	653	44	800	100	56	0	44	67	0	55
Grp Sat Flow(s),veh/h/ln	1781	1777	1820	1781	1777	1585	1781	0	1648	1781	0	1635
Q Serve(g_s), s	2.1	20.5	20.6	1.4	11.1	2.6	1.8	0.0	1.4	2.1	0.0	1.8
Cycle Q Clear(g_c), s	2.1	20.5	20.6	1.4	11.1	2.6	1.8	0.0	1.4	2.1	0.0	1.8
Prop In Lane	1.00		0.15	1.00		1.00	1.00		0.75	1.00		0.80
Lane Grp Cap(c), veh/h	141	666	682	93	1242	554	145	0	199	181	0	208
V/C Ratio(X)	0.47	0.96	0.96	0.47	0.64	0.18	0.39	0.00	0.22	0.37	0.00	0.26
Avail Cap(c_a), veh/h	215	666	682	185	1277	569	243	0	982	343	0	1044
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.9	17.9	17.9	27.0	16.0	13.3	25.6	0.0	23.3	24.6	0.0	23.2
Incr Delay (d2), s/veh	2.5	24.3	24.5	3.7	1.1	0.2	1.7	0.0	0.6	1.2	0.0	0.7
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	0.9	11.1	11.4	0.6	3.8	0.9	0.8	0.0	0.6	0.9	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.3	42.2	42.4	30.7	17.1	13.4	27.2	0.0	23.9	25.9	0.0	23.8
LnGrp LOS	C	D	D	C	B	B	C	A	C	C	A	C
Approach Vol, veh/h		1356			944			100			122	
Approach Delay, s/veh		41.6			17.4			25.8			24.9	
Approach LOS		D			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	27.4	10.3	13.5	9.1	25.9	10.7	13.1
Change Period (Y+Rc), s	4.5	5.4	5.5	6.0	4.4	5.4	* 4.7	6.0
Max Green Setting (Gmax), s	6.1	22.0	8.0	37.5	7.1	21.1	* 11	35.0
Max Q Clear Time (g_c+I1), s	3.4	22.6	3.8	3.8	4.1	13.1	4.1	3.4
Green Ext Time (p_c), s	0.0	0.0	0.0	0.3	0.0	3.3	0.1	0.2

Intersection Summary	
HCM 6th Ctrl Delay	31.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	20	80	10	40	110
Future Vol, veh/h	10	20	80	10	40	110
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	24	94	12	47	129

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	323	100	0	0	106	0
Stage 1	100	-	-	-	-	-
Stage 2	223	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	671	956	-	-	1485	-
Stage 1	924	-	-	-	-	-
Stage 2	814	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	648	956	-	-	1485	-
Mov Cap-2 Maneuver	648	-	-	-	-	-
Stage 1	924	-	-	-	-	-
Stage 2	786	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.6	0	2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	825	1485	-
HCM Lane V/C Ratio	-	-	0.043	0.032	-
HCM Control Delay (s)	-	-	9.6	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	460	490	230	520	0	990	270
Future Volume (veh/h)	460	490	230	520	0	990	270
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	495	527	247	559		1065	290
Peak Hour Factor	0.93	0.93	0.93	0.93		0.93	0.93
Percent Heavy Veh, %	2	2	2	2		2	2
Cap, veh/h	727	991	258	2157		1384	617
Arrive On Green	0.21	0.21	0.14	0.61		0.39	0.39
Sat Flow, veh/h	3456	2790	1781	3647		3647	1585
Grp Volume(v), veh/h	495	527	247	559		1065	290
Grp Sat Flow(s),veh/h/ln	1728	1395	1781	1777		1777	1585
Q Serve(g_s), s	9.1	10.4	9.5	5.1		18.0	9.4
Cycle Q Clear(g_c), s	9.1	10.4	9.5	5.1		18.0	9.4
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	727	991	258	2157		1384	617
V/C Ratio(X)	0.68	0.53	0.96	0.26		0.77	0.47
Avail Cap(c_a), veh/h	902	1132	258	2157		1772	790
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	25.1	17.7	29.3	6.3		18.4	15.7
Incr Delay (d2), s/veh	1.5	0.4	44.0	0.1		1.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	8.4	6.9	1.4		6.5	3.0
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	26.6	18.1	73.3	6.4		20.0	16.3
LnGrp LOS	C	B	E	A		B	B
Approach Vol, veh/h	1022			806		1355	
Approach Delay, s/veh	22.2			26.9		19.2	
Approach LOS	C			C		B	

Timer - Assigned Phs		2		4	5	6	
Phs Duration (G+Y+Rc), s		48.0		21.0	15.0	33.0	
Change Period (Y+Rc), s		* 6.1		6.5	5.0	* 6.1	
Max Green Setting (Gmax), s		* 39		18.0	10.0	* 34	
Max Q Clear Time (g_c+I1), s		7.1		12.4	11.5	20.0	
Green Ext Time (p_c), s		3.8		2.2	0.0	6.9	

Intersection Summary	
HCM 6th Ctrl Delay	22.1
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

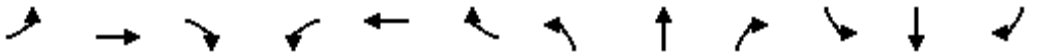
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	110	170	90	40	10
Future Vol, veh/h	0	110	170	90	40	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	133	205	108	48	12

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	313	0	-	0	392	259
Stage 1	-	-	-	-	259	-
Stage 2	-	-	-	-	133	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1247	-	-	-	612	780
Stage 1	-	-	-	-	784	-
Stage 2	-	-	-	-	893	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1247	-	-	-	612	780
Mov Cap-2 Maneuver	-	-	-	-	612	-
Stage 1	-	-	-	-	784	-
Stage 2	-	-	-	-	893	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1247	-	-	-	640
HCM Lane V/C Ratio	-	-	-	-	0.094
HCM Control Delay (s)	0	-	-	-	11.2
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	30	120	90	40	30	210	860	110	20	480	30
Future Volume (veh/h)	10	30	120	90	40	30	210	860	110	20	480	30
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	11	33	133	100	44	33	233	956	122	22	533	33
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	74	221	187	336	497	421	212	1060	135	31	791	49
Arrive On Green	0.04	0.12	0.12	0.19	0.27	0.27	0.12	0.33	0.33	0.02	0.23	0.23
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3170	404	1781	3399	210
Grp Volume(v), veh/h	11	33	133	100	44	33	233	536	542	22	278	288
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1798	1781	1777	1833
Q Serve(g_s), s	0.4	1.1	5.4	3.2	1.2	1.0	8.0	19.3	19.3	0.8	9.6	9.6
Cycle Q Clear(g_c), s	0.4	1.1	5.4	3.2	1.2	1.0	8.0	19.3	19.3	0.8	9.6	9.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		0.11
Lane Grp Cap(c), veh/h	74	221	187	336	497	421	212	594	601	31	413	426
V/C Ratio(X)	0.15	0.15	0.71	0.30	0.09	0.08	1.10	0.90	0.90	0.70	0.67	0.68
Avail Cap(c_a), veh/h	411	836	709	411	836	709	212	612	619	93	493	508
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.0	26.6	28.5	23.4	18.5	18.5	29.5	21.3	21.3	32.8	23.4	23.4
Incr Delay (d2), s/veh	0.9	0.3	4.9	0.5	0.1	0.1	90.1	16.4	16.3	24.9	2.8	2.8
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	0.2	0.5	2.3	1.4	0.5	0.4	8.5	9.7	9.8	0.5	3.9	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.9	26.9	33.4	23.9	18.6	18.6	119.7	37.7	37.6	57.7	26.2	26.2
LnGrp LOS	C	C	C	C	B	B	F	D	D	E	C	C
Approach Vol, veh/h		177			177			1311			588	
Approach Delay, s/veh		32.1			21.6			52.2			27.4	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.2	28.8	16.7	14.4	14.0	22.0	6.8	24.3
Change Period (Y+Rc), s	6.0	6.4	4.0	6.5	6.0	6.4	4.0	6.5
Max Green Setting (Gmax), s	3.5	23.1	15.5	30.0	8.0	18.6	15.5	30.0
Max Q Clear Time (g_c+I1), s	2.8	21.3	5.2	7.4	10.0	11.6	2.4	3.2
Green Ext Time (p_c), s	0.0	1.1	0.2	0.6	0.0	1.8	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	41.8
HCM 6th LOS	D

APPENDIX I

ANALYSIS WORKSHEETS – LONG-TERM + PROJECT

Intersection	
Int Delay, s/veh	732

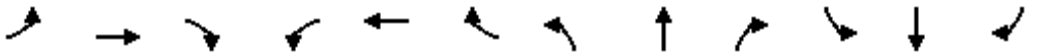
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	140	220	362	425	601	340
Future Vol, veh/h	140	220	362	425	601	340
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	159	250	411	483	683	386

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2181	876	1069	0	-	0
Stage 1	876	-	-	-	-	-
Stage 2	1305	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 51	348	652	-	-	-
Stage 1	407	-	-	-	-	-
Stage 2	254	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 7	348	652	-	-	-
Mov Cap-2 Maneuver	~ 7	-	-	-	-	-
Stage 1	~ 56	-	-	-	-	-
Stage 2	254	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, $	4226.1	9	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	652	-	7	348	-	-
HCM Lane V/C Ratio	0.631	-	22.727	0.718	-	-
HCM Control Delay (s)	19.5	$ 0	10807.8	37.8	-	-
HCM Lane LOS	C	A	F	E	-	-
HCM 95th %tile Q(veh)	4.5	-	21.8	5.3	-	-

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)	10	0	30	140	0	70	30	637	180	160	602	10
Future Volume (veh/h)	10	0	30	140	0	70	30	637	180	160	602	10
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	11	0	34	159	0	80	34	724	205	182	684	11
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	26	0	81	199	0	177	86	804	682	206	1782	29
Arrive On Green	0.07	0.00	0.07	0.11	0.00	0.11	0.05	0.43	0.43	0.12	0.50	0.50
Sat Flow, veh/h	398	0	1231	1781	0	1585	1781	1870	1585	1781	3579	58
Grp Volume(v), veh/h	45	0	0	159	0	80	34	724	205	182	339	356
Grp Sat Flow(s),veh/h/ln	1629	0	0	1781	0	1585	1781	1870	1585	1781	1777	1860
Q Serve(g_s), s	1.9	0.0	0.0	6.2	0.0	3.4	1.3	25.8	6.1	7.2	8.5	8.5
Cycle Q Clear(g_c), s	1.9	0.0	0.0	6.2	0.0	3.4	1.3	25.8	6.1	7.2	8.5	8.5
Prop In Lane	0.24		0.76	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	108	0	0	199	0	177	86	804	682	206	885	926
V/C Ratio(X)	0.42	0.00	0.00	0.80	0.00	0.45	0.40	0.90	0.30	0.88	0.38	0.38
Avail Cap(c_a), veh/h	659	0	0	199	0	177	206	911	772	206	885	926
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.1	0.0	0.0	31.0	0.0	29.8	33.1	19.0	13.4	31.2	11.2	11.2
Incr Delay (d2), s/veh	2.6	0.0	0.0	20.2	0.0	1.8	3.0	11.0	0.2	32.8	0.3	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	0.8	0.0	0.0	3.7	0.0	1.3	0.6	11.6	1.9	4.7	2.8	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.7	0.0	0.0	51.2	0.0	31.6	36.1	30.0	13.6	64.0	11.4	11.4
LnGrp LOS	C	A	A	D	A	C	D	C	B	E	B	B
Approach Vol, veh/h		45			239			963			877	
Approach Delay, s/veh		34.7			44.6			26.7			22.3	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.5	36.2		10.2	7.6	41.1		12.7				
Change Period (Y+Rc), s	* 4.2	5.4		5.5	* 4.2	5.4		4.7				
Max Green Setting (Gmax), s	* 8.3	34.9		29.0	* 8.3	34.9		8.0				
Max Q Clear Time (g_c+I1), s	9.2	27.8		3.9	3.3	10.5		8.2				
Green Ext Time (p_c), s	0.0	3.0		0.2	0.0	3.9		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		27.1	
HCM 6th LOS		C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

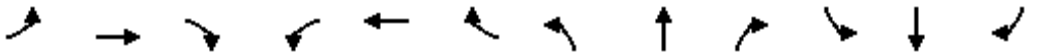
Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	772	10	26	707	10	10
Future Vol, veh/h	772	10	26	707	10	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	821	11	28	752	11	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	832	0	1259	416
Stage 1	-	-	-	-	827	-
Stage 2	-	-	-	-	432	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	796	-	163	585
Stage 1	-	-	-	-	390	-
Stage 2	-	-	-	-	622	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	796	-	157	585
Mov Cap-2 Maneuver	-	-	-	-	157	-
Stage 1	-	-	-	-	390	-
Stage 2	-	-	-	-	600	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	20.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	248	-	-	796	-
HCM Lane V/C Ratio	0.086	-	-	0.035	-
HCM Control Delay (s)	20.9	-	-	9.7	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	631	34	60	602	40	52	10	40	150	20	50
Future Volume (veh/h)	42	631	34	60	602	40	52	10	40	150	20	50
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	47	701	38	67	669	44	58	11	44	167	22	56
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	117	949	51	125	1008	449	153	40	159	271	81	206
Arrive On Green	0.07	0.28	0.28	0.07	0.28	0.28	0.09	0.12	0.12	0.15	0.17	0.17
Sat Flow, veh/h	1781	3428	186	1781	3554	1585	1781	327	1308	1781	467	1189
Grp Volume(v), veh/h	47	363	376	67	669	44	58	0	55	167	0	78
Grp Sat Flow(s),veh/h/ln	1781	1777	1837	1781	1777	1585	1781	0	1635	1781	0	1656
Q Serve(g_s), s	1.4	10.1	10.1	2.0	9.0	1.1	1.7	0.0	1.7	4.8	0.0	2.2
Cycle Q Clear(g_c), s	1.4	10.1	10.1	2.0	9.0	1.1	1.7	0.0	1.7	4.8	0.0	2.2
Prop In Lane	1.00		0.10	1.00		1.00	1.00		0.80	1.00		0.72
Lane Grp Cap(c), veh/h	117	492	509	125	1008	449	153	0	199	271	0	287
V/C Ratio(X)	0.40	0.74	0.74	0.54	0.66	0.10	0.38	0.00	0.28	0.62	0.00	0.27
Avail Cap(c_a), veh/h	233	719	743	200	1379	615	262	0	1053	370	0	1143
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.4	17.9	17.9	24.4	17.2	14.3	23.5	0.0	21.7	21.6	0.0	19.5
Incr Delay (d2), s/veh	2.2	2.3	2.2	3.5	0.8	0.1	1.5	0.0	0.7	2.3	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	3.7	3.8	0.9	3.1	0.4	0.7	0.0	0.6	2.0	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.6	20.1	20.1	27.9	17.9	14.4	25.0	0.0	22.4	23.8	0.0	20.0
LnGrp LOS	C	C	C	C	B	B	C	A	C	C	A	B
Approach Vol, veh/h		786			780			113			245	
Approach Delay, s/veh		20.5			18.6			23.8			22.6	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	20.5	10.2	15.4	8.0	20.8	13.0	12.6
Change Period (Y+Rc), s	4.5	5.4	5.5	6.0	4.4	5.4	* 4.7	6.0
Max Green Setting (Gmax), s	6.1	22.0	8.0	37.5	7.1	21.1	* 11	35.0
Max Q Clear Time (g_c+I1), s	4.0	12.1	3.7	4.2	3.4	11.0	6.8	3.7
Green Ext Time (p_c), s	0.0	2.9	0.0	0.5	0.0	3.1	0.2	0.3

Intersection Summary	
HCM 6th Ctrl Delay	20.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	31	71	10	22	92
Future Vol, veh/h	10	31	71	10	22	92
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	36	84	12	26	108

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	250	90	0	0	96	0
Stage 1	90	-	-	-	-	-
Stage 2	160	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	739	968	-	-	1498	-
Stage 1	934	-	-	-	-	-
Stage 2	869	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	726	968	-	-	1498	-
Mov Cap-2 Maneuver	726	-	-	-	-	-
Stage 1	934	-	-	-	-	-
Stage 2	853	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	1.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	895	1498	-
HCM Lane V/C Ratio	-	-	0.054	0.017	-
HCM Control Delay (s)	-	-	9.3	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	312	130	170	460	0	554	367
Future Volume (veh/h)	312	130	170	460	0	554	367
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	335	140	183	495		596	395
Peak Hour Factor	0.93	0.93	0.93	0.93		0.93	0.93
Percent Heavy Veh, %	2	2	2	2		2	2
Cap, veh/h	541	841	258	2121		1258	561
Arrive On Green	0.16	0.16	0.14	0.60		0.35	0.35
Sat Flow, veh/h	3456	2790	1781	3647		3647	1585
Grp Volume(v), veh/h	335	140	183	495		596	395
Grp Sat Flow(s),veh/h/ln	1728	1395	1781	1777		1777	1585
Q Serve(g_s), s	4.6	1.9	5.0	3.3		6.6	11.0
Cycle Q Clear(g_c), s	4.6	1.9	5.0	3.3		6.6	11.0
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	541	841	258	2121		1258	561
V/C Ratio(X)	0.62	0.17	0.71	0.23		0.47	0.70
Avail Cap(c_a), veh/h	1218	1387	349	2741		2393	1068
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	20.1	13.1	20.8	4.8		12.8	14.2
Incr Delay (d2), s/veh	1.2	0.1	4.2	0.1		0.3	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	1.7	2.1	0.7		2.0	3.2
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	21.3	13.2	25.0	4.9		13.1	15.8
LnGrp LOS	C	B	C	A		B	B
Approach Vol, veh/h	475			678		991	
Approach Delay, s/veh	18.9			10.3		14.2	
Approach LOS	B			B		B	

Timer - Assigned Phs		2		4	5	6	
Phs Duration (G+Y+Rc), s		36.6		14.5	12.4	24.2	
Change Period (Y+Rc), s		* 6.1		6.5	5.0	* 6.1	
Max Green Setting (Gmax), s		* 39		18.0	10.0	* 34	
Max Q Clear Time (g_c+I1), s		5.3		6.6	7.0	13.0	
Green Ext Time (p_c), s		3.3		1.4	0.1	5.1	

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

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

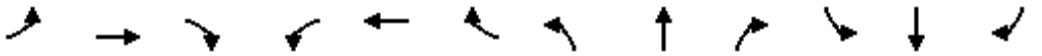
Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	202	71	51	112	10
Future Vol, veh/h	0	202	71	51	112	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	243	86	61	135	12

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	147	0	-	0	360	117
Stage 1	-	-	-	-	117	-
Stage 2	-	-	-	-	243	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1435	-	-	-	639	935
Stage 1	-	-	-	-	908	-
Stage 2	-	-	-	-	797	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1435	-	-	-	639	935
Mov Cap-2 Maneuver	-	-	-	-	639	-
Stage 1	-	-	-	-	908	-
Stage 2	-	-	-	-	797	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1435	-	-	-	656
HCM Lane V/C Ratio	-	-	-	-	0.224
HCM Control Delay (s)	0	-	-	-	12.1
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.9



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	20	254	90	20	30	172	452	130	20	507	10
Future Volume (veh/h)	10	20	254	90	20	30	172	452	130	20	507	10
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	11	22	282	100	22	33	191	502	144	22	563	11
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	73	394	334	314	647	548	192	787	224	31	706	14
Arrive On Green	0.04	0.21	0.21	0.18	0.35	0.35	0.11	0.29	0.29	0.02	0.20	0.20
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	2729	778	1781	3565	70
Grp Volume(v), veh/h	11	22	282	100	22	33	191	326	320	22	280	294
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1730	1781	1777	1858
Q Serve(g_s), s	0.4	0.7	12.7	3.6	0.6	1.0	8.0	11.9	12.0	0.9	11.2	11.2
Cycle Q Clear(g_c), s	0.4	0.7	12.7	3.6	0.6	1.0	8.0	11.9	12.0	0.9	11.2	11.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		0.04
Lane Grp Cap(c), veh/h	73	394	334	314	647	548	192	512	499	31	352	368
V/C Ratio(X)	0.15	0.06	0.84	0.32	0.03	0.06	1.00	0.64	0.64	0.72	0.80	0.80
Avail Cap(c_a), veh/h	371	754	639	371	754	639	192	552	537	84	444	465
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	34.4	23.5	28.2	26.7	16.1	16.3	33.2	23.1	23.1	36.4	28.4	28.4
Incr Delay (d2), s/veh	0.9	0.1	5.9	0.6	0.0	0.0	64.1	2.2	2.3	26.8	7.8	7.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.3	5.2	1.6	0.2	0.4	6.6	4.9	4.8	0.6	5.2	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.4	23.5	34.0	27.3	16.1	16.3	97.3	25.2	25.5	63.2	36.2	36.0
LnGrp LOS	D	C	C	C	B	B	F	C	C	E	D	D
Approach Vol, veh/h		315			155			837			596	
Approach Delay, s/veh		33.4			23.4			41.8			37.1	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	27.8	17.1	22.2	14.0	21.1	7.0	32.2
Change Period (Y+Rc), s	6.0	6.4	4.0	6.5	6.0	6.4	4.0	6.5
Max Green Setting (Gmax), s	3.5	23.1	15.5	30.0	8.0	18.6	15.5	30.0
Max Q Clear Time (g_c+I1), s	2.9	14.0	5.6	14.7	10.0	13.2	2.4	3.0
Green Ext Time (p_c), s	0.0	2.5	0.1	1.0	0.0	1.5	0.0	0.2

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

Intersection	
Int Delay, s/veh	5255.9

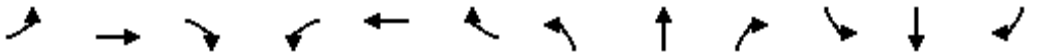
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	160	343	211	792	965	250
Future Vol, veh/h	160	343	211	792	965	250
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	182	390	240	900	1097	284

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2619	1239	1381	0	-	0
Stage 1	1239	-	-	-	-	-
Stage 2	1380	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 27	~ 214	496	-	-	-
Stage 1	273	-	-	-	-	-
Stage 2	233	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 1	~ 214	496	-	-	-
Mov Cap-2 Maneuver	~ 1	-	-	-	-	-
Stage 1	~ 9	-	-	-	-	-
Stage 2	233	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 28423.8	4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	496	-	1	214	-	-
HCM Lane V/C Ratio	0.483	-	181.818	1.821	-	-
HCM Control Delay (s)	18.9	0	$ 88445	$ 425.6	-	-
HCM Lane LOS	C	A	F	F	-	-
HCM 95th %tile Q(veh)	2.6	-	25.3	27.3	-	-

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)	10	0	20	190	0	170	50	803	80	30	1138	20
Future Volume (veh/h)	10	0	20	190	0	170	50	803	80	30	1138	20
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	11	0	23	216	0	193	57	912	91	34	1293	23
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	29	0	61	202	0	180	119	926	785	98	1727	31
Arrive On Green	0.06	0.00	0.06	0.11	0.00	0.11	0.07	0.50	0.50	0.06	0.48	0.48
Sat Flow, veh/h	532	0	1112	1781	0	1585	1781	1870	1585	1781	3572	64
Grp Volume(v), veh/h	34	0	0	216	0	193	57	912	91	34	643	673
Grp Sat Flow(s),veh/h/ln	1644	0	0	1781	0	1585	1781	1870	1585	1781	1777	1859
Q Serve(g_s), s	1.4	0.0	0.0	8.0	0.0	8.0	2.2	33.9	2.2	1.3	20.6	20.7
Cycle Q Clear(g_c), s	1.4	0.0	0.0	8.0	0.0	8.0	2.2	33.9	2.2	1.3	20.6	20.7
Prop In Lane	0.32		0.68	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	91	0	0	202	0	180	119	926	785	98	859	899
V/C Ratio(X)	0.37	0.00	0.00	1.07	0.00	1.07	0.48	0.98	0.12	0.35	0.75	0.75
Avail Cap(c_a), veh/h	676	0	0	202	0	180	210	926	785	210	880	921
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.1	0.0	0.0	31.2	0.0	31.2	31.7	17.5	9.5	32.1	14.7	14.7
Incr Delay (d2), s/veh	2.5	0.0	0.0	82.6	0.0	87.7	3.0	25.7	0.1	2.1	3.5	3.4
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	0.0	0.0	7.9	0.0	7.3	1.0	17.9	0.6	0.6	7.4	7.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.7	0.0	0.0	113.8	0.0	119.0	34.7	43.3	9.6	34.1	18.2	18.1
LnGrp LOS	C	A	A	F	A	F	C	D	A	C	B	B
Approach Vol, veh/h		34			409			1060			1350	
Approach Delay, s/veh		34.7			116.2			39.9			18.6	
Approach LOS		C			F			D			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.1	40.3		9.4	8.9	39.5		12.7				
Change Period (Y+Rc), s	* 4.2	5.4		5.5	* 4.2	5.4		4.7				
Max Green Setting (Gmax), s	* 8.3	34.9		29.0	* 8.3	34.9		8.0				
Max Q Clear Time (g_c+I1), s	3.3	35.9		3.4	4.2	22.7		10.0				
Green Ext Time (p_c), s	0.0	0.0		0.1	0.0	6.3		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		40.7	
HCM 6th LOS		D	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

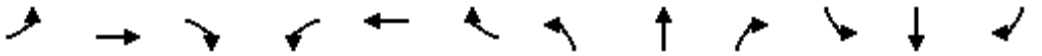
Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1208	10	48	843	10	10
Future Vol, veh/h	1208	10	48	843	10	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1285	11	51	897	11	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1296	0	1842	648
Stage 1	-	-	-	-	1291	-
Stage 2	-	-	-	-	551	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	531	-	67	413
Stage 1	-	-	-	-	222	-
Stage 2	-	-	-	-	541	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	531	-	61	413
Mov Cap-2 Maneuver	-	-	-	-	61	-
Stage 1	-	-	-	-	222	-
Stage 2	-	-	-	-	489	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	47.3
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	106	-	-	531	-
HCM Lane V/C Ratio	0.201	-	-	0.096	-
HCM Control Delay (s)	47.3	-	-	12.5	-
HCM Lane LOS	E	-	-	B	-
HCM 95th %tile Q(veh)	0.7	-	-	0.3	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	1076	92	40	733	90	55	10	30	60	10	40
Future Volume (veh/h)	68	1076	92	40	733	90	55	10	30	60	10	40
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	76	1196	102	44	814	100	61	11	33	67	11	44
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	151	1236	105	93	1216	542	153	51	154	181	41	166
Arrive On Green	0.08	0.37	0.37	0.05	0.34	0.34	0.09	0.12	0.12	0.10	0.13	0.13
Sat Flow, veh/h	1781	3314	282	1781	3554	1585	1781	412	1236	1781	327	1308
Grp Volume(v), veh/h	76	640	658	44	814	100	61	0	44	67	0	55
Grp Sat Flow(s),veh/h/ln	1781	1777	1820	1781	1777	1585	1781	0	1648	1781	0	1635
Q Serve(g_s), s	2.4	20.9	21.0	1.4	11.5	2.6	1.9	0.0	1.4	2.1	0.0	1.8
Cycle Q Clear(g_c), s	2.4	20.9	21.0	1.4	11.5	2.6	1.9	0.0	1.4	2.1	0.0	1.8
Prop In Lane	1.00		0.16	1.00		1.00	1.00		0.75	1.00		0.80
Lane Grp Cap(c), veh/h	151	662	678	93	1216	542	153	0	205	181	0	207
V/C Ratio(X)	0.50	0.97	0.97	0.47	0.67	0.18	0.40	0.00	0.21	0.37	0.00	0.27
Avail Cap(c_a), veh/h	214	662	678	184	1271	567	241	0	977	341	0	1039
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.8	18.1	18.2	27.2	16.6	13.6	25.5	0.0	23.3	24.7	0.0	23.3
Incr Delay (d2), s/veh	2.6	26.8	27.1	3.7	1.3	0.2	1.7	0.0	0.5	1.3	0.0	0.7
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	1.0	11.7	12.0	0.6	4.0	0.9	0.8	0.0	0.6	0.9	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.4	44.9	45.2	30.9	17.9	13.8	27.2	0.0	23.8	26.0	0.0	24.0
LnGrp LOS	C	D	D	C	B	B	C	A	C	C	A	C
Approach Vol, veh/h		1374			958			105			122	
Approach Delay, s/veh		44.2			18.0			25.8			25.1	
Approach LOS		D			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	27.4	10.6	13.5	9.4	25.6	10.7	13.3
Change Period (Y+Rc), s	4.5	5.4	5.5	6.0	4.4	5.4	* 4.7	6.0
Max Green Setting (Gmax), s	6.1	22.0	8.0	37.5	7.1	21.1	* 11	35.0
Max Q Clear Time (g_c+I1), s	3.4	23.0	3.9	3.8	4.4	13.5	4.1	3.4
Green Ext Time (p_c), s	0.0	0.0	0.0	0.3	0.0	3.2	0.1	0.2

Intersection Summary	
HCM 6th Ctrl Delay	32.7
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	23	82	10	41	111
Future Vol, veh/h	10	23	82	10	41	111
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	27	96	12	48	131

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	329	102	0	0	108	0
Stage 1	102	-	-	-	-	-
Stage 2	227	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	665	953	-	-	1483	-
Stage 1	922	-	-	-	-	-
Stage 2	811	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	642	953	-	-	1483	-
Mov Cap-2 Maneuver	642	-	-	-	-	-
Stage 1	922	-	-	-	-	-
Stage 2	783	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	831	1483	-
HCM Lane V/C Ratio	-	-	0.047	0.033	-
HCM Control Delay (s)	-	-	9.5	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	468	490	230	525	0	993	273
Future Volume (veh/h)	468	490	230	525	0	993	273
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	503	527	247	565		1068	294
Peak Hour Factor	0.93	0.93	0.93	0.93		0.93	0.93
Percent Heavy Veh, %	2	2	2	2		2	2
Cap, veh/h	727	991	258	2158		1387	618
Arrive On Green	0.21	0.21	0.14	0.61		0.39	0.39
Sat Flow, veh/h	3456	2790	1781	3647		3647	1585
Grp Volume(v), veh/h	503	527	247	565		1068	294
Grp Sat Flow(s),veh/h/ln	1728	1395	1781	1777		1777	1585
Q Serve(g_s), s	9.3	10.4	9.5	5.1		18.1	9.6
Cycle Q Clear(g_c), s	9.3	10.4	9.5	5.1		18.1	9.6
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	727	991	258	2158		1387	618
V/C Ratio(X)	0.69	0.53	0.96	0.26		0.77	0.48
Avail Cap(c_a), veh/h	900	1130	258	2158		1769	789
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	25.2	17.7	29.3	6.3		18.4	15.8
Incr Delay (d2), s/veh	1.7	0.4	44.5	0.1		1.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.1	6.9	1.4		6.5	3.0
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	26.9	18.2	73.8	6.4		20.0	16.3
LnGrp LOS	C	B	E	A		B	B
Approach Vol, veh/h	1030			812		1362	
Approach Delay, s/veh	22.4			26.9		19.2	
Approach LOS	C			C		B	

Timer - Assigned Phs		2		4	5	6	
Phs Duration (G+Y+Rc), s		48.1		21.0	15.0	33.1	
Change Period (Y+Rc), s		* 6.1		6.5	5.0	* 6.1	
Max Green Setting (Gmax), s		* 39		18.0	10.0	* 34	
Max Q Clear Time (g_c+I1), s		7.1		12.4	11.5	20.1	
Green Ext Time (p_c), s		3.9		2.2	0.0	6.9	

Intersection Summary		
HCM 6th Ctrl Delay	22.2	
HCM 6th LOS	C	

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

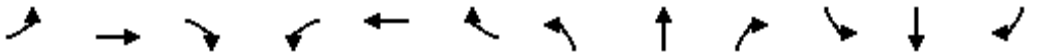
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	111	172	93	41	10
Future Vol, veh/h	0	111	172	93	41	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	134	207	112	49	12

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	319	0	-	0	397	263
Stage 1	-	-	-	-	263	-
Stage 2	-	-	-	-	134	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1241	-	-	-	608	776
Stage 1	-	-	-	-	781	-
Stage 2	-	-	-	-	892	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1241	-	-	-	608	776
Mov Cap-2 Maneuver	-	-	-	-	608	-
Stage 1	-	-	-	-	781	-
Stage 2	-	-	-	-	892	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1241	-	-	-	635
HCM Lane V/C Ratio	-	-	-	-	0.097
HCM Control Delay (s)	0	-	-	-	11.3
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3



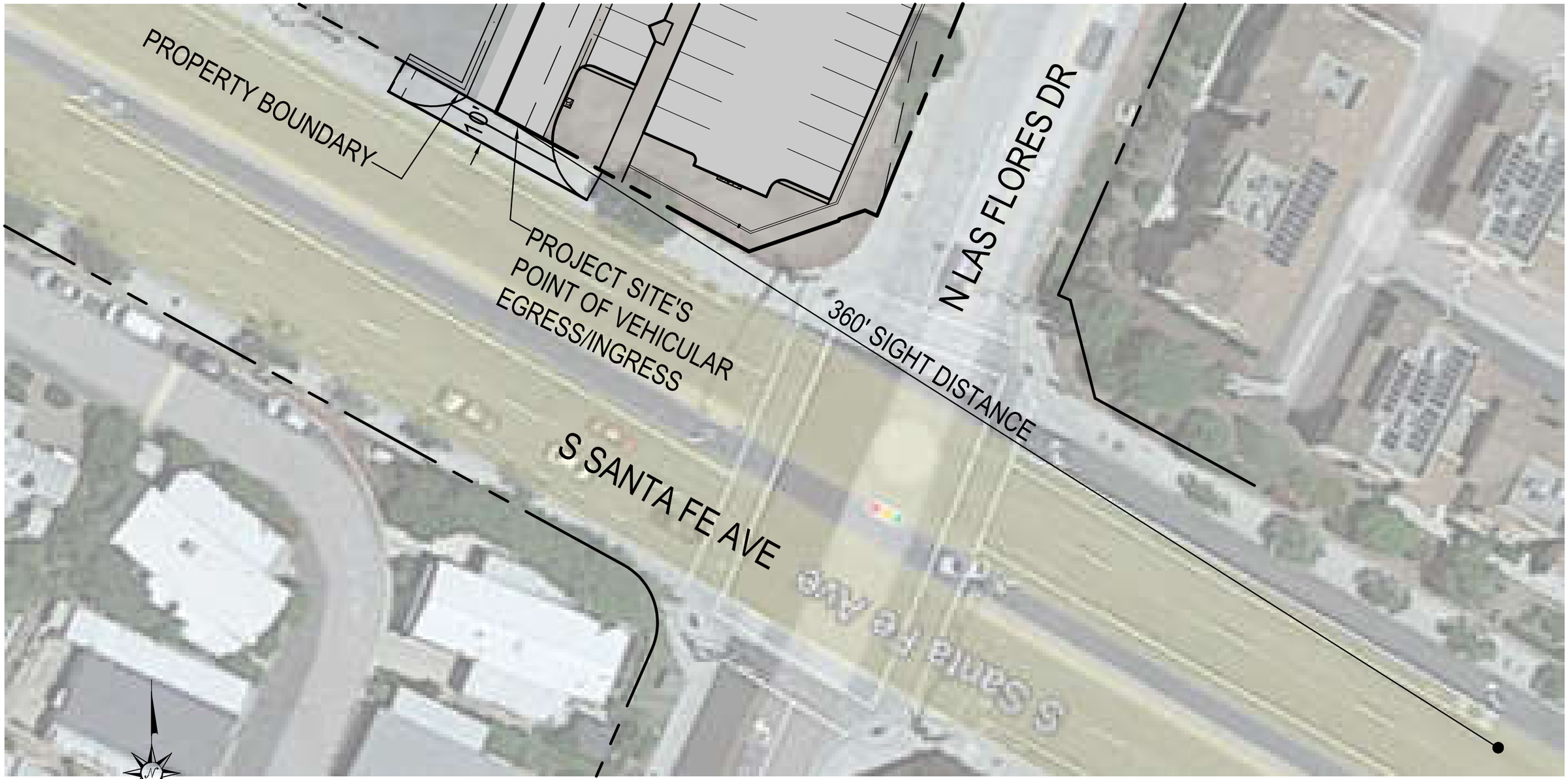
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	30	122	90	40	30	215	868	110	20	483	30
Future Volume (veh/h)	10	30	122	90	40	30	215	868	110	20	483	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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	11	33	136	100	44	33	239	964	122	22	537	33
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	74	224	190	335	499	423	211	1062	134	31	794	49
Arrive On Green	0.04	0.12	0.12	0.19	0.27	0.27	0.12	0.33	0.33	0.02	0.23	0.23
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3173	402	1781	3401	209
Grp Volume(v), veh/h	11	33	136	100	44	33	239	540	546	22	280	290
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1798	1781	1777	1833
Q Serve(g_s), s	0.4	1.1	5.6	3.3	1.2	1.1	8.0	19.6	19.6	0.8	9.7	9.7
Cycle Q Clear(g_c), s	0.4	1.1	5.6	3.3	1.2	1.1	8.0	19.6	19.6	0.8	9.7	9.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		0.11
Lane Grp Cap(c), veh/h	74	224	190	335	499	423	211	594	601	31	415	428
V/C Ratio(X)	0.15	0.15	0.72	0.30	0.09	0.08	1.13	0.91	0.91	0.70	0.68	0.68
Avail Cap(c_a), veh/h	410	832	705	410	832	705	211	609	616	92	490	506
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	31.2	26.6	28.6	23.5	18.6	18.5	29.7	21.4	21.4	32.9	23.5	23.5
Incr Delay (d2), s/veh	0.9	0.3	5.0	0.5	0.1	0.1	101.4	17.3	17.2	25.0	2.9	2.9
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	0.2	0.5	2.3	1.4	0.5	0.4	9.1	9.9	10.0	0.6	4.0	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.1	26.9	33.5	24.0	18.6	18.6	131.1	38.7	38.6	57.9	26.4	26.4
LnGrp LOS	C	C	C	C	B	B	F	D	D	E	C	C
Approach Vol, veh/h		180			177			1325			592	
Approach Delay, s/veh		32.2			21.7			55.4			27.6	
Approach LOS		C			C			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.2	28.9	16.7	14.6	14.0	22.1	6.8	24.5
Change Period (Y+Rc), s	6.0	6.4	4.0	6.5	6.0	6.4	4.0	6.5
Max Green Setting (Gmax), s	3.5	23.1	15.5	30.0	8.0	18.6	15.5	30.0
Max Q Clear Time (g_c+I1), s	2.8	21.6	5.3	7.6	10.0	11.7	2.4	3.2
Green Ext Time (p_c), s	0.0	1.0	0.2	0.6	0.0	1.8	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	43.7
HCM 6th LOS	D

APPENDIX J

SIGHT DISTANCE EXHIBIT



SIGHT DISTANCE EXHIBIT

2972 S. SANTA FE APARTMENTS

PLSA JOB NO. 3527
07-26-2022
SHEET 1 OF 1

0 30 60 90
SCALE: 1" = 30'

NOTES

* DISTANCES FOLLOW THE CALTRANS HIGHWAY DESIGN MANUAL, CHAPTER 200, INDEX 201.1, ASSUMING A 45MPH SPEED LIMIT ON S SANTA FE AVENUE

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SAVE DATE: 07/26/22 ~ PLOT DATE: 07/26/22 ~ FILE NAME: J:\ACTIVE JOBS\3527 MAYER-SOUTH SANTA FE AVE\CIVIL\DRAWING\EXHIBITS\Sight Distance\3527-SIGHT-DISTANCE-EXHIBIT.dwg