Appendix B2
Local Mobility Analysis

LINSCOTT LAW & GREENSPAN engineers

LOCAL MOBILITY ANALYSIS

RENZULLI ESTATES

PTS 674401

City of San Diego, California
April 2024

LLG Ref. 3-20-3272



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EXECUTIVE SUMMARY

Linscott, Law & Greenspan, Engineers (LLG) has prepared this Local Mobility Analysis (LMA) for Renzulli Estates (hereby referred to as the "Project"). The 40.56-acre Project site is located between the two termini of Cypress Canyon Road in the Scripps Miramar Ranch Community Planning Area. Angelique Street is the nearest cross street. The nearest arterial to access the regional roadway network is Scripps Poway Parkway.

Project Description

The Project proposes to construct 100 single-family homes and 12 affordable multi-family units. The project proposes a Community Plan Amendment to redesignate the site from 0-3 dwelling units per acre with a maximum of 45 dwelling units to a designation that would allow up to 100 dwelling units. The project also proposes to construct the connection of Cypress Canyon Road between Angelique Street and Cypress Canyon Park Drive in a less direct alignment than shown on the Community Plan circulation element. As part of the Project, it is also proposed to downgrade this segment of Cypress Canyon Road from a two-lane collector to a two-lane sub-collector street. The Project as proposed also requires a VTM, Site Development Permit, and MSCP boundary adjustment. A rezone from AR-1-1 to RX-1-2, RM-2-4 and OR-1-2 is also required.

In conformance with Senate Bill 743 (SB 743), under a separate cover, a Transportation Impact Analysis was prepared that evaluates the Project's transportation impacts using a Vehicle Miles Traveled (VMT) metric under CEQA, per the City of San Diego's Transportation Study Manual (current version dated September 2022), pursuant to guidance from the Governor's Office of Planning and Research (OPR) in December 2018. Consistent with SB 743 and CEQA Guidelines 15064.3, the CEQA significance determination for the Project will be based only on VMT and not on LOS. Also consistent with the TSM, this report is a Local Mobility Analysis (LMA) that evaluates the effects of the Project on the local transportation system to determine if the Project triggers the need for improvements.

Trip Generation

The Project is estimated to generate approximately 1,096 ADT with 88 AM peak hour trips (18 inbound/ 70 outbound) and 110 PM peak hour trips (77 inbound/ 33 outbound).

To determine the expected Opening Year 2025 and Horizon Year 2050 traffic effects of the Project, traffic volumes for the Opening Year 2025 and Horizon Year 2050 without and with Project scenarios were developed and traffic operations were evaluated. An analysis with and without the connection of Cypress Canyon Road between Angelique Street and Cypress Canyon Park Drive was also included at the applicant's request .

This report also evaluates pedestrian, bicycle and transit mobility in the project vicinity and describes the project improvements for these modes, as well as includes a Systemic Safety Review.

Project Improvements

The Project will construct the following improvements:

- The Project will construct the connection of Cypress Canyon Road between Angelique Street and Cypress Canyon Park Drive in a less direct alignment than shown on the Community Plan circulation element. As part of the Project, it is also proposed to downgrade this segment of Cypress Canyon Road from a two-lane collector to a two-lane sub-collector. This will also provide bicycle connectivity consistent with the proposed Class III Bike Route shown in the *Scripps Miramar Ranch Community Plan*.

- As a result of the project's Systemic Safety Review, at the Pomerado Road / Spring Canyon Road intersection, the Project will install high visibility crosswalk at the north leg (continental crosswalks exist at the south, east, and west legs) and an ADA curb ramp with truncated domes at the northeast corner per current City standards, as well as install pedestrian countdown timers at all intersection legs with pedestrian crossings.

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LOCAL MOBILITY ANALYSIS

RENZULLI ESTATES

City of San Diego, California
April 2024

1.0 INTRODUCTION

Linscott, Law & Greenspan, Engineers (LLG) has prepared this Local Mobility Analysis (LMA) for Renzulli Estates (hereby referred to as the "Project"). The 40.56-acre Project site is located between the two termini of Cypress Canyon Road in the Scripps Miramar Ranch Community Planning Area. Angelique Street is the nearest cross street. The nearest arterial to access the regional roadway network is Scripps Poway Parkway. The Project proposes to construct 100 single-family homes and 12 affordable multi-family units. The project proposes a Community Plan Amendment to redesignate the site from 0-3 dwelling units per acre with a maximum of 45 dwelling units to a designation that would allow up to 100 dwelling units. The project also proposes to construct the connection of Cypress Canyon Road between Angelique Street and Cypress Canyon Park Drive in a less direct alignment than shown on the Community Plan circulation element. As part of the Project, it is also proposed to downgrade this segment of the Cypress Canyon Road from a two-lane collector to a two-lane sub-collector street. The Project as proposed also requires a VTM, Site Development Permit, a Neighborhood Development Permit, and an MHPA boundary adjustment. A rezone from AR-1-1 to RX-1-2, RM-2-4, and OR-1-2 is also required.

This LMA has been prepared to evaluate the effects of the Project on mobility, access, circulation, and related safety elements in the proximate area of the Project per the City of San Diego's Transportation Study Manual (current version dated September 19, 2022). An analysis with and without the connection of Cypress Canyon Road between Angelique Street and Cypress Canyon Park Drive was also included at the applicant's request.

In addition to the vehicular mode analyses, the multi-modal network in the influence of the Project study area was also reviewed. Collectively, vehicular mobility combined with multi-modal networks were reviewed to help promote local and regional mobility without auto-dependency.

The report is organized as follow:

Section 1.0 Introduction
Section 2.0 Project Description
Section 3.0 Existing Conditions Discussion
Section 4.0 Study Area, Analysis Approach & Methodology
Section 5.0 Trip Generation, Distribution & Assignment
Section 6.0 Analysis of Existing Conditions
Section 7.0 Cumulative Projects Discussion
Section 8.0 Analysis of Opening Year 2025 Scenarios

Section 9.0 Analysis of Horizon Year 2050 Scenarios
Section 10.0 Pedestrian Mobility
Section 11.0 Bicycle Mobility
Section 12.0 Transit
Section 13.0 Systemic Safety Review
Section 14.0 Site Access, Circulation, and Parking
Section 15.0 Project Improvements

2.0 PROJECT DESCRIPTION

2.1 Project Location

The Project is located at 11495 Cypress Canyon Road within the Scripps Miramar Ranch Community. Access to the Project site is proposed via Cypress Canyon Road. The multi-family site for the 12 affordable dwelling units will be accessed off of Cypress Canyon Road on the east side of the Project site.

Figure 2–1 shows the vicinity map. ***Figure 2–2*** shows a more detailed Project area map.

2.2 Project Description

The Project proposes the construction of 100 single-family homes and 12 affordable multi-family units. The Project site encompasses approximately 40.56 acres and is currently occupied by an existing vacant single-family residence and several out buildings. All existing buildings will be removed as a part of the Project. As part of the Project, it proposes to construct the connection of Cypress Canyon Road between Angelique Street and Cypress Canyon Park Drive in a less direct alignment than shown on the Community Plan circulation element. In addition, as part of the Project, it is also proposed to downgrade this segment of Cypress Canyon Road from a two-lane collector to a two-lane sub-collector.

Figure 2–3 depicts the conceptual site plan.



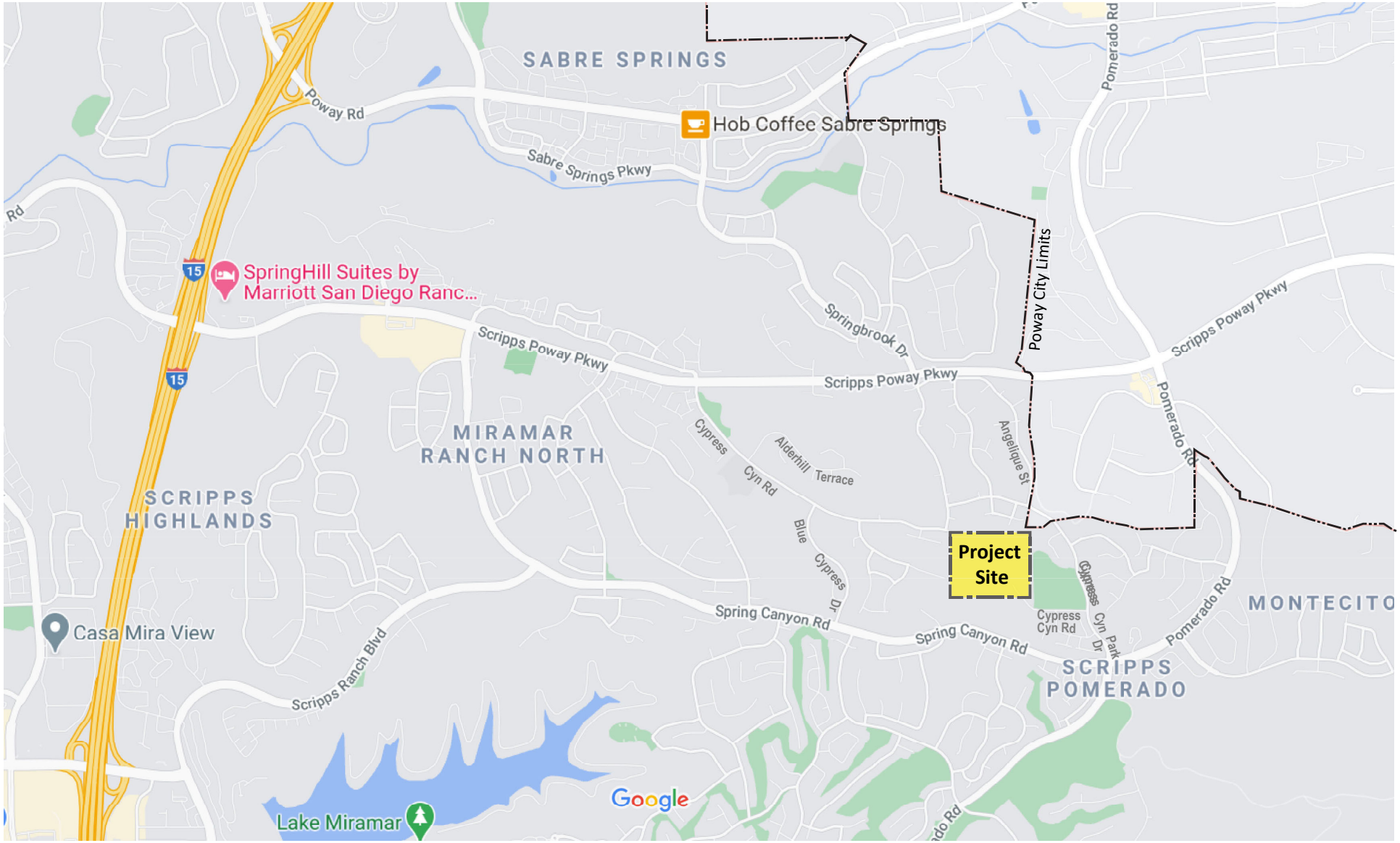
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Figure 2-1

Vicinity Map

RENZULLI ESTATES



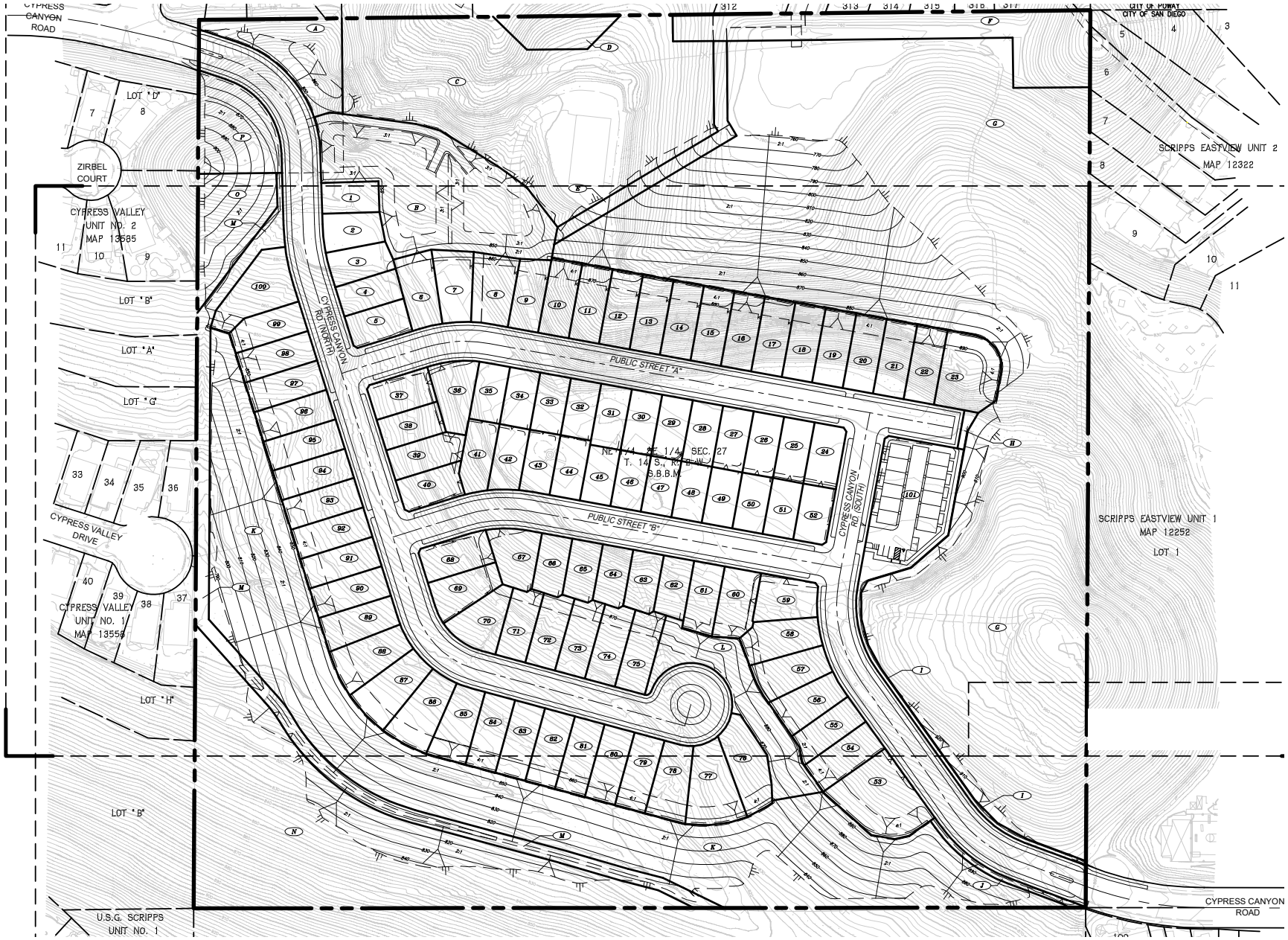
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Figure 2-2

Project Area Map

RENZULLI ESTATES



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Figure 2-3

Conceptual Site Plan

RENZULLI ESTATES

3.0 EXISTING CONDITIONS

Evaluation of the traffic effects of the proposed Project requires an understanding of the existing transportation system within the Project area. ***Figure 3–1*** shows the existing conditions diagram.

3.1 Existing Street Network

The following is a description of the existing street network in the study area.

Scripps Poway Parkway is classified in the *Miramar Ranch North Community Plan* as a Six-Lane Prime Arterial west of Spring Canyon Road and as a Six-Lane Major Arterial from Spring Canyon Road to the eastern planning area boundary. It is currently built as a six-lane roadway separated by a raised center median west of Spring Canyon Road and as a four-lane roadway separated by a raised center median between Spring Canyon Road and Cypress Canyon Road. The posted speed limit is 45-50 mph and parking is prohibited within the Project area. Class II bike lanes are provided on both sides of the street. West of Spring Canyon Road, non-contiguous sidewalks are provided on both sides of the street. Between Spring Canyon Road and Cypress Canyon Road, a contiguous sidewalk is provided on the north side of the street and a non-contiguous sidewalk is provided on the south side of the street. East of Cypress Canyon Road, a contiguous sidewalk is provided on both sides of the street.

Spring Canyon Road is classified in the *Scripps Miramar Ranch Community Plan* as a Four-Lane Collector west of Pomerado Road. It is currently built as a four-lane roadway separated by a painted median between Scripps Ranch Boulevard and Pomerado Road with intermittent turn pockets. The posted speed limit is 45 mph and parking is prohibited within the Project area. Class II bike lanes and contiguous sidewalks are provided on both sides of the street.

Pomerado Road is classified in the *Scripps Miramar Ranch Community Plan* as a Four-Lane Major Arterial between Spring Canyon Road and Stonebridge Parkway. It is currently built as a four-lane Major roadway separated by a raised median. The posted speed limit is 45 mph and parking is prohibited within the Project area. Class II bike lanes and contiguous sidewalks are provided on both sides of the street.

Cypress Canyon Road is classified in the *Miramar Ranch North Community Plan* as a Four-Lane Collector between Scripps Poway Parkway and Blue Cypress Drive and as a Two-Lane Collector east of Blue Cypress Drive. It is currently built as a three to four-lane roadway separated by a painted two way left-turn lane between Scripps Poway Parkway and Alderhill Terrace and as a two-lane roadway between Alderhill Terrace and Angelique Street. The posted speed limit is 25-40 mph and parking is intermittently permitted within the Project area. Class II bike lanes are provided on both sides of the street between Scripps Poway Parkway and Blue Cypress Drive. Contiguous sidewalks are provided on both sides of the street within the Project area.

Cypress Canyon Park Drive is classified in the *Scripps Miramar Ranch Community Plan* as a Two-Lane Residential Collector. It is currently built as a two-lane roadway. The posted speed limit is 25 mph and parking is intermittently permitted within the Project area while parking is prohibited on the east side of Cypress Canyon Park Drive, north of Spring Canyon Road for approximately

1,500 ft. Contiguous sidewalks are provided on both sides of the street within the Project area. The curb-to-curb width of Cypress Canyon Park Drive is approximately 40 feet.

Angelique Street is unclassified in the *Scripps Miramar Ranch Community Plan*. It is currently built as a two-lane roadway. The posted speed limit is 25 mph and parking is permitted on both sides of the street within the Project area. Contiguous sidewalks are provided on both sides of the street within the Project area. The curb-to-curb width of Angelique Street is approximately 40 feet.

3.2 Existing Traffic Volumes

Existing weekday daily street segment counts were conducted at the study street segments on Thursday, August 6, 2020, Thursday, August 13, 2020 and Tuesday, September 22, 2020. AM and PM peak hour (7:00-9:00 AM and 4:00-6:00 PM) counts at the study area intersections, including bicycle and pedestrian counts, were conducted on Thursday, August 6, 2020.

The existing intersection counts were adjusted to account for the changes in travel patterns and lower activity due to the CoVid-19 pandemic. Tuesday, February 28, 2017 and Wednesday, March 1, 2017 traffic count data was obtained from the Scripps Mesa Joint Occupancy Project Traffic Assessment Letter (June 2018) at the Scripps Poway Parkway / Spring Canyon Road intersection.

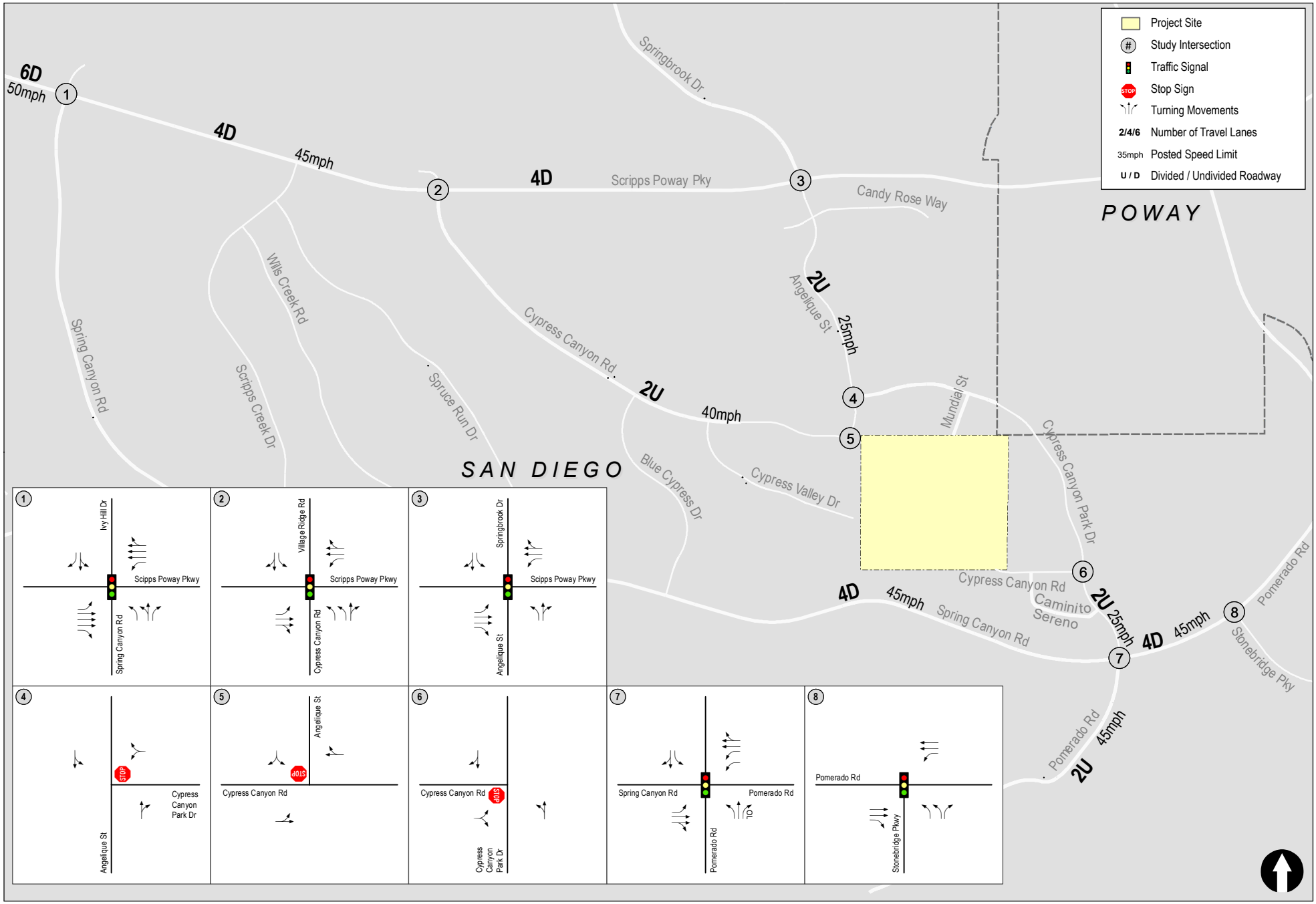
Based on a comparison of the counts at the Scripps Poway Parkway / Spring Canyon Road intersection, the August 2020 volumes were 94% lower during the AM peak hour and 39% lower during the PM peak hour as compared to the Year 2017 volumes. Therefore, a growth rate of 100% was applied to the AM peak hour and a growth rate of 50 % was applied to the PM peak hour for all of the August 2020 peak hour intersection counts to reflect a more typical Year 2020 traffic volume baseline.

3.2.1 *Supplemental Traffic Counts*

Supplemental street segment counts were conducted on the study street segments on Tuesday, September 14, 2021 and Wednesday, September 15, 2021 given that the Year 2020 street segment counts were conducted during the Covid-19 pandemic. For the purposes of the existing street segment analysis, the Year 2021 counts with a growth factor of 5% were used.

The comparison of Year 2020 street segment counts (with the adjustment factor) with Year 2021 street segment counts revealed that the Year 2021 counts were lower on the majority of the study area segments. Therefore, the intersection counts from Year 2020 with the Covid adjustment factor were used for the peak hour intersection analysis given that they represent a conservative baseline.

Figure 3–2 shows the Existing Traffic Volumes. ***Appendix A*** contains the traffic count data and the historical count comparison.



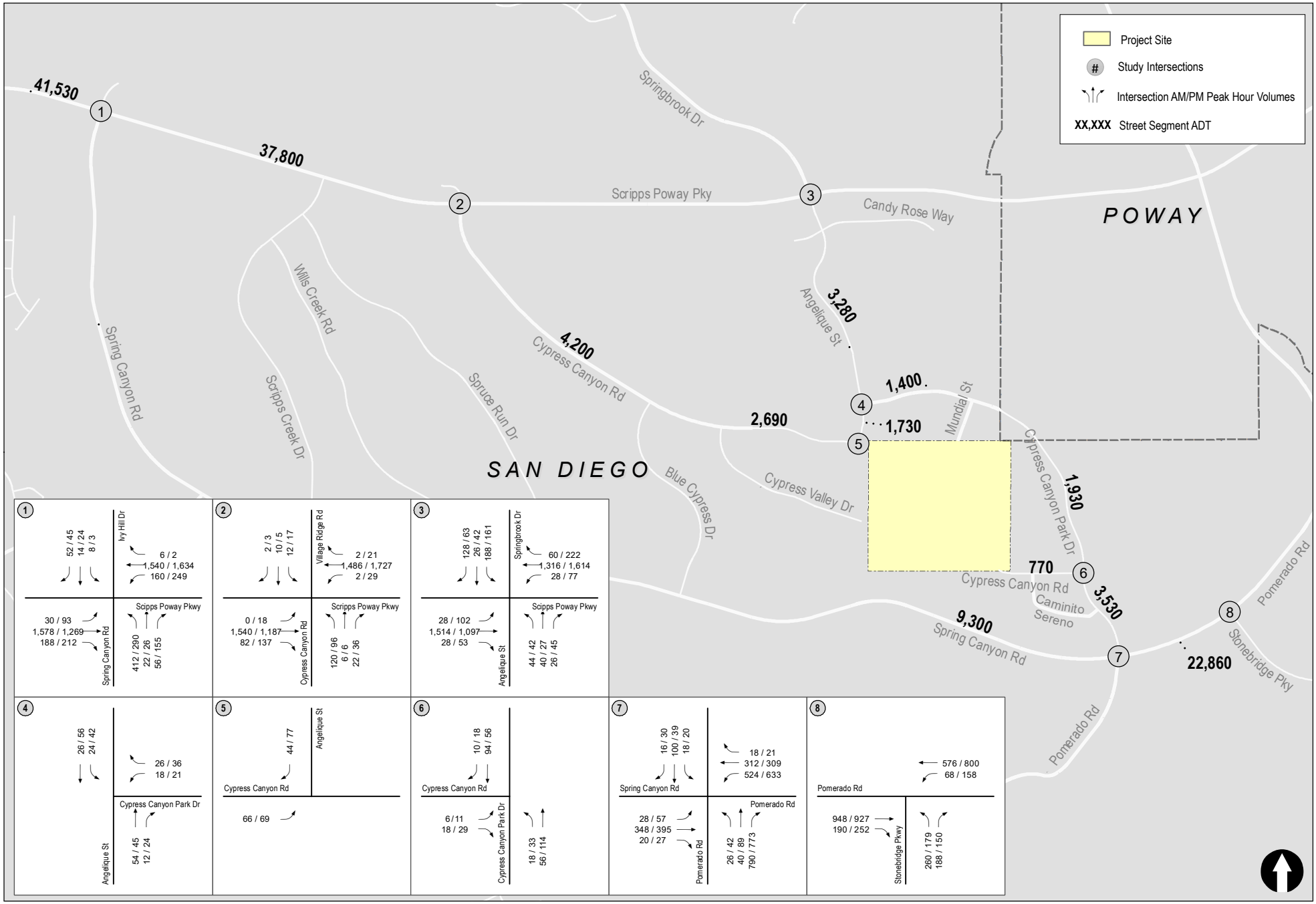
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Figure 3-1

Existing Conditions Diagram

Renzulli Estates



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Figure 3-2

Existing Traffic Volumes

Renzulli Estates

4.0 STUDY AREA, ANALYSIS APPROACH AND METHODOLOGY

4.1 Study Area

The study area was based on the criteria identified in the City of San Diego *Transportation Study Manual* (current version dated September 2022), as well as collaboration with the City of San Diego staff. Based on these criteria, the study area was generally determined by the limits or extent of where the Project would add 50 peak hour final primary (cumulative) trips to intersections and 500 or more daily final primary trips (cumulative) to roadway segments.

Using the above criteria along with input from City staff, the Project study area includes the following locations:

Intersections:

1. Scripps Poway Parkway / Spring Canyon Road
2. Scripps Poway Parkway / Cypress Canyon Road
3. Scripps Poway Parkway / Angelique Street / Springbrook Drive
4. Angelique Street / Cypress Canyon Park Drive
5. Angelique Street / Cypress Canyon Road
6. Cypress Canyon Park Drive / Cypress Canyon Road
7. Spring Canyon Road / Pomerado Road / Cypress Canyon Park Drive
8. Spring Canyon Road / Stonebridge Parkway

Segments:

Scripps Poway Parkway[1]

- West of Spring Canyon Road
- Spring Canyon Road to Cypress Canyon Road

Spring Canyon Road

- West of Pomerado Road

Pomerado Road

- Cypress Canyon Park Drive to Stonebridge Parkway

Cypress Canyon Road

- Scripps Poway Parkway to Blue Cypress Drive
- Blue Cypress Drive to Angelique Street
- Angelique Street to Street "A" (*proposed*)
- Street "A" *(proposed)* to Street "B" *(proposed)*

[1] The segment of Scripps Poway Parkway between Cypress Canyon Road and Angelique Street was not analyzed in this study since the Project does not add trips to this segment. See Section 5.0 for the Project trip distribution.

- Street "B" (*proposed*) to Caminito Sereno
- Caminito Sereno to Cypress Canyon Park Drive

Angelique Street

- Scripps Poway Parkway to Cypress Canyon Park Drive
- Cypress Canyon Park Drive to Cypress Canyon Road

Cypress Canyon Park Drive

- Angelique Street to Mundial Street
- Mundial Street to Cypress Canyon Road
- Cypress Canyon Road to Spring Canyon Road

Street "A" (proposed)

- Cypress Canyon Road (North) to Cypress Canyon Road (South)

Street "B" (proposed)

- Cypress Canyon Road (North) to Cypress Canyon Road (South)

4.2 Analysis Approach

The following is a summary of the various analyses performed based on the identified study area.

Table 4–1 shows the analyses performed in each of the scenarios to determine the potential Project effects on the road network. An explanation of each scenario is provided following *Table 4–1*.

TABLE 4–1
LEVEL OF SERVICE ANALYSIS SCENARIOS

Scenario	Analysis Performed
• Existing • Opening Year 2025 Without Project without and with Cypress Canyon Road connection • Opening Year 2025 With Project without and with Cypress Canyon Road connection	Peak Hour Intersection Analysis
• Horizon Year 2050 Without Project without and with Cypress Canyon Road connection • Horizon Year 2050 With Project without and with Cypress Canyon Road connection	Daily Street Segment Analysis

4.3 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, and freedom to maneuver. 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.

4.3.1 *Intersections*

Signalized intersections were analyzed under AM and PM peak hour conditions based on existing signal timing. 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* (version 11) computer software. The delay values (represented in seconds) were qualified with a corresponding intersection LOS. A more detailed explanation of the methodology is attached in ***Appendix B***. ***Table 4–2*** shows the signalized intersection delay categorized for each LOS.

Unsignalized intersections were analyzed under weekday 7:00-9:00 AM and 4:00-6:00 PM peak hour conditions. Average vehicle delay and LOS were determined based upon the procedures found in Chapters 19 and 20 of the *HCM 6,* with the assistance of the *Synchro* (version 11) computer software. A more detailed explanation of the methodology is attached in *Appendix B*. *Table 4–2* shows the unsignalized intersection delay categorized for each LOS.

TABLE 4–2
INTERSECTION LOS & DELAY RANGES

LOS	Delay (seconds/vehicle)	
	Signalized Intersections	**Unsignalized Intersections**
A	≤ 10.0	≤ 10.0
B	10.1 to 20.0	10.1 to 15.0
C	20.1 to 35.0	15.1 to 25.0
D	35.1 to 55.0	25.1 to 35.0
E	55.1 to 80.0	35.1 to 50.0
F	≥ 80.1	≥ 50.1

Source: Highway Capacity Manual

4.3.2 *Street Segments*

Street segment analysis is based upon the comparison of daily traffic volumes (ADTs) to the City of San Diego's *Roadway Segment LOS by Classification and Average Daily Traffic (ADT)* table. This table provides segment capacities for different street classifications, based on traffic volumes and roadway characteristics.

The City of San Diego classifications table is shown in ***Appendix C***.

5.0 TRIP GENERATION/DISTRIBUTION/ASSIGNMENT

5.1 Trip Generation

The single-family and multi-family residential unit rates from the City of San Diego *Trip Generation Manual* were used to calculate the trip generation for the proposed Project. ***Table 5–1*** summarizes the Project's estimated trip generation. As shown in *Table 5–1*, the Project is estimated to generate approximately 1,096 ADT with 88 AM peak hour trips (18 inbound/ 70 outbound) and 110 PM peak hour trips (77 inbound/ 33 outbound). No trip credit was taken for the existing single-family residence and out buildings that will be removed from the Project site. ***Table 5–2*** summarizes the breakdown of the Project trips loading onto the Project access off of Cypress Canyon Road in the event that the Cypress Canyon Road connection was not constructed.

5.2 Trip Distribution/Assignment

Two (2) SANDAG Series 14 Select Zone Assignments (SZA) were conducted for the Project site: one assuming the Cypress Canyon Road connection between Angelique Street and Cypress Canyon Park Drive, and the other without the Cypress Canyon Road connection (see ***Appendix D***). The Project trip distribution was developed based on these SANDAG Series 14 SZAs.

Figure 5–1 shows the Project trip distribution percentages on the study area with the Cypress Canyon Road connection. ***Figure 5–2*** shows the Project traffic volumes with the Cypress Canyon Road connection.

Figure 5–3 shows the Project trip distribution percentages on the study area without the Cypress Canyon Road connection. ***Figure 5–4*** shows the Project traffic volumes without the Cypress Canyon Road connection.

TABLE 5–1
PROJECT TRIP GENERATION

Land Use	Size	Daily Trip Ends (ADTs)		AM Peak Hour					PM Peak Hour				
		Rate [a]	Volume	% of ADT [a]	In:Out Split [a]	Volume In	Volume Out	Volume Total	% of ADT [a]	In:Out Split [a]	Volume In	Volume Out	Volume Total
Single-Family Units	100 DU	10 /DU	1,000	8%	20% 80%	16	64	80	10%	70% 30%	70	30	100
Affordable Multi-Family Units	12 DU	8 /DU	96	8%	20% 80%	2	6	8	10%	70% 30%	7	3	10
Total Proposed	**112 DU**	—	**1,096**	—	— —	**18**	**70**	**88**	—	— —	**77**	**33**	**110**

Footnotes:

a. Rates taken from the *City of San Diego Trip Generation Manual*.

General Notes:

1. ADT = Average daily traffic volumes
2. DU = Dwelling unit

TABLE 5–2
PROJECT DRIVEWAY LOADING

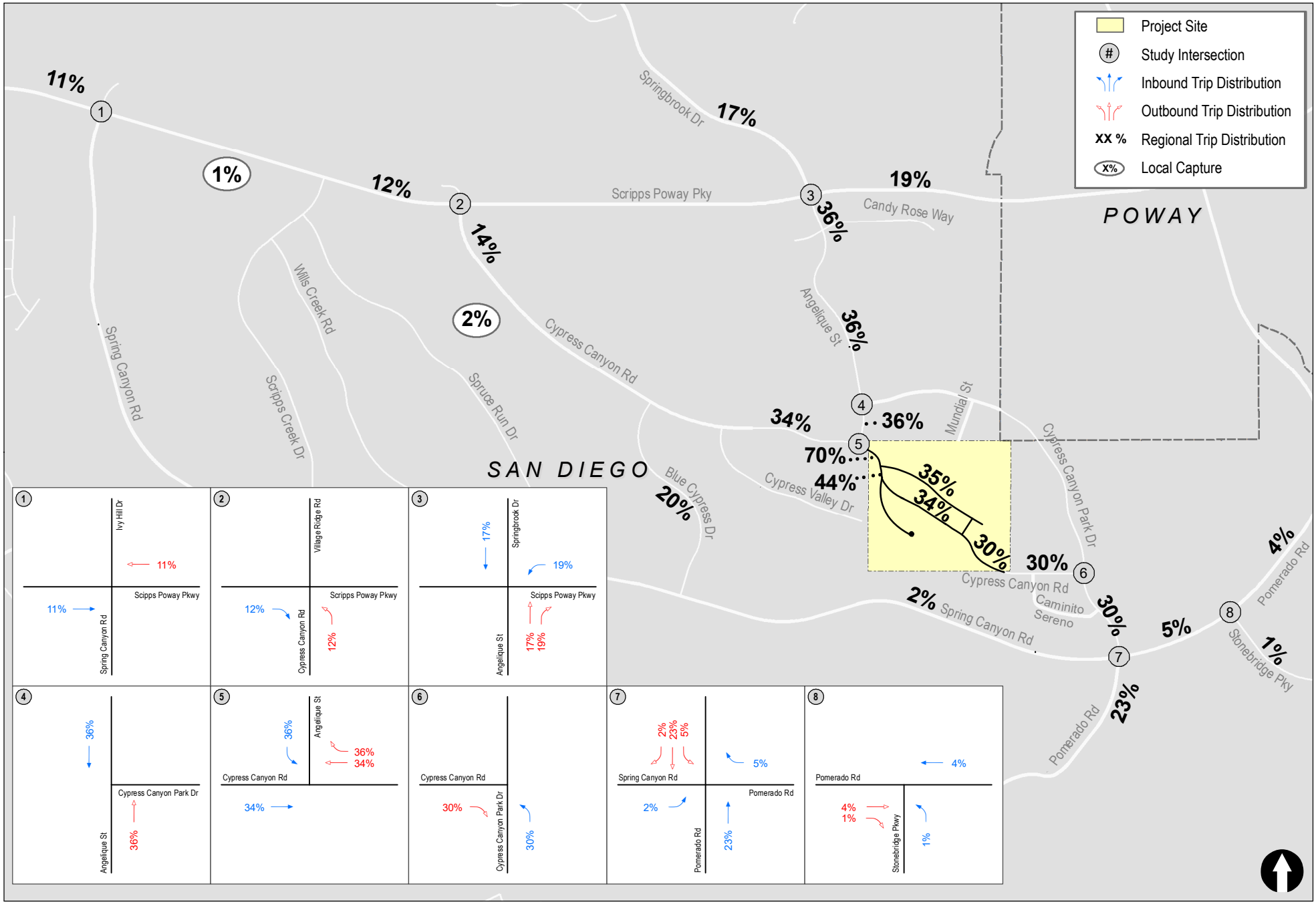
Project Access	Distribution %	ADT	AM Peak Hour					PM Peak Hour				
			% of ADT [a]	In:Out Split [a]	Volume In	Volume Out	Volume Total	% of ADT [a]	In:Out Split [a]	Volume In	Volume Out	Volume Total
Western Access [b]	50%	548	8%	20% 80%	9	35	44	10%	70% 30%	39	16	55
Eastern Access [c]	50%	548	8%	20% 80%	9	35	44	10%	70% 30%	38	17	55
Total Proposed		**1,096**	—	— —	**18**	**70**	**88**	—	— —	**77**	**33**	**110**

Footnotes:

a. Rates taken from the *City of San Diego Trip Generation Manual*.
b. 55 single-family DUs are assumed to utilize this access.
c. 45 single-family DUs and 12 affordable multi-family DUs are assumed to utilize this access.

General Notes:

1. ADT = Average daily traffic volumes
2. DU = Dwelling unit



LINSCOTT LAW & GREENSPAN engineers

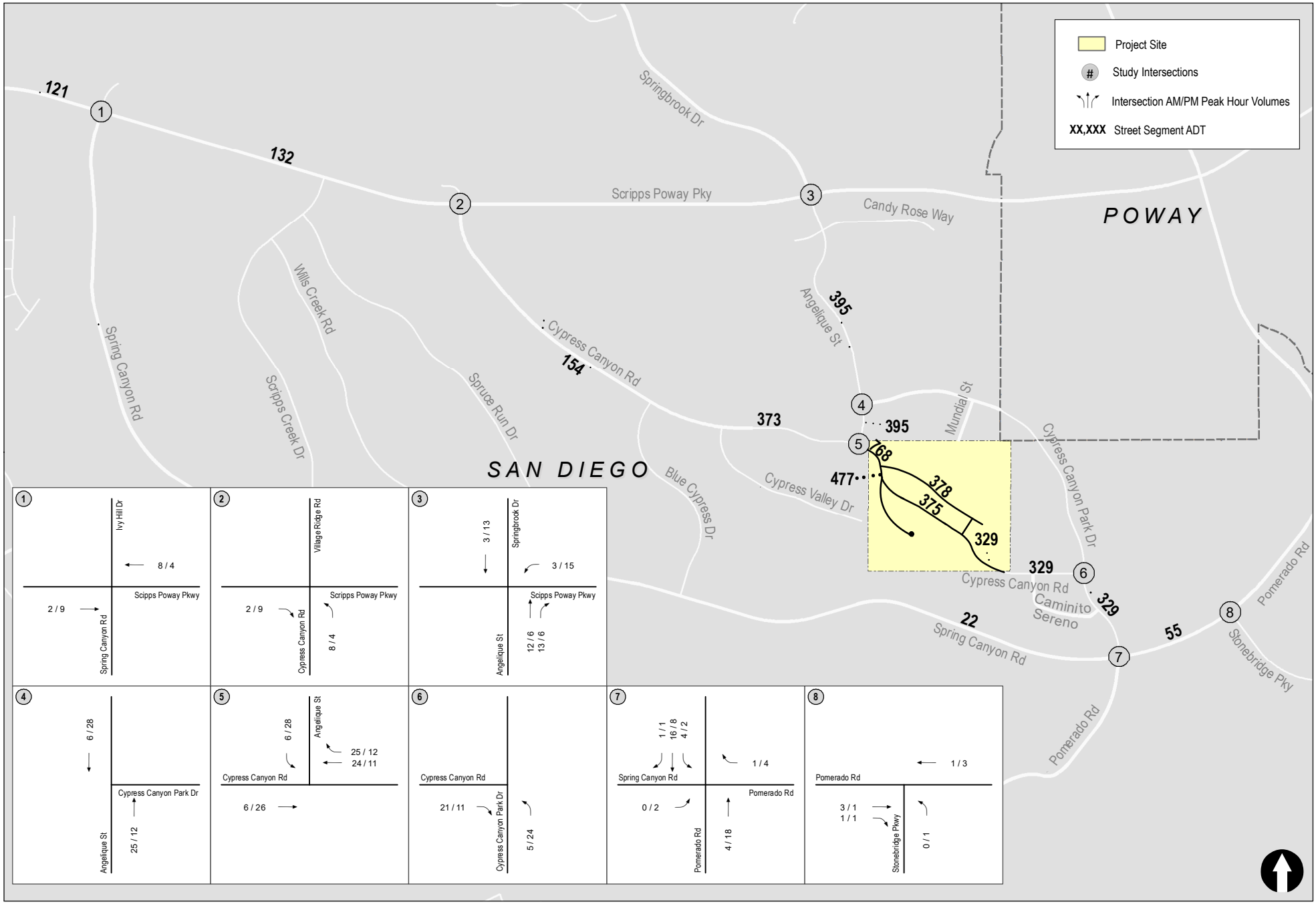
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Date: 10/5/2023
Time: 8:50 AM

Figure 5-1

Project Traffic Distribution

With Cypress Canyon Connection

Renzulli Estates



LINSCOTT LAW & GREENSPAN engineers

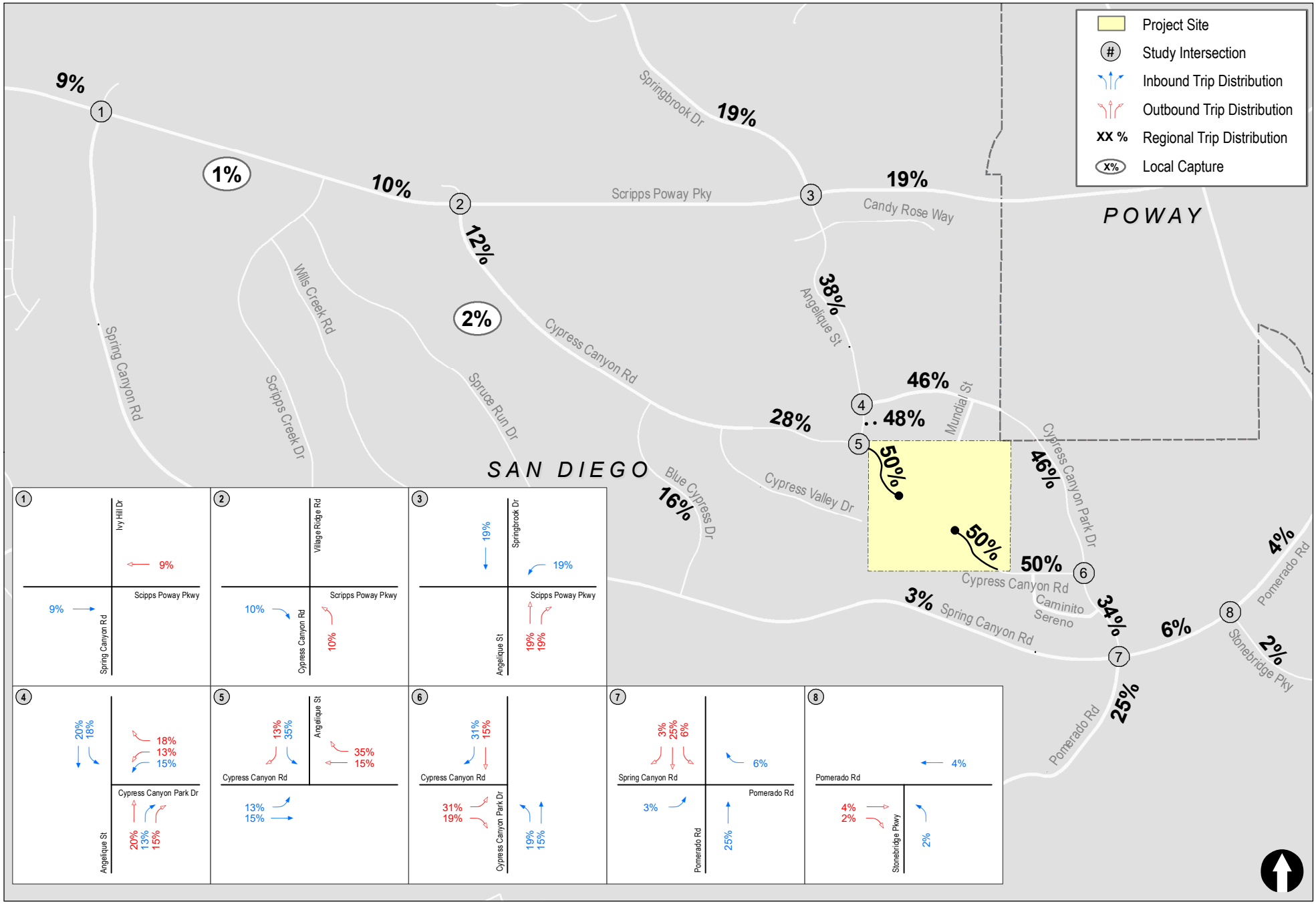
N:\3272\Figures
Date: 1/31/2024
Time: 2:58 PM

Figure 5-2

Project Traffic Volumes

With Cypress Canyon Connection

Renzulli Estates



LINSCOTT LAW & GREENSPAN engineers

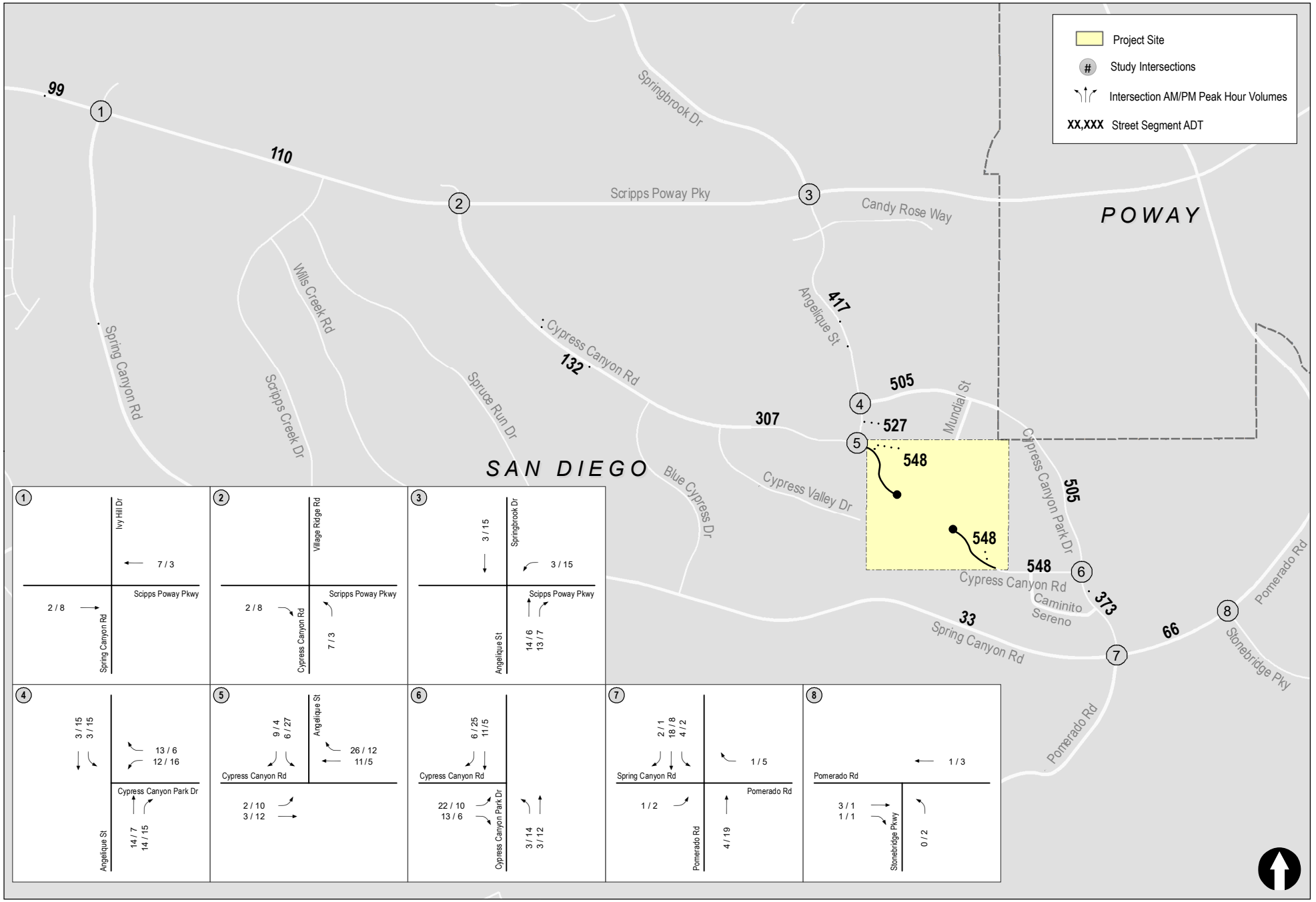
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Date: 3/1/2023
Time: 1:26 PM

Figure 5-3

Project Traffic Distribution

Without Cypress Canyon Connection

Renzulli Estates



LINSCOTT LAW & GREENSPAN engineers

N:\3272\Figures
Date: 3/8/2023
Time: 10:57 AM

Figure 5-4

Project Traffic Volumes

Without Cypress Canyon Connection

Renzulli Estates

6.0 ANALYSIS OF EXISTING CONDITIONS

The following section presents the analysis of existing study area locations.

6.1 Peak Hour Intersection Operations

6.1.1 *Intersection LOS*

Table 6–1 summarizes the Existing intersections LOS. As seen in *Table 6–1*, all intersections are calculated to currently operate at the acceptable LOS D or better.

Appendix E contains the Existing intersection analysis worksheets.

6.2 Daily Street Segment Operations

Table 6–2 summarizes the Existing roadway segment operations. As seen in *Table 6–2*, the study area segments are calculated to currently operate at LOS D or better with the following exception:

- Scripps Poway Parkway: Spring Canyon Road to Cypress Canyon Road (LOS E)

TABLE 6–1
EXISTING INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Existing	
			Delay [a]	LOS [b]
1. Scripps Poway Parkway / Spring Canyon Road	Signal	AM	30.5	C
		PM	33.4	C
2. Scripps Poway Parkway / Cypress Canyon Road	Signal	AM	26.4	C
		PM	32.4	C
3. Scripps Poway Parkway / Angelique Street	Signal	AM	23.5	C
		PM	24.8	C
4. Angelique Street / Cypress Canyon Park Drive	OWSC[c]	AM	9.4	A
		PM	9.7	A
5. Angelique Street / Cypress Canyon Road	OWSC[c]	AM	8.7	A
		PM	8.8	A
6. Cypress Canyon Park Drive / Cypress Canyon Road	OWSC[c]	AM	9.7	A
		PM	9.5	A
7. Pomerado Road / Spring Canyon Road	Signal	AM	39.1	D
		PM	36.7	D
8. Pomerado Road / Stonebridge Parkway	Signal	AM	18.3	B
		PM	19.3	B

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. One-Way Stop Control. Worst-case delay and LOS 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 6–2
EXISTING STREET SEGMENT OPERATIONS

Street Segment	Functional Classification	Capacity (LOS E) [a]	ADT [b]	LOS [c]	V/C [d]
Scripps Poway Parkway					
West of Spring Canyon Road	6-Lane Major Arterial	50,000	41,530	D	0.831
Spring Canyon Road to Cypress Canyon Road	4-Lane Major Arterial	40,000	37,800	E	0.945
Spring Canyon Road					
West of Pomerado Road	4-Lane Major Arterial	40,000	9,300	A	0.233
Pomerado Road					
Cypress Canyon Park Drive to Stonebridge Parkway	4-Lane Major Arterial	40,000	22,860	C	0.572
Cypress Canyon Road					
Scripps Poway Parkway to Blue Cypress Drive	2-Lane Collector	8,000	4,200	C	0.525
Blue Cypress Drive to Angelique Street	2-Lane Collector (fronting residential)	8,000	2,690	B	0.336
Caminito Sereno to Cypress Canyon Park Drive	2-Lane Collector	8,000	770	A	0.096
Angelique Street					
Scripps Poway Parkway to Cypress Canyon Park Drive	2-Lane Collector (fronting residential)	8,000	3,280	B	0.410
Cypress Canyon Park Drive to Cypress Canyon Road	2-Lane Collector (fronting residential)	8,000	1,730	A	0.216
Cypress Canyon Park Drive					
Angelique Street to Mundial Street	2-Lane Collector (fronting residential)	8,000	1,400	A	0.175
Mundial Street to Cypress Canyon Road	2-Lane Collector (fronting residential)	8,000	1,930	A	0.241
Cypress Canyon Road to Pomerado Road / Spring Canyon Road	2-Lane Collector	8,000	3,530	C	0.441

Footnotes:

a. Roadway Capacity at LOS E based on City of San Diego's Roadway Classification Table (See *Appendix C*).
b. Average Daily Traffic Volumes.
c. Level of Service.
d. Volume to Capacity

7.0 CUMULATIVE PROJECTS

"Cumulative" projects are other projects in the study area that are expected to be constructed and occupied by the Project's expected Opening Year in Year 2025, thus adding traffic to the local circulation system. LLG researched ongoing cumulative projects in the study area that could be constructed and generating traffic in the study area vicinity by the expected Opening Year of the Project in Year 2025. Based on this research, two (2) cumulative projects (Scripps Mesa Joint Occupancy Project and The Farm) are planned nearby that could add to traffic to study area intersections and street segments

The following is a brief description of the two (2) identified cumulative projects. ***Table 7–1*** provides a summary of the cumulative project trip generation summary.

1. **Scripps Mesa Joint Occupancy Project (PTS# 678857):** proposes to demolish the existing 351-student enrollment charter school and construct 264 multi-family residential units, 2,000 square feet (sf) of commercial/retail space, and a 4,000 sf community center building located at 10380 Spring Canyon Road. This project is approved and constructed.

2. **The Farm (City of Poway):** proposes to develop the 118-acre site formerly occupied by the Stoneridge Country Club with 160 residential units and non-residential uses primarily site-serving agricultural and social land uses. The site is bounded by Valle Verde Road, St. Andrews Drive, Tam O'Shanter Drive, Cloudcroft Drive, and Espola Road and was formerly occupied by the Stoneridge County Club. This project is approved and currently under construction.

TABLE 7–1
CUMULATIVE DEVELOPMENT PROJECTS SUMMARY

No.	Name	Project	ADT [a]	AM		PM		Status
				In	Out	In	Out	
1.	Scripps Mesa Joint Occupancy	Multi-Family Residential, Retail/Commercial, Community Center, (Charter School)[b]	802	-134	-5	39	-51	Approved – Constructed
2.	The Farm [c]	Single-Family and Multi-Family Residential, Agriculture, Health Club, Venue, Open Space Recreation, and Open Space Conservation	2,524	62	107	159	78	Approved via City of Poway Initiative – Under Construction

Footnotes:

a. ADT = Average daily traffic.
b. ( ) – demolition and reduction in trips.
c. Based on a review of the transportation impact study for the project (LLG Engineers, May 2020), the Farm project does not add trips to the proposed project study area.

8.0 ANALYSIS OF OPENING YEAR 2025 SCENARIOS

The following section presents the analysis of study area locations under Opening Year 2025 conditions.

8.1 Opening Year 2025 Traffic Volumes

For purposes of this analysis, it was assumed the Project would be constructed by the Year 2025. This timeframe represents the "Opening Year" baseline conditions. By Opening Year, it would be expected that ambient growth would occur within the study area due to other development projects. As discussed in Section 7.0, two (2) cumulative projects were identified to add traffic to the Project study area and the cumulative project traffic from these projects are low; therefore, to account for future unforeseen cumulative growth, a growth factor of 4% was applied to the existing traffic volumes to develop the Opening Year 2025 (without Cypress Canyon Road connection) condition. In order to forecast future traffic volumes for the Opening Year 2025 with Cypress Canyon Road connection conditions, the SANDAG Series 14 Model was utilized as further discussed in *Section 9.1*. Project traffic was added to the opening year traffic volumes to develop the Opening Year 2025 With Project traffic volumes.

Figure 8–1 depicts the Opening Year 2025 (With Connection) traffic volumes and ***Figure 8–2*** depicts the Opening Year 2025 (With Connection) With Project traffic volumes. ***Figure 8–3*** depicts the Opening Year 2025 (No Connection) traffic volumes and ***Figure 8–4*** depicts the Opening Year 2025 (No Connection) With Project traffic volumes.

8.2 Opening Year 2025 (With Connection) Without Project

8.2.1 *Peak Hour Intersection Analysis*

Table 8–1 summarizes the peak hour intersection operations for the Opening Year 2025 (With Connection) Without Project condition. As seen in *Table 8–1*, all intersections are calculated to operate at acceptable LOS D or better.

Appendix F contains the peak hour intersection analysis worksheets for the Opening Year 2025 (With Connection) Without Project condition.

8.2.2 *Daily Street Segment Operations*

Table 8–2 summarizes the key segment operations in the study area for the Opening Year 2025 (With Connection) Without Project condition. As seen in *Table 8–2*, the following study area segment is calculated to operate at LOS E:

- Scripps Poway Parkway: Spring Canyon Road to Cypress Canyon Road (LOS E)

8.3 Opening Year 2025 (With Connection) With Project

8.3.1 *Peak Hour Intersection Analysis*

Table 8–1 summarizes the peak hour intersection operations for Opening Year 2025 (With Connection) With Project conditions. As seen in *Table 8–1*, with the addition of Project traffic all intersections are calculated to continue to operate at acceptable LOS D or better.

Appendix G contains the peak hour intersection analysis worksheets for the Opening Year 2025 (With Connection) With Project condition.

Based on City of San Diego guidelines, no signal timing improvements or modifications are recommended as the study area intersections operate at LOS D or better.

8.3.2 *Daily Street Segment Operations*

Table 8–2 summarizes the key segment operations in the study area for the Opening Year 2025 (With Connection) With Project conditions. As seen in *Table 8–2*, with the addition of Project traffic, the following study area segment is calculated to operate at LOS E:

- Scripps Poway Parkway: Spring Canyon Road to Cypress Canyon Road (LOS E)

No additional improvements are required by the Project since the Project adds fewer than 50% of the total daily vehicle trips on this segment and the LOS does not worsen with the addition of Project traffic. It should be noted that, per the Miramar Ranch North Public Facilities Financing Plan, work on Scripps Poway Parkway has been completed.

8.4 Opening Year 2025 (No Connection) Without Project

8.4.1 *Peak Hour Intersection Analysis*

Table 8–1 summarizes the peak hour intersection operations for the Opening Year 2025 (No Connection) Without Project condition. As seen in *Table 8–1*, all intersections are calculated to operate at acceptable LOS D or better.

Appendix H contains the peak hour intersection analysis worksheets for the Opening Year 2025 (No Connection) Without Project condition.

8.4.2 *Daily Street Segment Operations*

Table 8–2 summarizes the key segment operations in the study area for the Opening Year 2025 (No Connection) Without Project condition. As seen in *Table 8–2*, the following study area segment is calculated to operate at LOS E:

- Scripps Poway Parkway: Spring Canyon Road to Cypress Canyon Road (LOS E)

8.5 Opening Year 2025 (No Connection) With Project

8.5.1 *Peak Hour Intersection Analysis*

Table 8–1 summarizes the peak hour intersection operations for Opening Year 2025 (No Connection) With Project conditions. As seen in *Table 8–1*, with the addition of Project traffic all intersections are calculated to continue to operate at acceptable LOS D or better.

Appendix I contains the peak hour intersection analysis worksheets for the Opening Year 2025 (No Connection) With Project condition.

Based on City of San Diego guidelines, no signal timing improvements or modifications are recommended as the study area intersections operate at LOS D or better.

8.5.2 *Daily Street Segment Operations*

Table 8–2 summarizes the key segment operations in the study area for the Opening Year 2025 (No Connection) With Project conditions. As seen in *Table 8–2*, with the addition of Project traffic, the following study area segment is calculated to operate at LOS E:

- Scripps Poway Parkway: Spring Canyon Road to Cypress Canyon Road (LOS E)

No additional improvements are required by the Project since the Project adds fewer than 50% of the total daily vehicle trips on this segment and the LOS does not worsen with the addition of Project traffic. It should be noted that, per the Miramar Ranch North Public Facilities Financing Plan, work on Scripps Poway Parkway has been completed.

TABLE 8–1
OPENING YEAR 2025 INTERSECTION OPERATIONS – WITH CONNECTION

Intersection	Control Type	Peak Hour	Opening Year 2025 Without Project		Opening Year 2025 With Project		Δ^d
			Delay [a]	LOS [b]	Delay [a]	LOS [b]	
1. Scripps Poway Parkway / Spring Canyon Road	Signal	AM	32.1	C	32.4	C	0.3
		PM	34.9	C	35.0	C	0.1
2. Scripps Poway Parkway / Cypress Canyon Road	Signal	AM	28.3	C	28.4	C	0.1
		PM	34.9	C	35.1	D	0.2
3. Scripps Poway Parkway / Angelique Street	Signal	AM	25.7	C	27.6	C	1.9
		PM	27.6	C	28.5	C	0.9
4. Angelique Street / Cypress Canyon Park Drive	OWSC[c]	AM	9.6	A	9.8	A	0.2
		PM	9.7	A	9.9	A	0.2
5. Angelique Street / Cypress Canyon Road	OWSC[c]	AM	9.5	A	10.1	B	0.6
		PM	10.5	B	11.7	B	1.2
6. Cypress Canyon Park Drive / Cypress Canyon Road	OWSC[c]	AM	10.2	B	10.3	B	0.1
		PM	10.2	B	10.4	B	0.2
7. Pomerado Road / Spring Canyon Road	Signal	AM	49.3	D	49.8	D	0.5
		PM	45.8	D	46.3	D	0.5
8. Pomerado Road / Stonebridge Parkway	Signal	AM	18.6	B	18.7	B	0.1
		PM	19.9	B	19.9	B	0.0

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. One-Way Stop Control. Worst-case delay and LOS reported.
d. Δ denotes the project-induced increase in delay.

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
OPENING YEAR 2025 STREET SEGMENT OPERATIONS – WITH CONNECTION

Street Segment	Functional Classification	Capacity (LOS E) [a]	Opening Year 2025 without Project			Opening Year 2025 with Project			Δ[e]
			ADT[b]	LOS[c]	V/C[d]	ADT[b]	LOS[c]	V/C[d]	
Scripps Poway Parkway									
West of Spring Canyon Road	6-Lane Major Arterial	50,000	42,690	D	0.854	42,811	D	0.856	0.002
Spring Canyon Road to Cypress Canyon Road	4-Lane Major Arterial	40,000	38,830	E	0.971	38,962	E	0.974	0.003
Spring Canyon Road									
West of Pomerado Road	4-Lane Major Arterial	40,000	9,780	A	0.245	9,802	A	0.245	0.000
Pomerado Road									
Cypress Canyon Park Drive to Stonebridge Parkway	4-Lane Major Arterial	40,000	25,040	C	0.626	25,095	C	0.627	0.001
Cypress Canyon Road									
Scripps Poway Parkway to Blue Cypress Drive	2-Lane Collector	8,000	4,340	C	0.543	4,494	C	0.562	0.019
Blue Cypress Drive to Angelique Street	2-Lane Collector (fronting residential)	8,000	2,930	B	0.366	3,303	B	0.413	0.047
Angelique Street to Street "A"	Residential Sub-Collector	2,200 [f]	1,370	–	–	2,138	–	–	–
Street "A" to Street "B"	Residential Sub-Collector	2,200 [f]	690	–	–	1,167	–	–	–
Street "B" to Caminito Sereno	Residential Sub-Collector	2,200 [f]	1,370	–	–	1,699	–	–	–
Caminito Sereno to Cypress Canyon Park Drive	2-Lane Collector	8,000	2,100	A	0.263	2,429	A	0.304	0.041
Angelique Street									
Scripps Poway Parkway to Cypress Canyon Park Drive	2-Lane Collector (fronting residential)	8,000	3,900	C	0.488	4,295	C	0.537	0.049
Cypress Canyon Park Drive to Cypress Canyon Road	2-Lane Collector (fronting residential)	8,000	2,480	A	0.310	2,875	B	0.359	0.049

TABLE 8–2
OPENING YEAR 2025 STREET SEGMENT OPERATIONS – WITH CONNECTION

Street Segment	Functional Classification	Capacity (LOS E) [a]	Opening Year 2025 without Project			Opening Year 2025 with Project			Δ[e]
			ADT[b]	LOS[c]	V/C[d]	ADT[b]	LOS[c]	V/C[d]	
Cypress Canyon Park Drive									
Angelique Street to Mundial Street	2-Lane Collector (fronting residential)	8,000	1,000	A	0.125	1,000	A	0.125	0.000
Mundial Street to Cypress Canyon Road	2-Lane Collector (fronting residential)	8,000	1,550	A	0.194	1,550	A	0.194	0.000
Cypress Canyon Road to Pomerado Road / Spring Canyon Road	2-Lane Collector	8,000	4,430	C	0.554	4,759	C	0.595	0.041
Street "A" Cypress Canyon Road (North) to Cypress Canyon Road (South)	Residential Sub-Collector	2,200 [f]	690	–	–	1,068	–	–	–
Street "B" Cypress Canyon Road (North) to Cypress Canyon Road (South)	Residential Sub-Collector	2,200 [f]	680	–	–	1,055	–	–	–

Footnotes:

a. Capacities based on City of San Diego Roadway Classification & LOS table (see *Appendix C*).
b. Average Daily Traffic
c. Level of Service
d. Volume to Capacity ratio
e. Δ denotes a project-induced increase in the Volume to Capacity ratio
f. Roadway Capacity at LOS C based on City of San Diego's Roadway Classification Table (see *Appendix C*). LOS and V/C are not applied to residential streets.

TABLE 8–3
OPENING YEAR 2025 INTERSECTION OPERATIONS – NO CONNECTION

Intersection	Control Type	Peak Hour	Opening Year 2025 Without Project		Opening Year 2025 With Project		Δ[d]
			Delay [a]	LOS [b]	Delay [a]	LOS [b]	
1. Scripps Poway Parkway / Spring Canyon Road	Signal	AM	32.1	C	32.4	C	0.3
		PM	34.9	C	35.0	C	0.1
2. Scripps Poway Parkway / Cypress Canyon Road	Signal	AM	28.4	C	28.4	C	0.0
		PM	35.1	D	35.2	D	0.1
3. Scripps Poway Parkway / Angelique Street	Signal	AM	25.1	C	27.1	C	2.0
		PM	26.5	C	27.6	C	1.0
4. Angelique Street / Cypress Canyon Park Drive	OWSC[c]	AM	9.5	A	9.9	A	0.4
		PM	9.8	A	10.6	B	0.8
5. Angelique Street / Cypress Canyon Road	OWSC[c]	AM	8.7	A	9.1	A	0.4
		PM	8.8	A	9.6	A	0.8
6. Cypress Canyon Park Drive / Cypress Canyon Road	OWSC[c]	AM	9.8	A	10.7	B	0.9
		PM	9.6	A	10.2	B	0.6
7. Pomerado Road / Spring Canyon Road	Signal	AM	43.4	D	43.8	D	0.4
		PM	40.5	D	40.8	D	0.3
8. Pomerado Road / Stonebridge Parkway	Signal	AM	18.6	B	18.6	B	0.0
		PM	19.8	B	19.8	B	0.0

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. One-Way Stop Control. Worst-case delay and LOS reported.
d. Δ denotes the project-induced increase in delay.

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 8–4
OPENING YEAR 2025 STREET SEGMENT OPERATIONS – NO CONNECTION

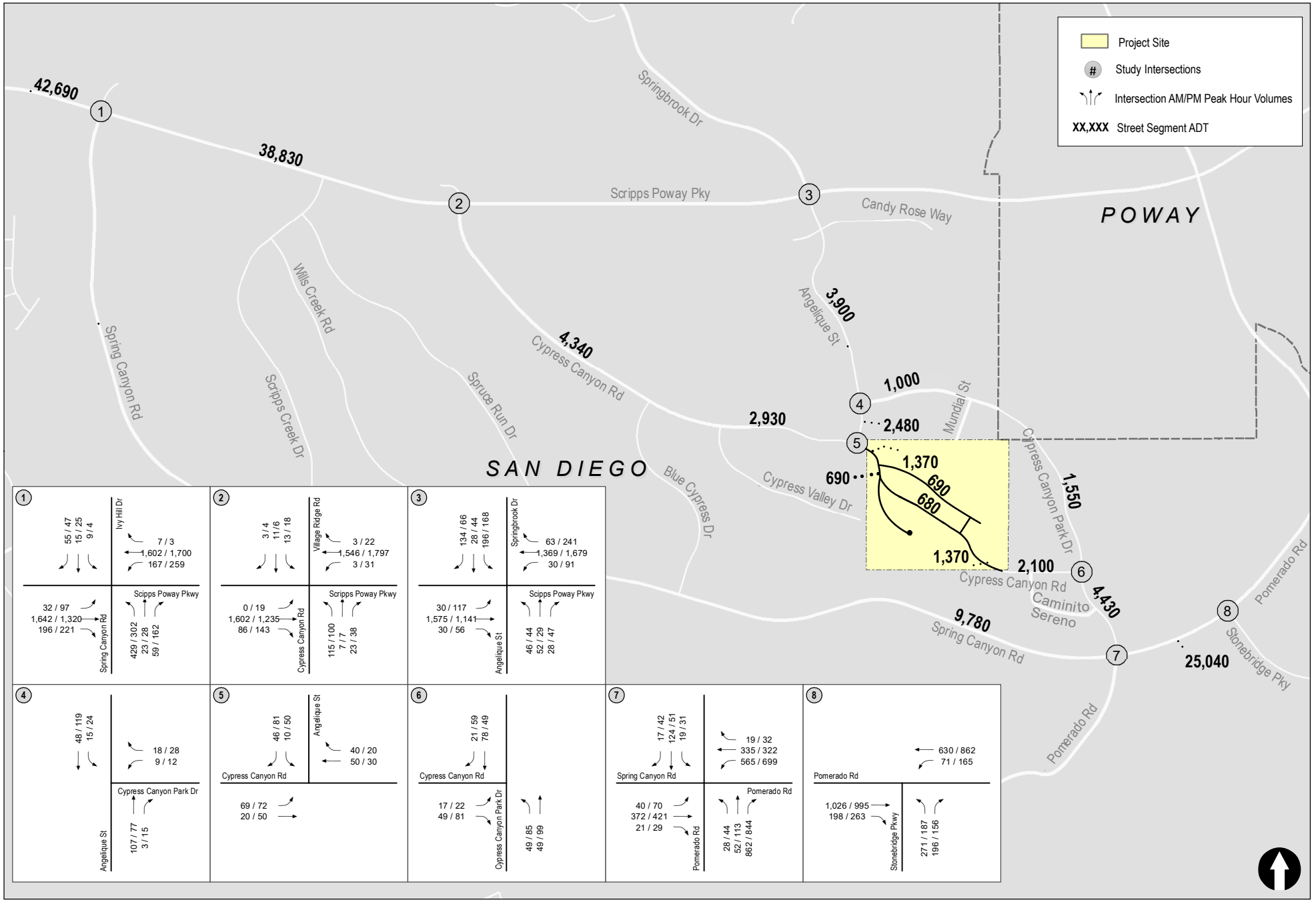
Street Segment	Functional Classification	Capacity (LOS E) [a]	Opening Year 2025 without Project			Opening Year 2025 with Project			Δ[e]
			ADT[b]	LOS[c]	V/C[d]	ADT[b]	LOS[c]	V/C[d]	
Scripps Poway Parkway									
West of Spring Canyon Road	6-Lane Major Arterial	50,000	43,200	D	0.864	43,299	D	0.866	0.002
Spring Canyon Road to Cypress Canyon Road	4-Lane Major Arterial	40,000	39,320	E	0.983	39,430	E	0.986	0.003
Spring Canyon Road									
West of Pomerado Road	4-Lane Major Arterial	40,000	9,680	A	0.242	9,713	A	0.243	0.001
Pomerado Road									
Cypress Canyon Park Drive to Stonebridge Parkway	4-Lane Major Arterial	40,000	23,780	C	0.595	23,846	C	0.596	0.001
Cypress Canyon Road									
Scripps Poway Parkway to Blue Cypress Drive	2-Lane Collector	8,000	4,370	C	0.546	4,502	C	0.563	0.017
Blue Cypress Drive to Angelique Street	2-Lane Collector (fronting residential)	8,000	2,800	B	0.350	3,107	B	0.388	0.038
Caminito Sereno to Cypress Canyon Park Drive	2-Lane Collector	8,000	810	A	0.101	1,358	A	0.170	0.069
Angelique Street									
Scripps Poway Parkway to Cypress Canyon Park Drive	2-Lane Collector (fronting residential)	8,000	3,420	B	0.428	3,837	C	0.480	0.052
Cypress Canyon Park Drive to Cypress Canyon Road	2-Lane Collector (fronting residential)	8,000	1,800	A	0.225	2,327	A	0.291	0.066

TABLE 8–4
OPENING YEAR 2025 STREET SEGMENT OPERATIONS – NO CONNECTION

Street Segment	Functional Classification	Capacity (LOS E) [a]	Opening Year 2025 without Project			Opening Year 2025 with Project			Δ[e]
			ADT[b]	LOS[c]	V/C[d]	ADT[b]	LOS[c]	V/C[d]	
Cypress Canyon Park Drive									
Angelique Street to Mundial Street	2-Lane Collector (fronting residential)	8,000	1,460	A	0.183	1,965	A	0.246	0.063
Mundial Street to Cypress Canyon Road	2-Lane Collector (fronting residential)	8,000	2,010	A	0.251	2,515	B	0.314	0.063
Cypress Canyon Road to Pomerado Road / Spring Canyon Road	2-Lane Collector	8,000	3,680	C	0.460	4,053	C	0.507	0.047

Footnotes:

a. Capacities based on City of San Diego Roadway Classification & LOS table (see *Appendix C*).
b. Average Daily Traffic
c. Level of Service
d. Volume to Capacity ratio
e. Δ denotes a project-induced increase in the Volume to Capacity ratio



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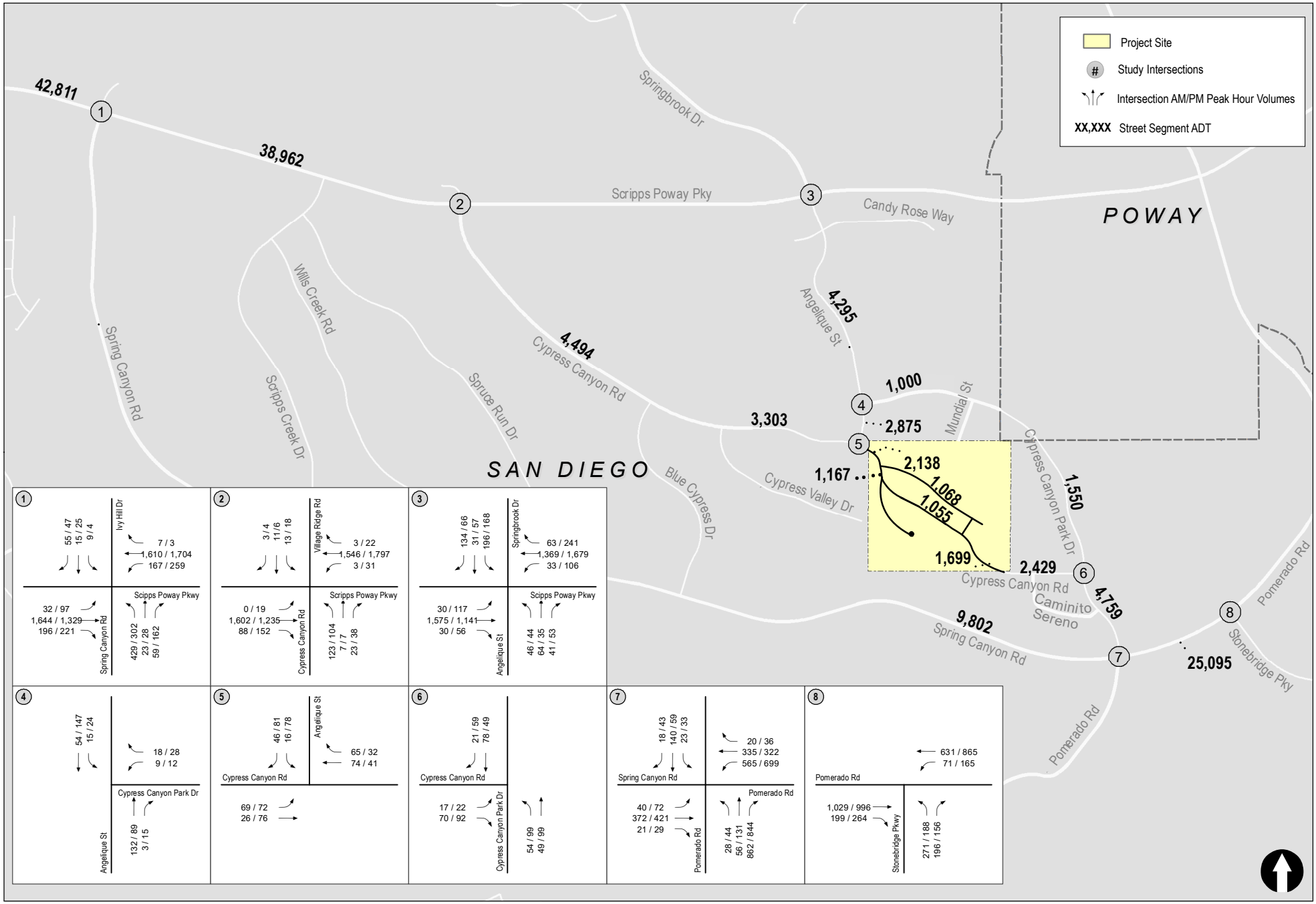
Note:
The roadway connection is shown for illustration purposes only.

Figure 8-1

Opening Year 2025 Without Project Traffic Volumes

With Cypress Canyon Connection

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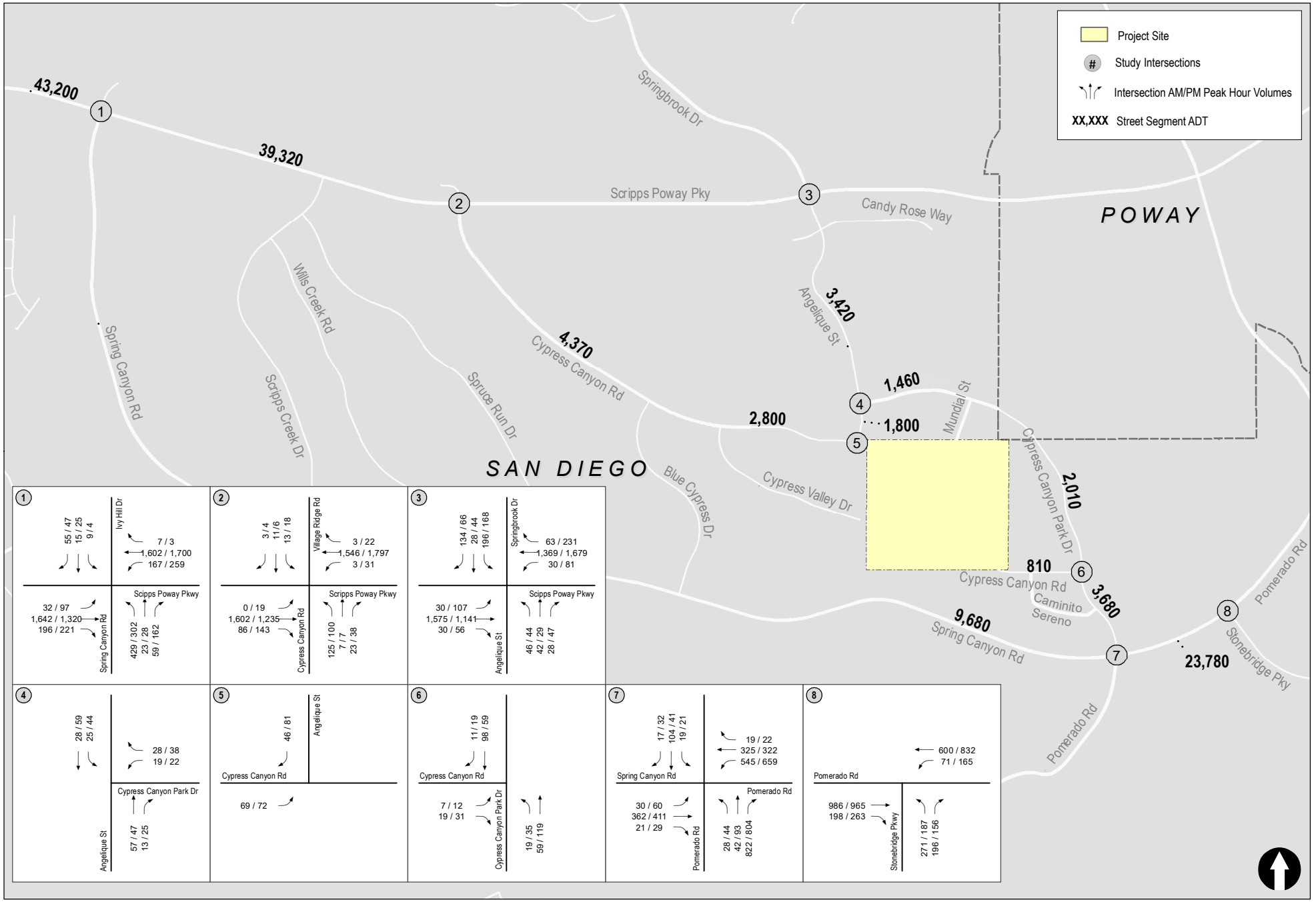
Note:
The roadway connection is shown for illustration purposes only.

Figure 8-2

Opening Year 2025 + Project Traffic Volumes

With Cypress Canyon Connection

Renzulli Estates



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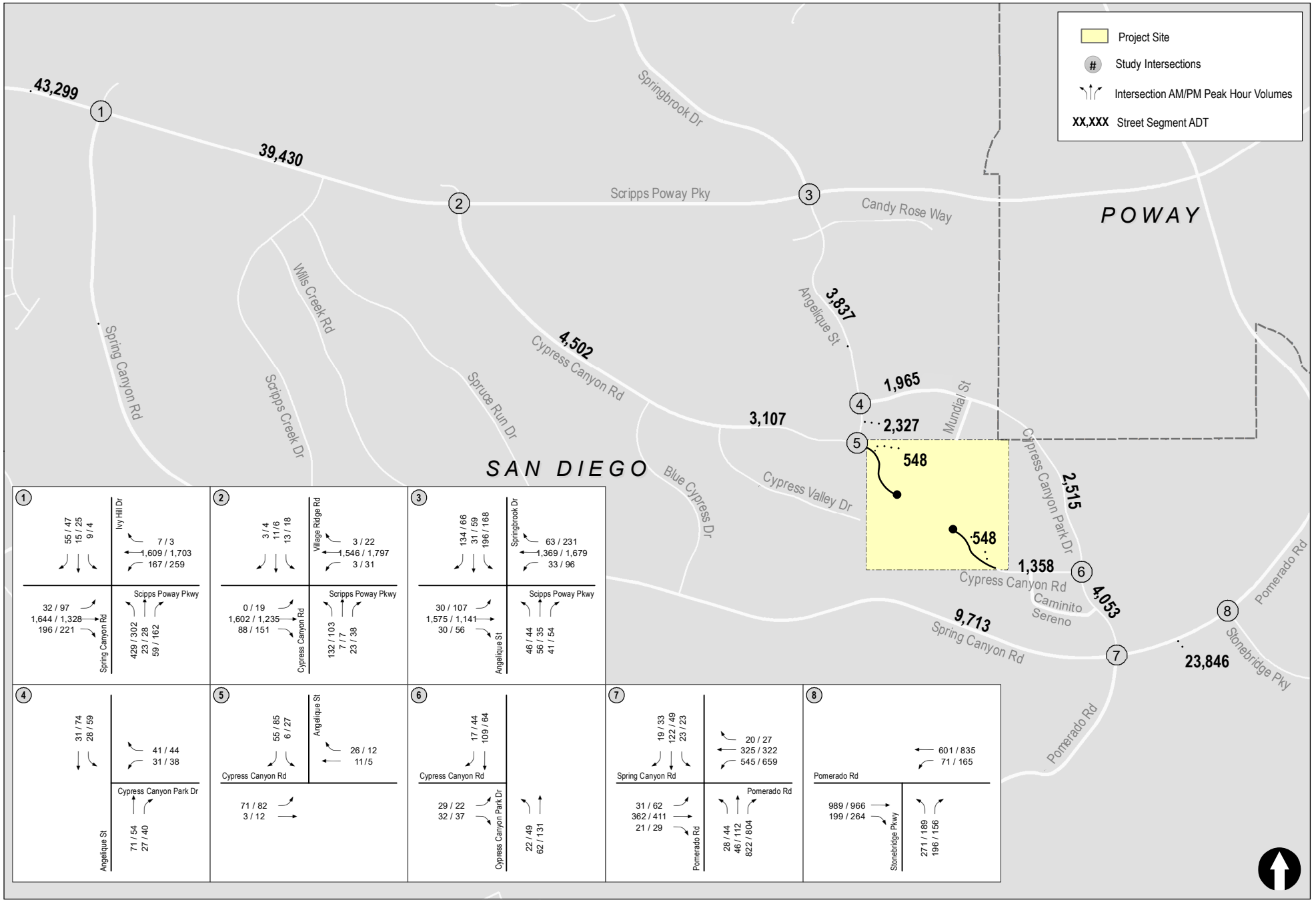
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Figure 8-3

Opening Year 2025 Without Project Traffic Volumes

Without Cypress Canyon Connection

Renzulli Estates



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Figure 8-4

Opening Year 2025 With Project Traffic Volumes

Without Cypress Canyon Connection

Renzulli Estates

9.0 ANALYSIS OF HORIZON YEAR 2050 SCENARIOS

The following section presents the analysis of study area locations under two scenarios – Horizon Year 2050 without Project and Horizon Year 2050 with Project conditions with and without the Cypress Canyon Road connection. The existing street network with no additional network improvements other than the proposed Cypress Canyon Road connection between Angelique Street and Cypress Canyon Park Drive was assumed.

9.1 Horizon Year 2050 Traffic Volumes

To forecast future traffic volumes for Horizon Year 2050 conditions, a SANDAG Series 14 forecast Model run was conducted with and without the Cypress Canyon Road connection. The model included 46 units on the Project site, therefore, the trips associated with the 46 units were removed to develop baseline Horizon Year 2050 without Project volumes (see *Appendix D* for model results and included land uses). The Project traffic volumes were then added to the baseline Horizon Year 2050 without Project volumes to develop Horizon Year 2050 with Project traffic volumes.

Figure 9–1 depicts Horizon Year 2050 (With Connection) without Project traffic volumes and ***Figure 9–2*** depicts Horizon Year 2050 (With Connection) Cypress Canyon Road connection with Project traffic volumes. ***Figure 9–3*** depicts the Horizon Year 2050 (No Connection) without Project traffic volumes and ***Figure 9–4*** depicts Horizon Year 2050 (No Connection) With Project traffic volumes.

As shown in the Horizon Year 2050 with Cypress Canyon Road connection alternative, the traffic volumes are higher on a few segments due to re-routed traffic due to the new roadway connection. Consequently, the traffic volumes are lower on a few segments due to the re-routed traffic. Nevertheless, the changes in traffic volumes on the surrounding roadways were calculated to be nominal given that the Cypress Canyon extension is expected to only alter local traffic circulation.

9.2 Horizon Year 2050 (With Connection) Without Project Analysis

9.2.1 *Peak Hour Intersection Analysis*

Table 9–1 summarizes the peak hour intersection operations for the Horizon Year 2050 (With Connection) Without Project condition. As seen in *Table 9–1*, all intersections are calculated to operate at acceptable LOS D or better.

Appendix J contains the peak hour intersection analysis worksheets for the Horizon Year 2050 (With Connection) Without Project condition.

9.2.2 *Daily Street Segment Operations*

Table 9–2 summarizes the key segment operations in the study area for the Horizon Year 2050 (With Connection) Without Project condition. As seen in *Table 9–2*, the following study area segments are calculated to operate at LOS E or F:

- Scripps Poway Parkway: West of Spring Canyon Road (LOS E)

- Scripps Poway Parkway: Spring Canyon Road to Cypress Canyon Road (LOS F)

9.3 Horizon Year 2050 (With Connection) With Project Analysis

9.3.1 *Peak Hour Intersection Analysis*

Table 9–1 summarizes the peak hour intersection operations for Horizon Year 2050 (With Connection) With Project conditions. As seen in *Table 9–1*, with the addition of Project traffic all intersections are calculated to continue to operate at acceptable LOS D or better.

Appendix K contains the peak hour intersection analysis worksheets for the Horizon Year 2050 (With Connection) With Project condition.

Based on City of San Diego guidelines, no improvements are recommended as the study area intersections operate at LOS D or better.

9.3.2 *Daily Street Segment Operations*

Table 9–2 summarizes the key segment operations in the study area for the Horizon Year 2050 (With Connection) With Project conditions. As seen in *Table 9–2*, with the addition of Project traffic, the following study area segments are calculated to operate at LOS E or F:

- Scripps Poway Parkway: West of Spring Canyon Road (LOS E)
- Scripps Poway Parkway: Spring Canyon Road to Cypress Canyon Road (LOS F)

No additional improvements are required by the Project since the Project adds fewer than 50% of the total daily vehicle trips on these segments and the LOS does not worsen with the addition of Project traffic. It should be noted that, per the Miramar Ranch North Public Facilities Financing Plan, work on Scripps Poway Parkway has been completed.

9.4 Horizon Year 2050 (No Connection) Without Project Analysis

9.4.1 *Peak Hour Intersection Analysis*

Table 9–3 summarizes the peak hour intersection operations for the Horizon Year 2050 (No Connection) Without Project condition. As seen in *Table 9–3*, all intersections are calculated to operate at acceptable LOS D or better.

Appendix L contains the peak hour intersection analysis worksheets for the Horizon Year 2050 (No Connection) Without Project condition.

9.4.2 *Daily Street Segment Operations*

Table 9–4 summarizes the key segment operations in the study area for the Horizon Year 2050 (No Connection) Without Project condition. As seen in *Table 9–4*, the following study area segments are calculated to operate at LOS E or F:

- Scripps Poway Parkway: West of Spring Canyon Road (LOS E)
- Scripps Poway Parkway: Spring Canyon Road to Cypress Canyon Road (LOS F)

9.5 Horizon Year 2050 (No Connection) With Project

9.5.1 *Peak Hour Intersection Analysis*

Table 9–3 summarizes the peak hour intersection operations for Horizon Year 2050 (No Connection) With Project conditions. As seen in *Table 9–3*, with the addition of Project traffic all intersections are calculated to continue to operate at acceptable LOS D or better.

Appendix M contains the peak hour intersection analysis worksheets for the Horizon Year 2050 (No Connection) With Project condition.

Based on City of San Diego guidelines, no improvements are required as the study area intersections operate at LOS D or better.

9.5.2 *Daily Street Segment Operations*

Table 9–4 summarizes the key segment operations in the study area for the Horizon Year 2050 (No Connection) With Project conditions. As seen in *Table 9–4*, with the addition of Project traffic, the following study area segments are calculated to operate at LOS E or F:

- Scripps Poway Parkway: West of Spring Canyon Road (LOS E)
- Scripps Poway Parkway: Spring Canyon Road to Cypress Canyon Road (LOS F)

Table 9–5 shows the comparison between the Horizon Year 2050 with Project street segment operations with and without the Cypress Canyon Road connection.

No additional improvements are required by the Project since the Project adds fewer than 50% of the total daily vehicle trips on these segments and the LOS does not worsen with the addition of Project traffic. It should be noted that, per the Miramar Ranch North Public Facilities Financing Plan, work on Scripps Poway Parkway has been completed.

TABLE 9–1
HORIZON YEAR 2050 INTERSECTION OPERATIONS – WITH CONNECTION

Intersection	Control Type	Peak Hour	Horizon Year 2050 Without Project		Horizon Year 2050 With Project		Δ^d
			Delay [a]	LOS [b]	Delay [a]	LOS [b]	
1. Scripps Poway Parkway / Spring Canyon Road	Signal	AM	35.3	D	35.3	D	0.0
		PM	38.7	D	39.1	D	0.4
2. Scripps Poway Parkway / Cypress Canyon Road	Signal	AM	35.4	D	35.5	D	0.1
		PM	44.2	D	44.2	D	0.0
3. Scripps Poway Parkway / Angelique Street	Signal	AM	28.1	C	30.1	C	2.0
		PM	30.4	C	31.8	C	1.4
4. Angelique Street / Cypress Canyon Park Drive	OWSC[c]	AM	10.0	B	10.2	B	0.2
		PM	10.0	B	10.2	B	0.2
5. Angelique Street / Cypress Canyon Road	OWSC[c]	AM	9.5	A	10.1	B	0.6
		PM	10.5	B	11.6	B	1.1
6. Cypress Canyon Park Drive / Cypress Canyon Road	OWSC[c]	AM	10.4	B	10.5	B	0.1
		PM	10.5	B	10.7	B	0.2
7. Pomerado Road / Spring Canyon Road	Signal	AM	54.8	D	54.9	D	0.1
		PM	54.9	D	54.9	D	0.0
8. Pomerado Road / Stonebridge Parkway	Signal	AM	19.8	B	19.8	B	0.0
		PM	23.7	C	23.7	C	0.0

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. One-Way Stop Control. Worst-case delay and LOS reported.
d. Δ denotes the project-induced increase in delay.

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 9–2
HORIZON YEAR 2050 STREET SEGMENT OPERATIONS – WITH CONNECTION

Street Segment	Functional Classification	Capacity (LOS E) [a]	Horizon Year 2050 without Project			Horizon Year 2050 with Project			Δ[e]
			ADT[b]	LOS[c]	V/C[d]	ADT[b]	LOS[c]	V/C[d]	
Scripps Poway Parkway									
West of Spring Canyon Road	6-Lane Major Arterial	50,000	46,800	E	0.936	46,921	E	0.938	0.002
Spring Canyon Road to Cypress Canyon Road	4-Lane Major Arterial	40,000	42,230	F	1.056	42,362	F	1.059	0.003
Spring Canyon Road									
West of Pomerado Road	4-Lane Major Arterial	40,000	11,970	A	0.299	11,992	A	0.300	0.001
Pomerado Road									
Cypress Canyon Park Drive to Stonebridge Parkway	4-Lane Major Arterial	40,000	31,000	D	0.775	31,055	D	0.776	0.001
Cypress Canyon Road									
Scripps Poway Parkway to Blue Cypress Drive	2-Lane Collector	8,000	2,350	A	0.294	2,504	B	0.313	0.019
Blue Cypress Drive to Angelique Street	2-Lane Collector (fronting residential)	8,000	2,640	B	0.330	3,013	B	0.377	0.047
Angelique Street to Street "A"	Residential Sub-Collector	2,200 [f]	1,370	–	–	2,138	–	–	–
Street "A" to Street "B"	Residential Sub-Collector	2,200 [f]	690	–	–	1,167	–	–	–
Street "B" to Caminito Sereno	Residential Sub-Collector	2,200 [f]	1,370	–	–	1,699	–	–	–
Caminito Sereno to Cypress Canyon Park Drive	2-Lane Collector	8,000	1,970	A	0.246	2,299	A	0.287	0.041

TABLE 9–2
HORIZON YEAR 2050 STREET SEGMENT OPERATIONS – WITH CONNECTION

Street Segment	Functional Classification	Capacity (LOS E) [a]	Horizon Year 2050 without Project			Horizon Year 2050 with Project			Δ[e]
			ADT[b]	LOS[c]	V/C[d]	ADT[b]	LOS[c]	V/C[d]	
Angelique Street									
Scripps Poway Parkway to Cypress Canyon Park Drive	2-Lane Collector (fronting residential)	8,000	4,610	C	0.576	5,005	D	0.626	0.050
Cypress Canyon Park Drive to Cypress Canyon Road	2-Lane Collector (fronting residential)	8,000	3,190	B	0.399	3,585	C	0.448	0.049
Cypress Canyon Park Drive									
Angelique Street to Mundial Street	2-Lane Collector (fronting residential)	8,000	1,920	A	0.240	1,920	A	0.240	0.000
Mundial Street to Cypress Canyon Road	2-Lane Collector (fronting residential)	8,000	1,920	A	0.240	1,920	A	0.240	0.000
Cypress Canyon Road to Pomerado Road / Spring Canyon Road	2-Lane Collector	8,000	2,560	B	0.320	2,889	B	0.361	0.041
Street "A"									
Cypress Canyon Road (North) to Cypress Canyon Road (South)	Residential Sub-Collector	2,200 [f]	690	–	–	1,068	–	–	–
Street "B"									
Cypress Canyon Road (North) to Cypress Canyon Road (South)	Residential Sub-Collector	2,200 [f]	680	–	–	1,055	–	–	–

Footnotes:

a. Capacities based on City of San Diego Roadway Classification & LOS table (see *Appendix C*).
b. Average Daily Traffic
c. Level of Service
d. Volume to Capacity ratio
e. Δ denotes a project-induced increase in the Volume to Capacity ratio
f. Roadway Capacity at LOS C based on City of San Diego's Roadway Classification Table (see *Appendix C*). LOS and V/C are not applied to residential streets.

TABLE 9–3
HORIZON YEAR 2050 INTERSECTION OPERATIONS – NO CONNECTION

Intersection	Control Type	Peak Hour	Horizon Year 2050 Without Project		Horizon Year 2050 With Project		Δ^d
			Delay [a]	LOS [b]	Delay [a]	LOS [b]	
1. Scripps Poway Parkway / Spring Canyon Road	Signal	AM	35.3	D	35.3	D	0.0
		PM	38.7	D	39.1	D	0.4
2. Scripps Poway Parkway / Cypress Canyon Road	Signal	AM	35.5	D	35.5	D	0.0
		PM	44.4	D	44.4	D	0.0
3. Scripps Poway Parkway / Angelique Street	Signal	AM	27.4	C	29.5	C	2.1
		PM	29.3	C	30.7	C	1.4
4. Angelique Street / Cypress Canyon Park Drive	OWSC[c]	AM	9.8	A	10.3	B	0.5
		PM	10.0	B	10.9	B	0.9
5. Angelique Street / Cypress Canyon Road	OWSC[c]	AM	8.7	A	9.1	A	0.4
		PM	8.8	A	9.6	A	0.8
6. Cypress Canyon Park Drive / Cypress Canyon Road.	OWSC[c]	AM	10.0	B	10.9	B	0.9
		PM	9.9	A	10.5	B	0.6
7. Pomerado Road / Spring Canyon Road	Signal	AM	54.6	D	54.9	D	0.3
		PM	48.9	D	49.0	D	0.1
8. Pomerado Road / Stonebridge Parkway	Signal	AM	19.6	B	19.6	B	0.0
		PM	23.3	C	23.3	C	0.0

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. One-Way Stop Control. Worst-case delay and LOS reported.
d. Δ denotes the project-induced increase in delay.

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 9–4
HORIZON YEAR 2050 STREET SEGMENT OPERATIONS – NO CONNECTION

Street Segment	Functional Classification	Capacity (LOS E) [a]	Horizon Year 2050 without Project			Horizon Year 2050 with Project			Δ[e]
			ADT[b]	LOS[c]	V/C[d]	ADT[b]	LOS[c]	V/C[d]	
Scripps Poway Parkway									
West of Spring Canyon Road	6-Lane Major Arterial	50,000	47,310	E	0.946	47,409	E	0.948	0.002
Spring Canyon Road to Cypress Canyon Road	4-Lane Major Arterial	40,000	42,720	F	1.068	42,830	F	1.071	0.003
Spring Canyon Road									
West of Pomerado Road	4-Lane Major Arterial	40,000	11,870	A	0.297	11,903	A	0. 298	0.001
Pomerado Road									
Cypress Canyon Park Drive to Stonebridge Parkway	4-Lane Major Arterial	40,000	29,740	C	0.744	29,806	C	0.745	0.001
Cypress Canyon Road									
Scripps Poway Parkway to Blue Cypress Drive	2-Lane Collector	8,000	2,380	A	0.298	2,512	B	0.314	0.016
Blue Cypress Drive to Angelique Street	2-Lane Collector (fronting residential)	8,000	2,510	B	0.314	2,817	B	0.352	0.038
Caminito Sereno to Cypress Canyon Park Drive	2-Lane Collector	8,000	680	A	0.085	1,228	A	0.154	0.069
Angelique Street									
Scripps Poway Parkway to Cypress Canyon Park Drive	2-Lane Collector (fronting residential)	8,000	4,130	C	0.516	4,547	C	0.568	0.052
Cypress Canyon Park Drive to Cypress Canyon Road	2-Lane Collector (fronting residential)	8,000	2,510	B	0.314	3,037	B	0.380	0.066

TABLE 9–4
HORIZON YEAR 2050 STREET SEGMENT OPERATIONS – NO CONNECTION

Street Segment	Functional Classification	Capacity (LOS E) [a]	Horizon Year 2050 without Project			Horizon Year 2050 with Project			Δ[e]
			ADT[b]	LOS[c]	V/C[d]	ADT[b]	LOS[c]	V/C[d]	
Cypress Canyon Park Drive									
Angelique Street to Mundial Street	2-Lane Collector (fronting residential)	8,000	2,380	A	0.298	2,885	B	0.361	0.063
Mundial Street to Cypress Canyon Road	2-Lane Collector (fronting residential)	8,000	2,380	A	0.298	2,885	B	0.361	0.063
Cypress Canyon Road to Pomerado Road / Spring Canyon Road	2-Lane Collector	8,000	1,810	A	0.226	2,183	A	0.273	0.047

Footnotes:

a. Capacities based on City of San Diego Roadway Classification & LOS table (see *Appendix C*).
b. Average Daily Traffic
c. Level of Service
d. Volume to Capacity ratio
e. Δ denotes a project-induced increase in the Volume to Capacity ratio

TABLE 9–5
HORIZON YEAR 2050 WITH PROJECT COMPARISON — WITHOUT VS. WITH CONNECTION

Street Segment	Functional Classification	Capacity (LOS E) [a]	Horizon Year 2050 with Project (without Cypress Canyon Road Connection)			Horizon Year 2050 with Project (with Cypress Canyon Road Connection)			Δ[e]
			ADT[b]	LOS[c]	V/C[d]	ADT[b]	LOS[c]	V/C[d]	
Scripps Poway Parkway									
West of Spring Canyon Road	6-Lane Major Arterial	50,000	47,409	E	0.948	46,921	E	0.938	-488
Spring Canyon Road to Cypress Canyon Road	4-Lane Major Arterial	40,000	42,830	F	1.071	42,362	F	1.059	-468
Spring Canyon Road									
West of Pomerado Road	4-Lane Major Arterial	40,000	11,903	A	0.298	11,992	A	0.300	89
Pomerado Road									
Cypress Canyon Park Drive to Stonebridge Parkway	4-Lane Major Arterial	40,000	29,806	C	0.745	31,055	D	0.776	1,249
Cypress Canyon Road									
Scripps Poway Parkway to Blue Cypress Drive	2-Lane Collector	8,000	2,512	B	0.314	2,504	B	0.313	-8
Blue Cypress Drive to Angelique Street	2-Lane Collector (fronting residential)	8,000	2,817	B	0.352	3,013	B	0.377	196
Angelique Street to Street "A"	Residential Sub-Collector	2,200 [f]	548[g]	–	–	2,138	–	–	1,590
Street "A" to Street "B"	Residential Sub-Collector	2,200 [f]	– [i]	–	–	1,167	–	–	–
Street "B" to Caminito Sereno	Residential Sub-Collector	2,200 [f]	548[h]	–	–	1,699	–	–	1,151
Caminito Sereno to Cypress Canyon Park Drive	2-Lane Collector	8,000	1,228	A	0.154	2,299	A	0.287	1,071

TABLE 9–5
HORIZON YEAR 2050 WITH PROJECT COMPARISON — WITHOUT VS. WITH CONNECTION

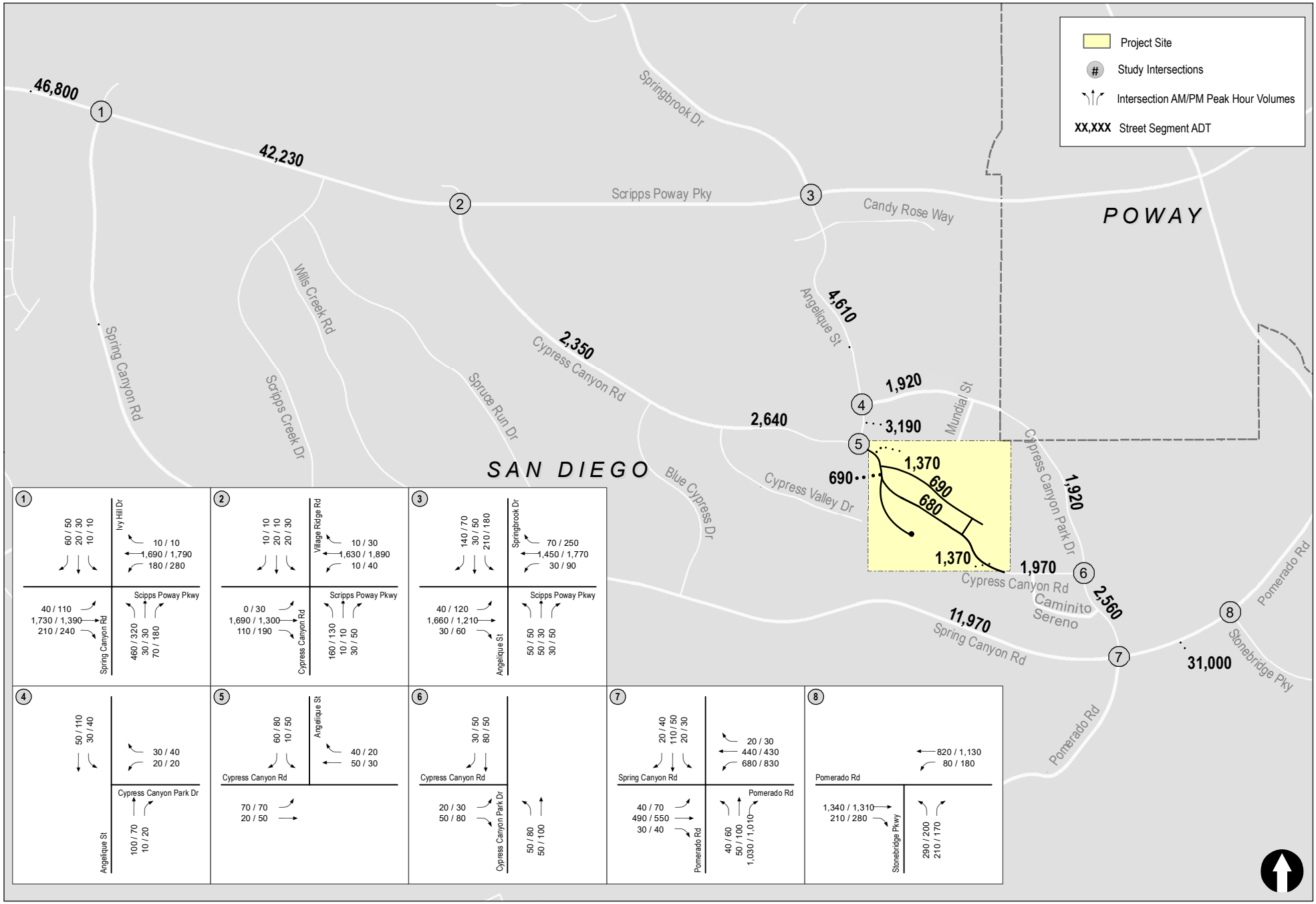
Street Segment	Functional Classification	Capacity (LOS E) [a]	Horizon Year 2050 with Project (without Cypress Canyon Road Connection)			Horizon Year 2050 with Project (with Cypress Canyon Road Connection)			Δ[e]
			ADT[b]	LOS[c]	V/C[d]	ADT[b]	LOS[c]	V/C[d]	
Angelique Street									
Scripps Poway Parkway to Cypress Canyon Park Drive	2-Lane Collector (fronting residential)	8,000	4,547	C	0.568	5,005	D	0.626	458
Cypress Canyon Park Drive to Cypress Canyon Road	2-Lane Collector (fronting residential)	8,000	3,037	B	0.380	3,585	C	0.448	548
Cypress Canyon Park Drive									
Angelique Street to Mundial Street	2-Lane Collector (fronting residential)	8,000	2,885	B	0.361	1,920	A	0.240	-965
Mundial Street to Cypress Canyon Road	2-Lane Collector (fronting residential)	8,000	2,885	B	0.361	1,920	A	0.240	-965
Cypress Canyon Road to Pomerado Road / Spring Canyon Road	2-Lane Collector	8,000	2,183	A	0.273	2,889	B	0.361	706
Street "A" Cypress Canyon Road (North) to Cypress Canyon Road (South)	Residential Sub-Collector	2,200 [f]	– [i]	–	–	1,068	–	–	–

TABLE 9–5
HORIZON YEAR 2050 WITH PROJECT COMPARISON — WITHOUT VS. WITH CONNECTION

Street Segment	Functional Classification	Capacity (LOS E) [a]	Horizon Year 2050 with Project (without Cypress Canyon Road Connection)			Horizon Year 2050 with Project (with Cypress Canyon Road Connection)			Δ[e]
			ADT[b]	LOS[c]	V/C[d]	ADT[b]	LOS[c]	V/C[d]	
Street "B"									
Cypress Canyon Road (North) to Cypress Canyon Road (South)	Residential Sub-Collector	2,200 [f]	– [i]	–	–	1,055	–	–	–

Footnotes:

a. Capacities based on City of San Diego Roadway Classification & LOS table (see *Appendix C*).
b. Average Daily Traffic.
c. Level of Service.
d. Volume to Capacity ratio.
e. Δ denotes the increase in volume due to the Cypress Canyon Road connection.
f. Roadway Capacity at LOS C based on City of San Diego's Roadway Classification Table (see *Appendix C*). LOS and V/C are not applied to residential streets.
g. The connection does not exist in this scenario. The volume is for the segment of Cypress Canyon Road between Angelique Street and the terminus of the roadway within the western portion of the Project site.
h. The connection does not exist in this scenario. The volume is for the segment of Cypress Canyon Road between Caminito Sereno and the terminus of the roadway within the eastern portion of the Project site.
i. The connection does not exist in this scenario.



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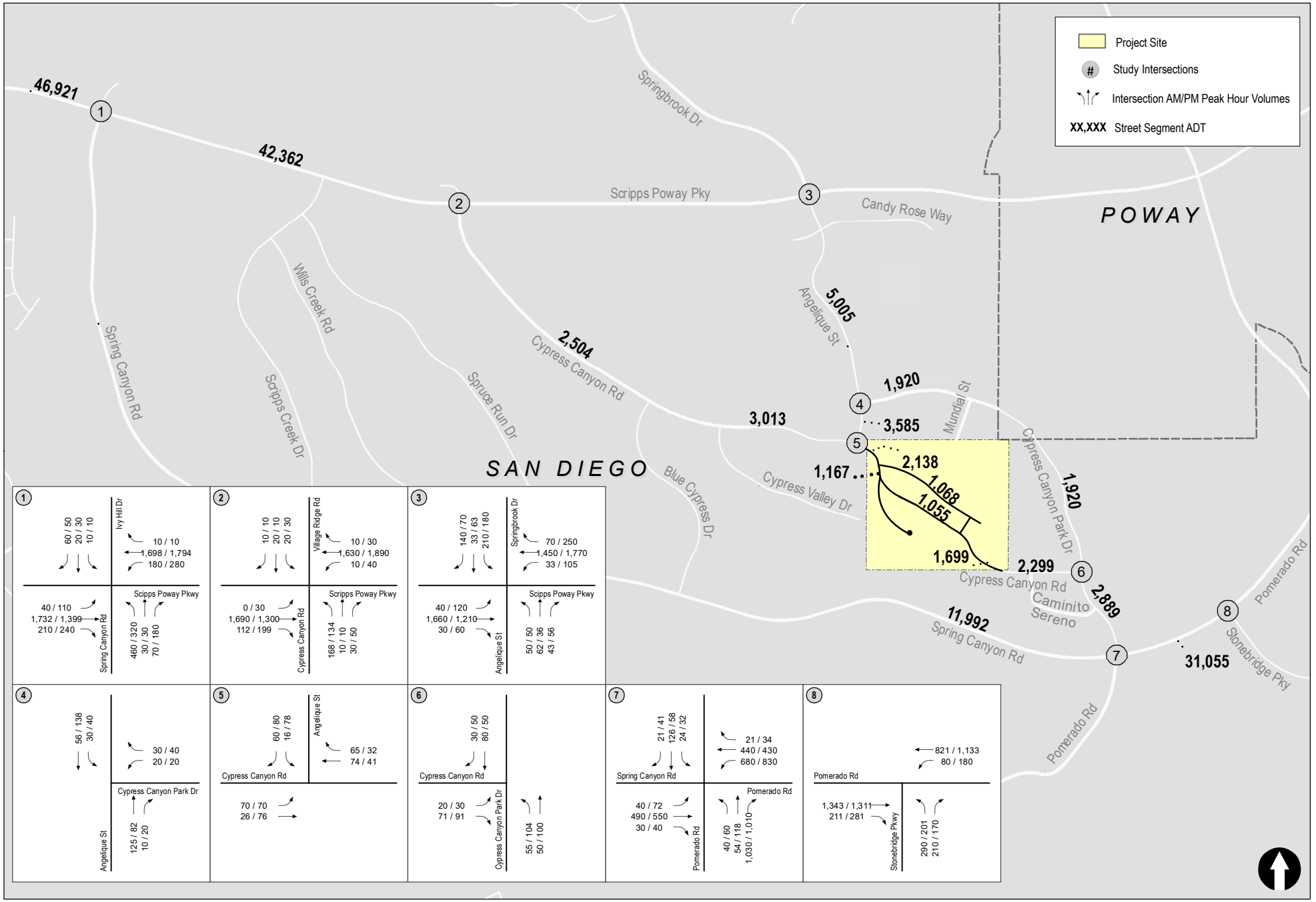
Note:
The roadway connection is shown for illustration purposes only.

Figure 9-1

Year 2050 Without Project Traffic Volumes

With Cypress Canyon Connection

Renzulli Estates



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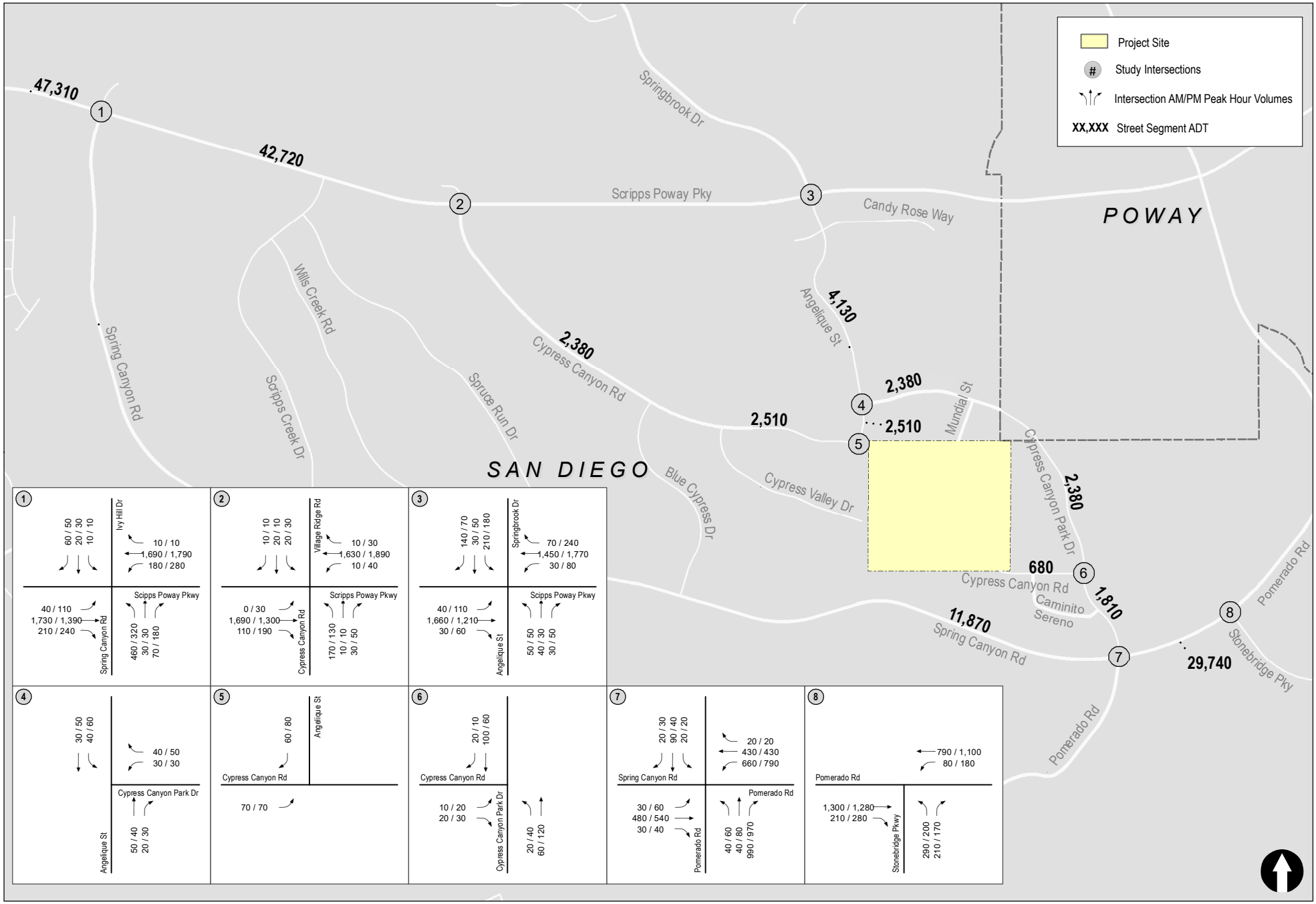
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Time: 9:49 AM

Figure 9-2

Year 2050 With Project Traffic Volumes

With Cypress Canyon Connection

Renzulli Estates



LINSCOTT LAW & GREENSPAN engineers

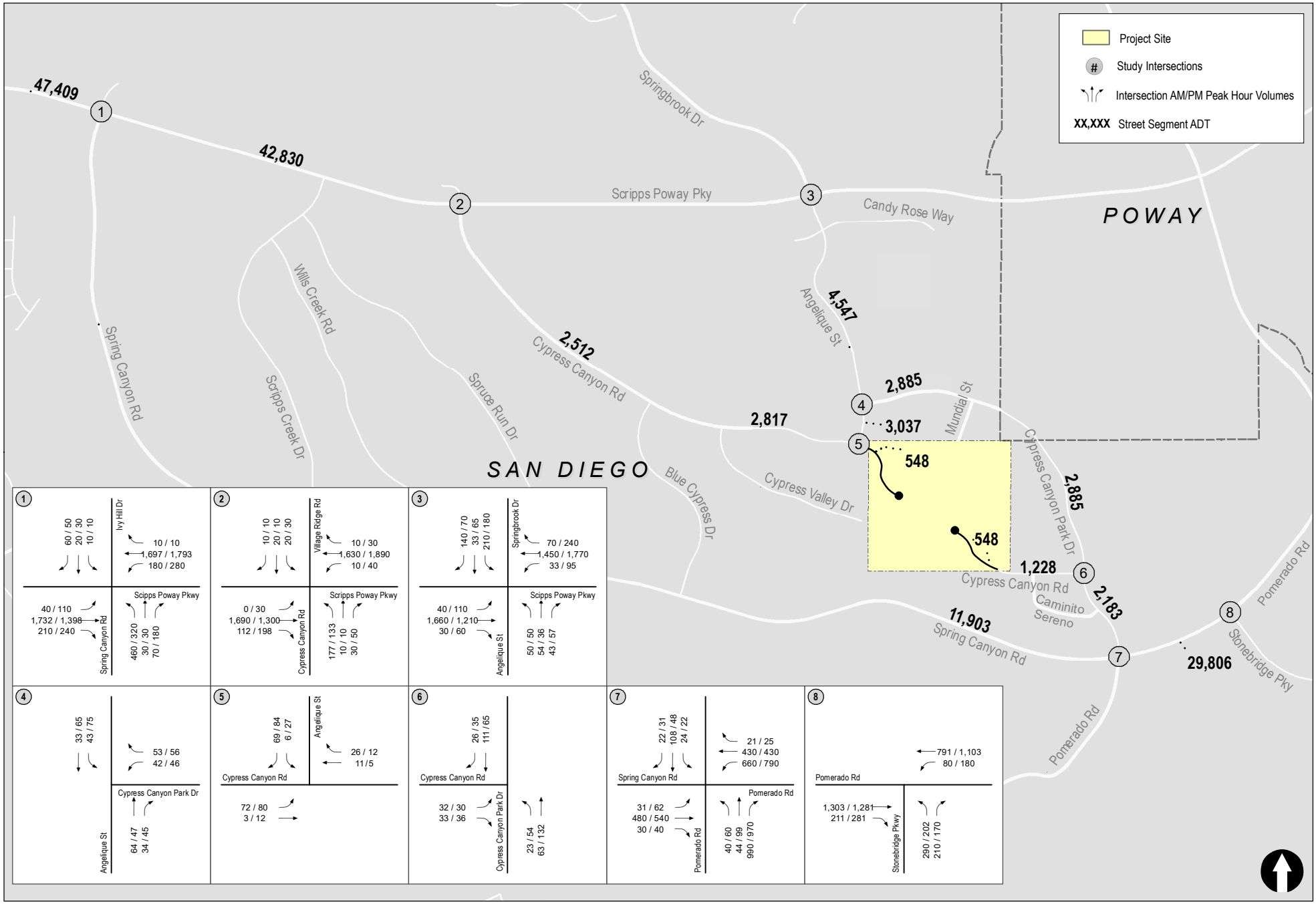
N:\3272\Figures
Date: 3/8/2023
Time: 11:02 AM

Figure 9-3

Year 2050 Without Project Traffic Volumes

Without Cypress Canyon Connection

Renzulli Estates



LINSCOTT LAW & GREENSPAN engineers

N:\3272\Figures
Date: 3/8/2023
Time: 11:03 AM

Figure 9-4

Year 2050 With Project Traffic Volumes

Without Cypress Canyon Connection

Renzulli Estates

10.0 PEDESTRIAN MOBILITY

This section presents the pedestrian conditions in the Project study area and includes a walkshed analysis to ensure the Project provides the appropriate pedestrian facilities. The City of San Diego Pedestrian Master Plan (2006), General Plan Mobility Element (2008), and Scripps Miramar Ranch Community Plan establish guidelines to a complete, functional, and interconnected pedestrian network.

10.1 Existing Pedestrian Conditions

A pedestrian network inventory was conducted along street segments, which included documenting missing sidewalks, pedestrian barriers and pedestrian pathways within ½ mile walking distance of the Project. ***Figure 10–1*** shows the existing pedestrian network within the immediate vicinity of the Project.

Existing pedestrian counts were conducted on Thursday, August 6, 2020 at every intersection in the study area during the commuter AM/PM peak hours as shown in *Appendix A*. ***Figure 10–2*** shows the existing pedestrian counts within the Project study area.

10.2 Pedestrian Mobility Review

10.2.1 *Walkshed Analysis*

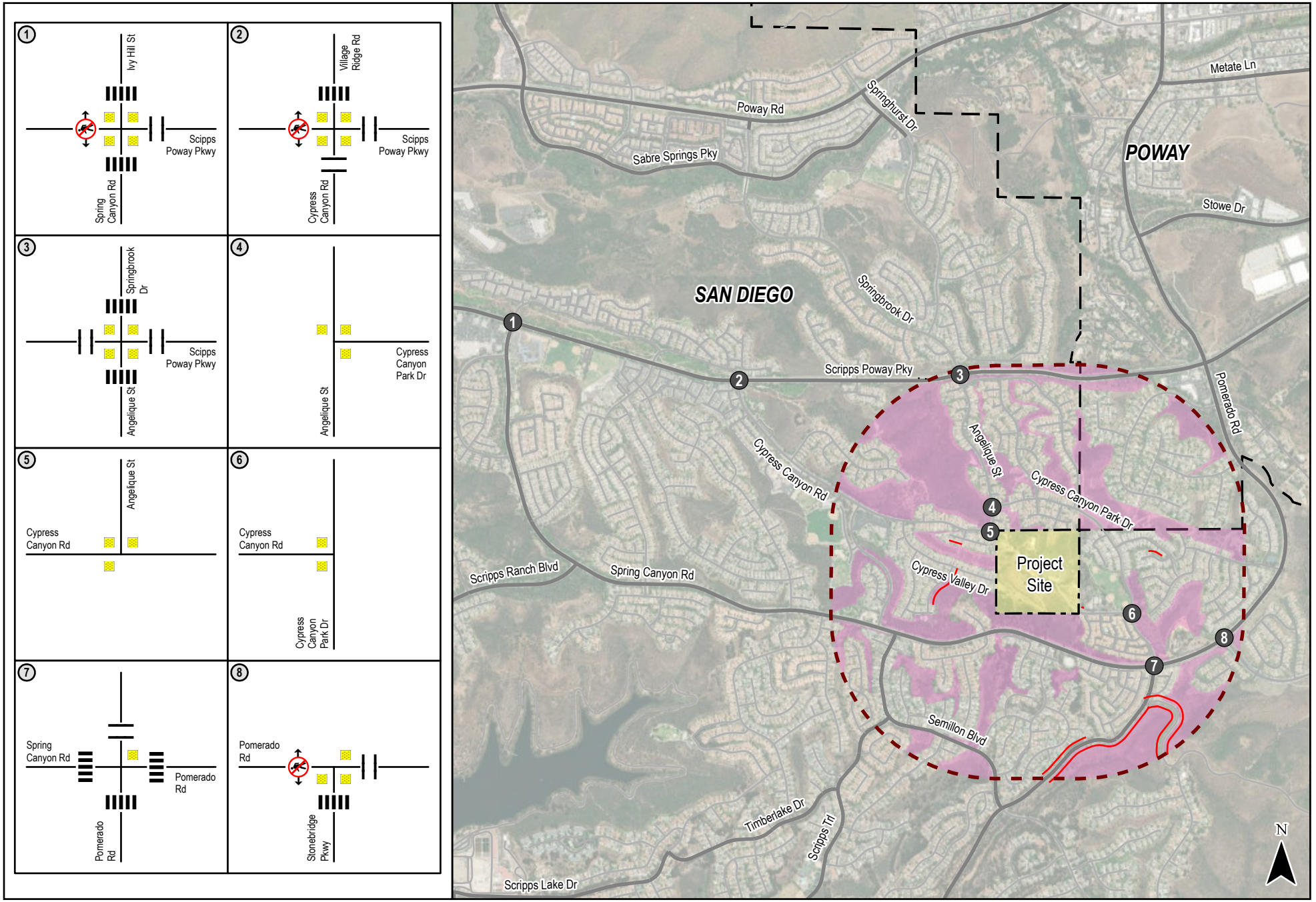
As stated above, a walkshed analysis was performed to evaluate the pedestrian connectivity in the vicinity of the Project site and to ensure the Project provides the appropriate pedestrian facilities.

The walkshed analysis was performed by identifying all access points to / from the Project considering topography constraints. From each access point, areas outside the Project site that could be reached by walking ½-mile were identified. Selected walking routes from each access point were mapped considering sidewalks, crosswalks, pedestrian routes, etc., while some areas located within the ½-mile radius around the Project site may not be accessible by walking due to lack of facilities. After creating the walkshed network, the area that could be captured by walking was measured. A larger walkshed area (walkshed network) means higher connectivity between the Project site and nearby areas. ***Figure 10–3*** shows the Project's walkshed.

10.3 Pedestrian Project Improvements

The Project proposes to construct the connection of Cypress Canyon Road between Angelique Street and Cypress Canyon Park Drive which will provide pedestrian connectivity through the Project site. It will also provide additional pedestrian connectivity to the Cypress Canyon Park for residents west of the Project site.

Figure 10–4 shows the pedestrian route through the Project site.



LINSCOTT LAW & GREENSPAN engineers

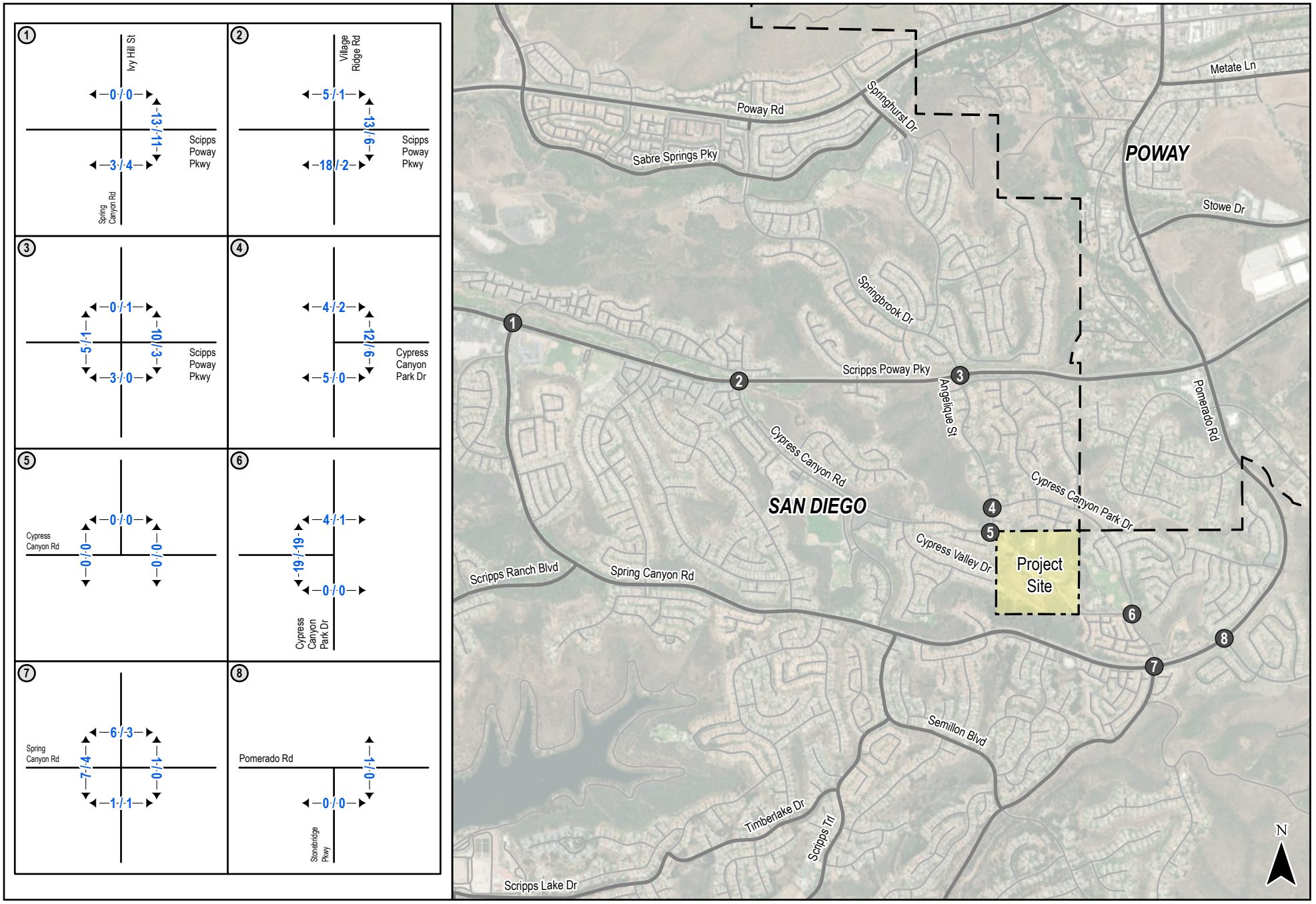
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Date: 2/26/2021
Time: 10:47 AM

USDA FSA, GeoEye, Maxar

- Study intersection
- Project site
- Pedestrian barrier
- Missing sidewalks
- 0.5-mile buffer from project edges
- Missing truncated domes
- Standard crosswalk
- High Visibility Crosswalk (HVC)
- Ped crossing prohibited
- City boundaries

Figure 10-1
Existing Pedestrian Network

RENZULLI ESTATES



LINSCOTT LAW & GREENSPAN engineers

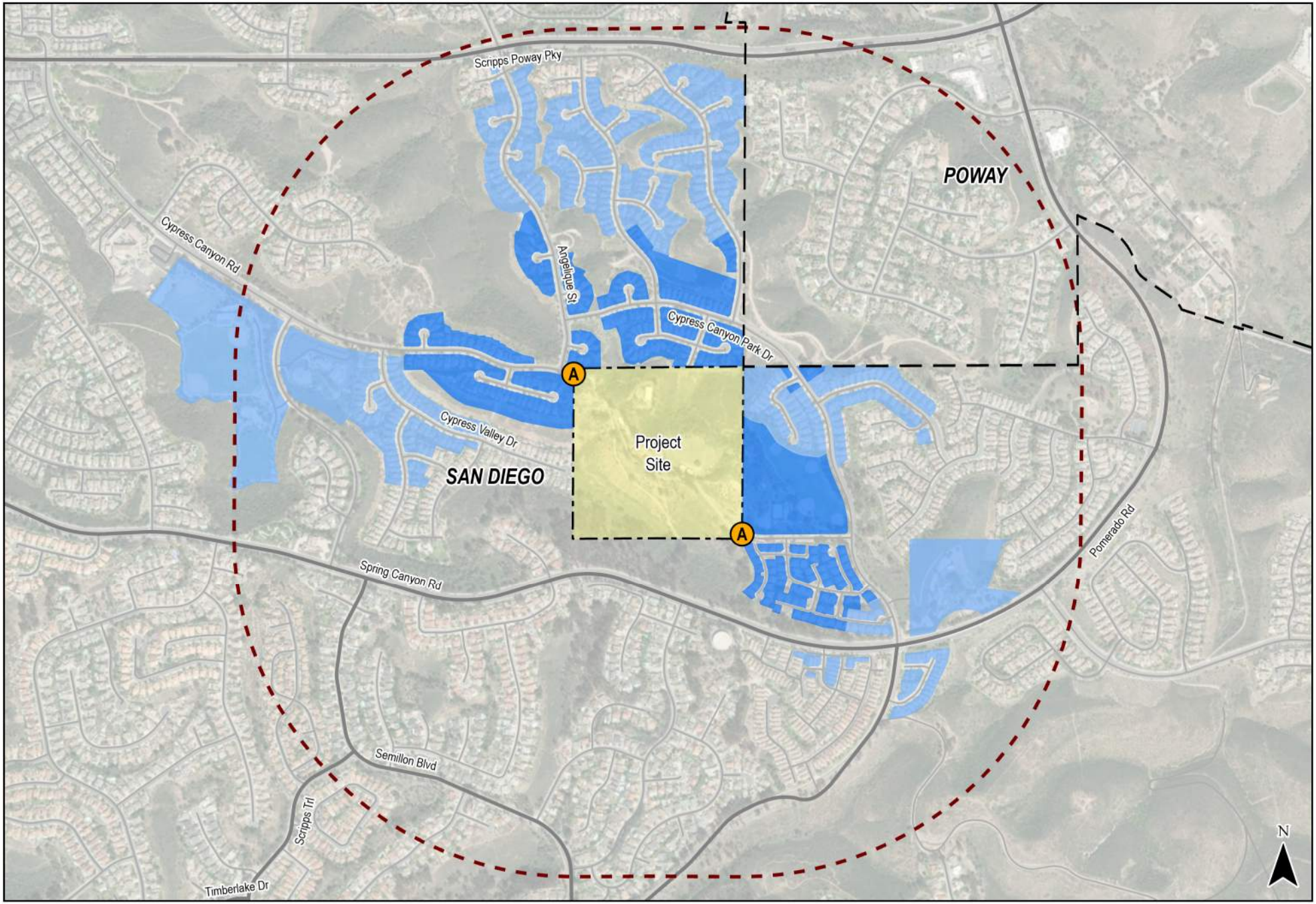
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Date: 2/26/2021
Time: 10:47 AM

USDA FSA, GeoEye, Maxar

(#) Study intersection
Project site
x / x AM/PM Pedestrian Peak Hour Volumes
City boundaries

Figure 10-2
Existing Pedestrian Activity

RENZULLI ESTATES



LINSCOTT LAW & GREENSPAN engineers

N:\3272\Figure
Date: 2/22/2023
Time: 2:20 PM

Maxar

A Access Point
0.25-mile Walkshed
0.5-mile Walkshed
0.5-mile buffer from project edges
City boundaries

Figure 10-3
Existing Walkshed

Renzulli Estates

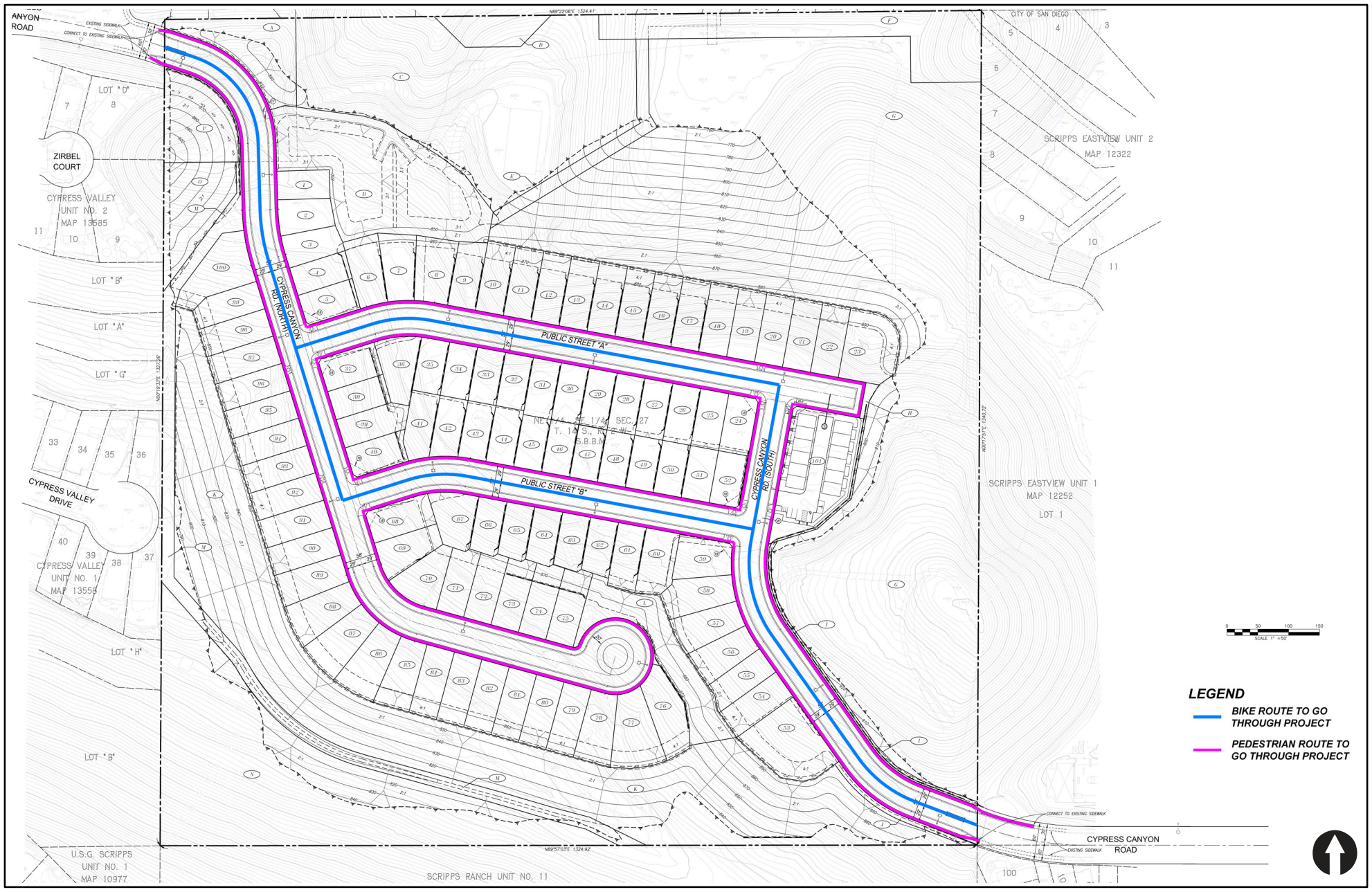


Figure 10-4

Proposed Pedestrian/Bicycle Route

LINSCOTT LAW & GREENSPAN engineers

N:\3272\Figures
Date: 10/05/23

11.0 BICYCLE MOBILITY

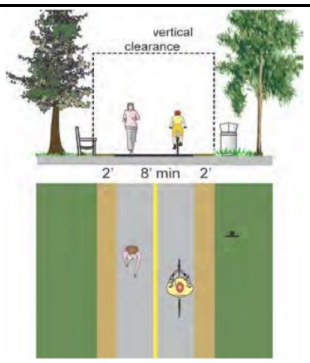
Bicycle mobility has become a prominent part of roadway networks today and will continue to evolve as a more viable option to auto use in many parts of San Diego. The *City of San Diego Bicycle Master Plan* (2013), the *City of San Diego General Plan - Mobility Element* (2008), the *SANDAG San Diego Regional Bike Plan* (2010), and the *Scripps Miramar Ranch Community Plan* establish guidelines for a safe, comprehensive local and regional bikeway network. This section presents the bicycle network in the Project study area and includes a bikeshed analysis to ensure the Project provides the appropriate bicycle facilities.

11.1 Bicycle Classifications

There are four (4) different bicycle classifications – Class I, Class II, Class III and Class IV as shown in ***Table 11–1.***

TABLE 11–1
CALIFORNIA BIKEWAY CLASSIFICATION SYSTEM

Class I – Bike Path



Bike paths, also termed shared-use or multi-use paths, are paved right-of-way for exclusive use by bicyclists, pedestrians, and those using non-motorized modes of travel. They are physically separated from vehicular traffic and can be constructed in roadway right-of-way or exclusive right-of-way. Bike paths provide critical connections in the city where roadways are absent or are not conducive to bicycle travel.

Class II – Bike Lane



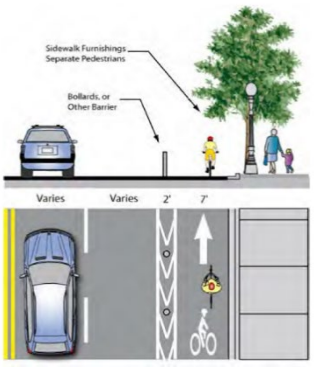
Bike lanes are defined by pavement striping and signage used to allocate a portion of a roadway for exclusive or preferential bicycle travel. Bike lanes are one-way facilities on either side of a roadway. Whenever possible, Bike Lanes should be enhanced with treatments that improve safety and connectivity by addressing site-specific issues, such as additional warning or wayfinding signage.

Class III – Bike Route



Bike routes provide shared use with motor vehicle traffic within the same travel lane. Designated by signs, Bike Routes provide continuity to other bike facilities or designate preferred routes through corridors with high demand. Whenever possible, Bike Routes should be enhanced with treatments that improve safety and connectivity, such as the use of "sharrows" or shared lane markings to delineate that the road is a shared-use facility.

Class IV – Cycle Track



A Cycle Track is a hybrid type bicycle facility that combines the experience of a separated path with the on-street infrastructure of a conventional Bike Lane. Cycle tracks are bikeways located in roadway right-of-way but separated from vehicle lanes by physical barriers or buffers. Cycle tracks provide for one-way bicycle travel in each direction adjacent to vehicular travel lanes and are exclusively for bicycle use.

Source: *City of San Diego Bicycle Master Plan (2013)*

11.2 Existing Bicycle Conditions

A detailed bicycle network inventory was conducted for the surrounding study area. ***Figure 11–1*** presents the existing bicycle network in the Project study area. Existing bicycle counts were conducted on Thursday, August 6, 2020 at every intersection in the study area during the commuter AM/PM peak hours as shown in *Appendix A*. ***Figure 11–2*** shows the existing bicycle counts within the Project study area.

11.3 Bicycle Mobility Review

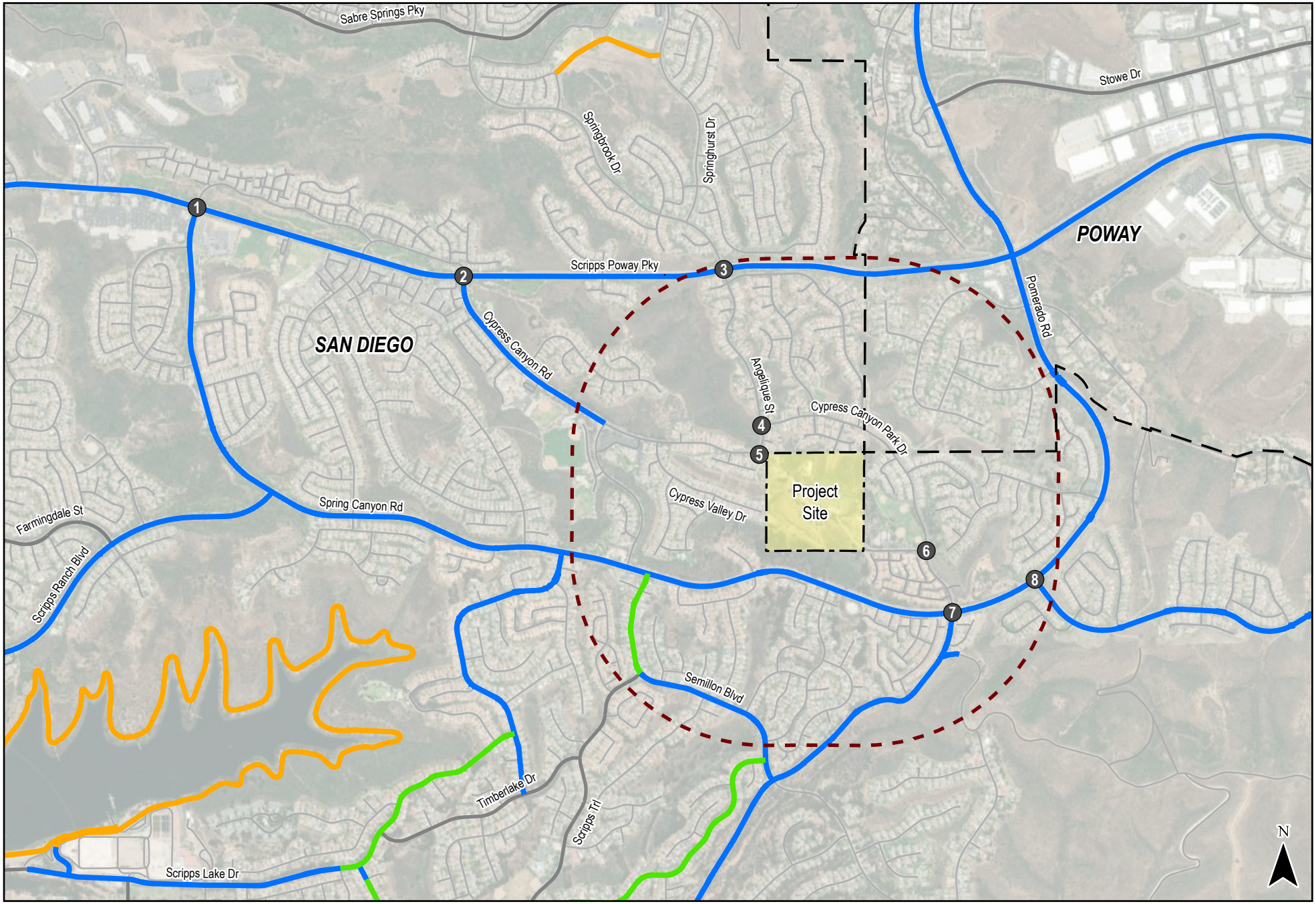
11.3.1 *Bikeshed Analysis*

In this study, a bikeshed analysis was conducted to evaluate bicycle connectivity in the vicinity of the Project site. This analysis also identifies potential locations where providing bicycle access could improve Project connectivity to surrounding area.

The bikeshed analysis was performed by identifying all access points to / from the Project. From each access point, areas outside the Project site that could be reached by biking ½ mile were identified. Selected biking routes from each access point were mapped considering the presence of bike routes, lanes, dedicated pathways etc., while some areas are located within the ½-mile buffer around the Project site may not be reached by bike due to lack of facilities. A larger bikeshed area (bikeshed network) means higher connectivity between the Project site and nearby areas. ***Figure 11–3*** shows the Project's bikeshed with the existing bicycle network.

11.4 Bicycle Project Improvements

The Project proposes to construct the connection of Cypress Canyon Road between Angelique Street and Cypress Canyon Park Drive which will provide bicycle connectivity consistent with the proposed Class III Bike Route outlined in the *Scripps Miramar Ranch Community Plan*.
Figure 10–4 shows the proposed bicycle route through the Project site.



LINSCOTT LAW & GREENSPAN engineers

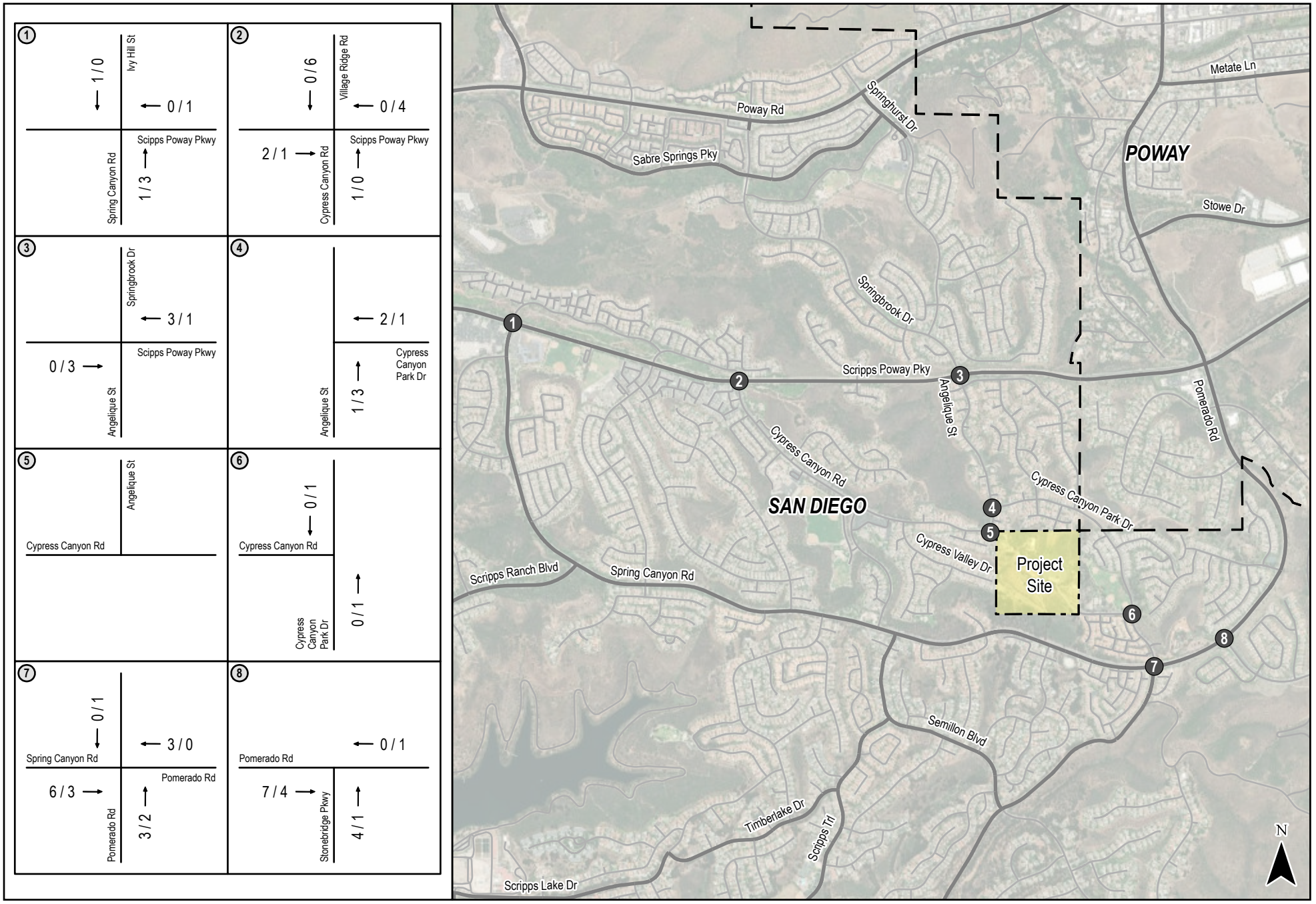
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USDA FSA, GeoEye, Maxar

- # Study Intersection
- Project Site
- 0.5-mile buffer from project edges
- City boundaries
- Bike Path (Class I)
- Bike Lane (Class II)
- Bike Route with Sharrow (Class III)

Figure 11-1
Existing Bicycle Network

RENZULLI ESTATES



LINSCOTT LAW & GREENSPAN engineers

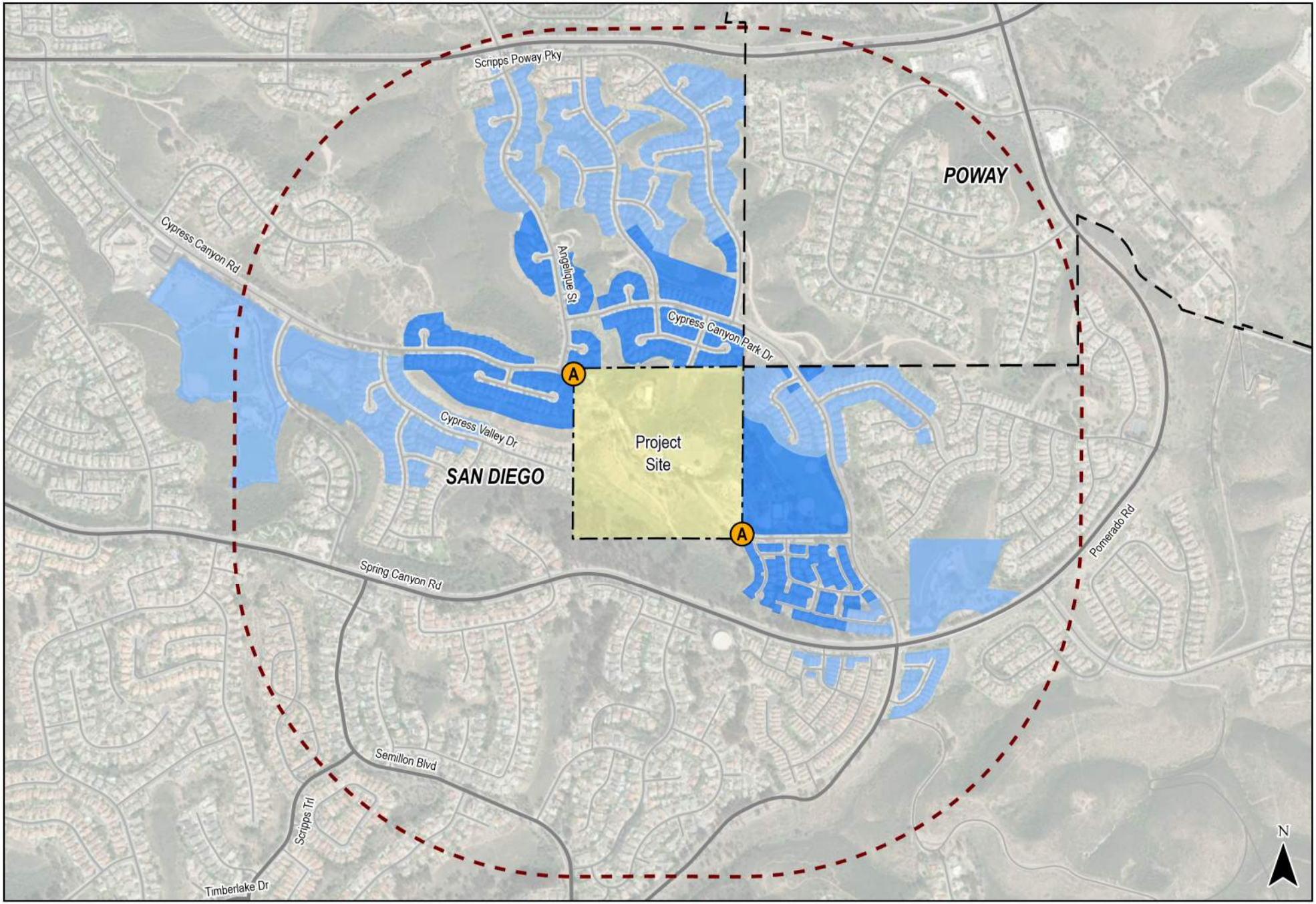
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Time: 10:48 AM

USDA FSA, GeoEye, Maxar

Study intersection
Project site
Bicycle peak hour volumes
City boundaries

Figure 11-2
Existing Bicycle Activity

RENZULLI ESTATES



LINSCOTT LAW & GREENSPAN engineers

N:\3272\Figure
Date: 2/22/2023
Time: 2:21 PM

Maxar

A Access Point
0.25-mile Bikeshed
0.5-mile Bikeshed
0.5-mile buffer from project edges
City boundaries

Figure 11-3
Existing Bikeshed

Renzulli Estates

12.0 TRANSIT MOBILITY

Based on a review of the area within the vicinity of the Project, there are no transit stops within ½ walking distance of any of the pedestrian access points of the Project. The closest transit stop is located approximately 2.5 miles away at the intersection of Poway Road and Springbrook Drive, which serves MTS Route 944. Route 944 runs between Sabre Springs / Peñasquitos Transit Station and Hilleary Place in Poway.

13.0 SYSTEMIC SAFETY REVIEW

A review of the City of San Diego's Systemic Safety Hot Spot map was conducted. Based on a review of the map and an evaluation of the intersection footprints found in Appendix C of the *City of San Diego's Systemic Safety, The Data-Driven Path to Vision Zero Report (April 2019)*, the following study area intersections are identified as pedestrian and bicycle "hot spots" necessitating further evaluation:

- Scripps Poway Parkway / Angelique Street
- Pomerado Road / Spring Canyon Road

Table 13–1 shows the identification of hotspots for Systemic Safety Review.

13.1 Recommended Improvements

The following improvements will be provided by the Project, satisfactory to the City Engineer:

- *Scripps Poway Parkway / Angelique Street:* As a part of the recent Scripps Poway *Parkway Pavement Repair Project,* this intersection has been recently improved with the installation of high visibility crosswalks and ADA compliant curb ramps at all the intersection legs. Additionally, loop detectors for vehicles and bikes already exist at the intersection. Therefore, no additional project improvements are proposed at this intersection.

- *Pomerado Road / Spring Canyon Road:* High visibility crosswalk exists at all legs except the north leg and ADA compliant curb ramps exists at all corners except the northeast corner of the intersection. Loop detectors for vehicles and bicycles already exist at the intersection. The Project will install high visibility crosswalk at the north leg and an ADA curb ramp with truncated domes at the northeast corner of the intersection per current City standards, as well as pedestrian countdown timers at all the intersection legs with pedestrian crossings.

TABLE 13–1
SYSTEMIC HOTSPOT CRITERIA – STUDY INTERSECTIONS

Footprint[a]	Intersection Criteria for Analysis[b]	Scripps Poway Parkway / Angelique Street		Pomerado Road / Spring Canyon Road	
P-1	Signalized	✓	Criteria not met	✓	Criteria not met
	One-way 3-lane roadway intersects 4-lane roadway OR	x		x	
	One-way 3-lane roadway intersects one-way 3-lane roadway	x		x	
	Primary road ADT: 7,001 – 15,000	x		x	
P-2	Signalized	✓	Criteria not met	✓	**Criteria met**
	4-lane roadway intersects 2-lane roadway	✓		✓	
	Primary road ADT: 7,001 – 25,000	x		✓	
P-3	Signalized	✓	Criteria not met	✓	**Criteria met**
	4-lane roadway intersects 2-lane roadway	✓		✓	
	Primary road ADT: 15,000 – 25,000	x		✓	
B-1	Signalized	✓	**Criteria met**	✓	**Criteria met**
	4-lane roadway intersects 2-lane roadway OR	✓		✓	
	4-lane roadway intersects 4-lane roadway	x		x	
B-2	Side-street stop	x	Criteria not met	x	Criteria not met
	2-lane roadway intersects 2-lane roadway	x		x	
V-1	Signalized	✓	Criteria not met	✓	Criteria not met
	4-lane roadway intersects 2-lane roadway	✓		✓	
	Primary road ADT: >15,000	✓		✓	
	Secondary road ADT : ≤7,000	x		x	

TABLE 13–1
SYSTEMIC HOTSPOT CRITERIA – STUDY INTERSECTIONS

Footprint[a]	Intersection Criteria for Analysis[b]	Scripps Poway Parkway / Angelique Street		Pomerado Road / Spring Canyon Road	
V-2	Signalized	✓	Criteria not met	✓	Criteria not met
	6-lane roadway intersects 4-lane roadway	x		x	
	Primary road ADT: >15,000	✓		✓	
	Secondary road ADT: >7,000	✓		✓	
V-3	Signalized	✓	Criteria not met	✓	Criteria not met
	4-lane roadway intersects 4-lane roadway	x		x	
	Secondary road ADT: >7,000	✓		x	

Footnotes:

a. X-Y: Type of Matrix – Intersection Footprint #, P: Pedestrian, B: Bicycle, V: Vehicle

b. Based on the City of San Diego's Systemic Safety, The Data-Driven Path to Vision Zero Report, April 2019, Appendix C: Identification of Systemic Hotspots.

14.0 SITE ACCESS, CIRCULATION, AND PARKING

14.1 Access and Circulation

14.1.1 *Vehicular Access*

Vehicular access is provided via Cypress Canyon Road. The intersections of Cypress Canyon Road / Angelique Street and Cypress Canyon Road / Cypress Canyon Road Park Drive, which serve as the major access points, are calculated to operate at LOS B or better with the addition of project traffic. The Project proposes to install two (2) chokers along Cypress Canyon Road, one east of the Cypress Canyon Road / Angelique Street intersection and one near the eastern property boundary as traffic calming features.

14.1.2 *Non-Vehicular Access*

As mentioned earlier in Section 10.3 and Section 11.4 of this report, the Project proposes to construct the connection of Cypress Canyon Road between Angelique Street and Cypress Canyon Park Drive which will provide pedestrian and bicycle connectivity through the Project site. It will also provide additional pedestrian and bicycle connectivity to the Cypress Canyon Park for residents west of the Project site.

As discussed earlier in Section 2.0 of this report, the Project proposes to construct the connection of Cypress Canyon Road between Angelique Street and Cypress Canyon Park Drive in a less direct alignment than shown on the Community Plan circulation element. As part of the Project, it is also proposed to downgrade this segment of Cypress Canyon Road from a two-lane collector to a two-lane sub-collector. Per the City of San Diego's *Street Design Manual* (March 2017), a two-lane sub-collector street has a design ADT of 2,200 and allows for single-family homes with front yards fronting the street. The Cypress Canyon Road connection is forecasted to have less than 2,200 ADT. This connection will also provide bicycle access and access for emergency service providers through the Project site from both the eastern and western access points on Cypress Canyon Road.

14.2 Parking

The minimum required parking rates for the proposed Project are based on the standards outlined in the City of San Diego Municipal Code (*Chapter 14: General Regulations, Article 2: General Development Regulations and Division 5: Parking Regulations*). The City of San Diego minimum required parking rate for single-family dwelling units is 2 spaces per dwelling unit. The Project proposes to provide dedicated garage parking with 2 spaces for each single-family dwelling unit, which will meet the City's minimum parking requirements. The City of San Diego minimum required parking rate for affordable three-bedroom multi-family dwelling units in high parking demand areas is 1.75 spaces per dwelling unit. The Project proposes to provide dedicated garage parking with 2 spaces for each affordable multi-family dwelling unit, which will exceed the City's minimum parking requirements. The Project is also required to provide 2 guest spaces and 1 motorcycle space. The Project proposes to provide 4 guest spaces (including 1 EV space and 1 van accessible space) and 3 motorcycle spaces, which will exceed the City's minimum parking requirements.

15.0 PROJECT IMPROVEMENTS

The Project will construct the following improvements:

- The Project will construct the connection of Cypress Canyon Road between Angelique Street and Cypress Canyon Park Drive in a less direct alignment than shown on the Community Plan circulation element. In addition, as part of the Project, it is also proposed to downgrade this segment of Cypress Canyon Road from a two-lane collector to a two-lane sub-collector. This will also provide bicycle connectivity consistent with the proposed Class III Bike Route shown in the *Scripps Miramar Ranch Community Plan*.

- The construction of the connection of Cypress Canyon Road between Angelique Street and Cypress Canyon Park Drive includes sidewalks that will provide pedestrian connectivity through the Project site and to the Cypress Canyon Park for residents west of the Project site.

- As a result of the Project's Systemic Safety Review, at the Pomerado Road / Spring Canyon Road intersection, the Project will install a high visibility crosswalk at the north leg (continental crosswalks exist at the south, east, and west legs) and an ADA curb ramp with truncated domes at the northeast corner per current City standards, as well as pedestrian countdown timers at all the intersection legs with pedestrian crossings.

End of Report

LINSCOTT LAW & GREENSPAN engineers

LOCAL MOBILITY ANALYSIS
TECHNICAL APPENDICES

RENZULLI ESTATES

PTS 674401

San Diego, California
April 2024

LLG Ref. 3-20-3272

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858.300.8810 F
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APPENDICES

APPENDIX	
A.	Intersection and Segment Count Sheets and Signal Timing Plans
B.	Intersection Methodology
C.	City of San Diego Roadway Classification Table
D.	SANDAG Series 14 Select Zone Model Runs
E.	Existing Intersection Analysis Calculation Sheets
F.	Opening Year 2025 (With Connection) Without Project Intersection Analysis Calculation Sheets
G.	Opening Year 2025 (With Connection) With Project Intersection Analysis Calculation Sheets
H.	Opening Year 2025 (No Connection) Without Project Intersection Analysis Calculation Sheets
I.	Opening Year 2025 (No Connection) With Project Intersection Analysis Calculation Sheets
J.	Horizon Year 2050 (With Connection) Without Project Intersection Analysis Calculation Sheets
K.	Horizon Year 2050 (With Connection) With Project Intersection Analysis Calculation Sheets
L.	Horizon Year 2050 (No Connection) Without Project Intersection Analysis Calculation Sheets
M.	Horizon Year 2050 (No Connection) With Project Intersection Analysis Calculation Sheets

APPENDIX A

INTERSECTION AND SEGMENT COUNT SHEETS AND SIGNAL TIMING PLANS

Year 2021 Traffic Counts

Linscott, Law & Greenspan, Engineers

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

Average Daily Traffic

Location: **Scripps Poway Pkwy, West of Spring Canyon Rd**

Date: **Tuesday, September 14, 2021** Total Daily Volume: **39519** 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
293	175	175	287	620	1181	1820	2880	2692	2060	1968	2056	2175	2203	2919	3048	3056	2859	2318	1751	1198	881	561	343
65	34	39	71	88	212	344	646	632	533	478	511	497	505	596	746	738	745	634	492	354	225	150	122
46	43	26	70	123	228	409	739	754	487	495	468	578	577	635	756	756	746	554	448	314	253	155	78
118	52	38	62	190	343	518	754	658	547	490	516	545	606	833	759	788	687	543	409	285	230	149	75
64	46	72	84	219	398	549	741	648	493	505	561	555	515	855	787	774	681	587	402	245	173	107	68

Date: **Tuesday, September 14, 2021** Total Daily Volume: **19608** 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
85	61	101	160	376	659	941	1409	1328	1004	945	974	1080	1060	1426	1488	1446	1486	1207	910	598	414	283	167
21	12	17	33	53	109	176	289	335	248	216	251	223	247	287	366	359	368	326	245	164	114	66	52
16	19	15	40	72	126	221	364	368	234	249	218	302	276	323	332	350	397	274	233	168	119	86	45
25	16	26	29	120	188	244	346	314	266	227	236	272	280	413	343	358	357	294	203	138	109	71	36
23	14	43	58	131	236	300	410	311	256	253	269	283	257	403	447	379	364	313	229	128	72	60	34

Date: **Tuesday, September 14, 2021** Total Daily Volume: **19911** 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
208	114	74	127	244	522	879	1471	1364	1056	1023	1082	1095	1143	1493	1560	1610	1373	1111	841	600	467	278	176
44	22	22	38	35	103	168	357	297	285	262	260	274	258	309	380	379	377	308	247	190	111	84	70
30	24	11	30	51	102	188	375	386	253	246	250	276	301	312	424	406	349	280	215	146	134	69	33
93	36	12	33	70	155	274	408	344	281	263	280	273	326	420	416	430	330	249	206	147	121	78	39
41	32	29	26	88	162	249	331	337	237	252	292	272	258	452	340	395	317	274	173	117	101	47	34

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Linscott, Law & Greenspan, Engineers

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

Average Daily Traffic

Location: **Scripps Poway Pkwy, West of Spring Canyon Rd**

Date: **Wednesday, September 15, 2021** Total Daily Volume: **39569** 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
304	191	173	307	641	1233	1736	2746	2817	2051	1897	2066	2164	2355	3008	3030	3040	2946	2270	1736	1192	807	502	357
65	53	21	83	75	187	307	580	626	526	430	485	556	553	611	745	741	727	567	497	349	224	149	115
59	33	28	61	135	272	407	745	777	496	475	541	511	590	618	795	756	841	564	467	288	248	127	80
111	52	57	74	204	374	497	709	725	493	494	484	547	615	858	768	808	662	562	396	313	201	136	82
69	53	67	89	227	400	525	712	689	536	498	556	550	597	921	722	735	716	577	376	242	134	90	80

Date: **Wednesday, September 15, 2021** Total Daily Volume: **19656** 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
86	75	95	165	393	679	873	1389	1328	1028	905	972	1091	1157	1513	1417	1499	1500	1143	933	601	381	253	180
23	18	10	39	37	91	141	273	323	260	209	222	283	285	281	360	360	357	281	249	172	98	77	56
23	24	7	28	83	140	206	363	371	269	231	253	270	285	326	365	373	419	300	243	134	110	67	42
20	12	37	45	132	199	256	367	333	222	242	217	264	287	423	340	400	338	268	217	172	110	58	37
20	21	41	53	141	249	270	386	301	277	223	280	274	300	483	352	366	386	294	224	123	63	51	45

Date: **Wednesday, September 15, 2021** Total Daily Volume: **19913** 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
218	116	78	142	248	554	863	1357	1489	1023	992	1094	1073	1198	1495	1613	1541	1446	1127	803	591	426	249	177
42	35	11	44	38	96	166	307	303	266	221	263	273	268	330	385	381	370	286	248	177	126	72	59
36	9	21	33	52	132	201	382	406	227	244	288	241	305	292	430	383	422	264	224	154	138	60	38
91	40	20	29	72	175	241	342	392	271	252	267	283	328	435	428	408	324	294	179	141	91	78	45
49	32	26	36	86	151	255	326	388	259	275	276	276	297	438	370	369	330	283	152	119	71	39	35

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

Average Daily Traffic

Location: **Scripps Poway Pkwy, between Spring Canyon Rd and Scripps Creek Dr**

Date: **Tuesday, September 14, 2021** Total Daily Volume: **35973** 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
273	166	169	273	596	1146	1649	2530	2548	1876	1800	1867	1961	1981	2739	2794	2829	2594	2053	1510	1029	786	493	311
64	35	39	68	91	205	308	530	603	492	426	432	459	456	563	707	705	693	588	403	301	206	128	104
41	38	22	66	111	213	374	651	742	443	464	431	501	509	598	686	705	685	474	382	276	219	134	67
107	51	36	61	185	338	456	674	610	493	432	495	527	559	737	714	743	634	511	375	252	201	142	74
61	42	72	78	209	390	511	675	593	448	478	509	474	457	841	687	676	582	480	350	200	160	89	66

Date: **Tuesday, September 14, 2021** Total Daily Volume: **17078** 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
72	53	96	154	364	647	859	1285	1268	896	823	837	906	885	1311	1296	1287	1243	962	690	451	332	228	133
21	11	16	32	54	107	155	261	311	226	192	194	183	198	270	338	334	312	264	182	122	90	46	38
11	16	14	39	66	122	203	319	383	218	214	198	245	225	285	288	321	338	221	179	128	96	70	33
18	15	23	29	119	186	220	321	279	229	200	195	250	249	346	292	309	309	261	152	117	88	65	32
22	11	43	54	125	232	281	384	295	223	217	250	228	213	410	378	323	284	216	177	84	58	47	30

Date: **Tuesday, September 14, 2021** Total Daily Volume: **18895** 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
201	113	73	119	232	499	790	1245	1280	980	977	1030	1055	1096	1428	1498	1542	1351	1091	820	578	454	265	178
43	24	23	36	37	98	153	269	292	266	234	238	276	258	293	369	371	381	324	221	179	116	82	66
30	22	8	27	45	91	171	332	359	225	250	233	256	284	313	398	384	347	253	203	148	123	64	34
89	36	13	32	66	152	236	353	331	264	232	300	277	310	391	422	434	325	250	223	135	113	77	42
39	31	29	24	84	158	230	291	298	225	261	259	246	244	431	309	353	298	264	173	116	102	42	36

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Average Daily Traffic

Location: **Scripps Poway Pkwy, between Spring Canyon Rd and Scripps Creek Dr**

Date: **Wednesday, September 15, 2021** Total Daily Volume: **36011** 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
283	177	178	308	614	1176	1601	2378	2647	1837	1753	1865	1960	2106	2837	2781	2856	2626	2087	1486	1011	702	432	310
61	46	21	85	73	186	285	483	625	486	393	419	504	488	560	704	692	697	548	431	296	194	137	86
53	30	28	61	127	254	369	635	766	436	443	505	475	525	603	729	739	723	497	384	250	215	95	70
106	47	57	72	201	346	477	617	657	451	463	460	510	523	821	724	723	624	526	338	263	175	121	73
63	54	72	90	213	390	470	643	599	464	454	481	471	570	853	624	702	582	516	333	202	118	79	81

Date: **Wednesday, September 15, 2021** Total Daily Volume: **17136** 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
68	64	97	164	379	661	823	1245	1282	903	798	840	922	971	1395	1218	1304	1211	999	707	449	298	196	142
20	15	10	39	36	91	135	241	325	243	184	190	237	229	249	312	315	305	252	196	135	74	62	37
18	19	7	29	80	132	189	323	381	220	208	226	228	242	310	321	348	326	248	159	95	84	46	29
14	8	37	44	131	187	234	329	298	204	221	190	233	225	398	284	319	283	259	179	126	87	48	30
16	22	43	52	132	251	265	352	278	236	185	234	224	275	438	301	322	297	240	173	93	53	40	46

Date: **Wednesday, September 15, 2021** Total Daily Volume: **18875** 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
215	113	81	144	235	515	778	1133	1365	934	955	1025	1038	1135	1442	1563	1552	1415	1088	779	562	404	236	168
41	31	11	46	37	95	150	242	300	243	209	229	267	259	311	392	377	392	296	235	161	120	75	49
35	11	21	32	47	122	180	312	385	216	235	279	247	283	293	408	391	397	249	225	155	131	49	41
92	39	20	28	70	159	243	288	359	247	242	270	277	298	423	440	404	341	267	159	137	88	73	43
47	32	29	38	81	139	205	291	321	228	269	247	247	295	415	323	380	285	276	160	109	65	39	35

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Average Daily Traffic

Location: **Cypress Canyon Rd, South of Scripps Poway Pkwy**

Date: **Tuesday, September 14, 2021** Total Daily Volume: **4252** 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	8	5	7	12	37	80	216	589	186	138	216	223	176	261	474	360	354	348	228	132	100	50	34
6	1	2	3	0	4	10	56	77	53	43	51	65	50	51	119	80	81	83	81	31	24	18	12
1	4	0	1	1	14	12	51	162	42	29	49	56	45	39	172	93	97	71	62	33	16	14	11
4	3	0	1	4	10	31	61	219	45	24	59	56	48	63	89	86	77	92	49	37	15	11	10
7	0	3	2	7	9	27	48	131	46	42	57	46	33	108	94	101	99	102	36	31	45	7	1

Date: **Tuesday, September 14, 2021** Total Daily Volume: **2325** 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
14	6	2	7	11	33	53	145	333	110	81	135	125	100	107	288	196	162	143	95	68	57	34	20
4	1	1	3	0	4	7	42	36	30	25	27	44	31	27	29	47	37	43	33	18	10	17	9
1	4	0	1	1	14	8	36	56	31	20	35	28	27	14	144	48	43	27	25	11	9	6	4
4	1	0	1	3	9	21	41	140	22	12	39	27	28	26	69	47	37	30	26	18	5	8	6
5	0	1	2	7	6	17	26	101	27	24	34	26	14	40	46	54	45	43	11	21	33	3	1

Date: **Tuesday, September 14, 2021** Total Daily Volume: **1927** 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	2	3	0	1	4	27	71	256	76	57	81	98	76	154	186	164	192	205	133	64	43	16	14
2	0	1	0	0	0	3	14	41	23	18	24	21	19	24	90	33	44	40	48	13	14	1	3
0	0	0	0	0	0	4	15	106	11	9	14	28	18	25	28	45	54	44	37	22	7	8	7
0	2	0	0	1	1	10	20	79	23	12	20	29	20	37	20	39	40	62	23	19	10	3	4
2	0	2	0	0	3	10	22	30	19	18	23	20	19	68	48	47	54	59	25	10	12	4	0

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Average Daily Traffic

Location: **Cypress Canyon Rd, South of Scripps Poway Pkwy**

Date: **Wednesday, September 15, 2021** Total Daily Volume: **3741** 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
15	4	1	7	12	40	107	183	553	178	152	171	183	159	259	420	317	297	264	193	131	49	29	17
12	4	0	2	0	9	9	47	67	37	55	43	41	40	39	85	90	74	65	64	36	10	8	3
1	0	0	1	3	15	16	42	125	54	34	38	48	39	60	171	79	89	56	45	30	12	10	10
1	0	1	2	1	4	47	52	239	51	34	47	44	43	71	105	80	74	75	54	36	19	5	1
1	0	0	2	8	12	35	42	122	36	29	43	50	37	89	59	68	60	68	30	29	8	6	3

Date: **Wednesday, September 15, 2021** Total Daily Volume: **2008** 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
7	3	0	6	10	31	74	108	331	105	97	94	90	81	96	260	179	146	119	77	58	17	14	5
6	3	0	2	0	7	7	31	41	22	35	30	24	18	22	17	49	28	29	23	20	5	2	1
0	0	0	1	3	13	12	24	41	26	25	22	18	23	22	132	45	47	20	16	14	6	5	4
0	0	0	1	1	4	34	28	150	33	23	26	31	20	32	76	45	46	40	28	16	6	3	0
1	0	0	2	6	7	21	25	99	24	14	16	17	20	20	35	40	25	30	10	8	0	4	0

Date: **Wednesday, September 15, 2021** Total Daily Volume: **1733** 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
8	1	1	1	2	9	33	75	222	73	55	77	93	78	163	160	138	151	145	116	73	32	15	12
6	1	0	0	0	2	2	16	26	15	20	13	17	22	17	68	41	46	36	41	16	5	6	2
1	0	0	0	0	2	4	18	84	28	9	16	30	16	38	39	34	42	36	29	16	6	5	6
1	0	1	1	0	0	13	24	89	18	11	21	13	23	39	29	35	28	35	26	20	13	2	1
0	0	0	0	2	5	14	17	23	12	15	27	33	17	69	24	28	35	38	20	21	8	2	3

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

Average Daily Traffic

Location: **Cypress Canyon Rd, between Blue Cypress Dr and Cypress Valley Dr**

Date: **Tuesday, September 14, 2021** Total Daily Volume: **2680** 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
2	3	2	2	4	23	69	133	382	105	114	128	118	121	168	311	254	243	211	133	68	49	28	9
2	1	1	1	0	6	3	25	66	25	25	29	33	38	26	86	67	62	47	46	16	15	6	1
0	1	0	0	0	8	16	24	104	23	32	37	26	29	21	104	77	67	45	32	14	10	7	5
0	1	0	0	2	8	27	41	156	22	32	31	28	25	39	57	49	62	61	27	17	7	11	2
0	0	1	1	2	1	23	43	56	35	25	31	31	29	82	64	61	52	58	28	21	17	4	1

Date: **Tuesday, September 14, 2021** Total Daily Volume: **1365** 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
1	2	1	2	4	21	52	100	225	66	66	68	49	60	107	129	121	101	89	51	23	16	9	2
1	1	0	1	0	5	3	22	58	18	18	15	14	22	14	57	29	29	17	17	5	1	5	0
0	1	0	0	0	8	15	19	82	12	18	19	11	13	12	30	39	28	20	13	6	3	0	1
0	0	0	0	2	7	16	25	66	15	19	18	7	12	31	18	23	18	29	13	6	2	3	1
0	0	1	1	2	1	18	34	19	21	11	16	17	13	50	24	30	26	23	8	6	10	1	0

Date: **Tuesday, September 14, 2021** Total Daily Volume: **1315** 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
1	1	1	0	0	2	17	33	157	39	48	60	69	61	61	182	133	142	122	82	45	33	19	7
1	0	1	0	0	1	0	3	8	7	7	14	19	16	12	29	38	33	30	29	11	14	1	1
0	0	0	0	0	0	1	5	22	11	14	18	15	16	9	74	38	39	25	19	8	7	7	4
0	1	0	0	0	1	11	16	90	7	13	13	21	13	8	39	26	44	32	14	11	5	8	1
0	0	0	0	0	0	5	9	37	14	14	15	14	16	32	40	31	26	35	20	15	7	3	1

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Average Daily Traffic

Location: **Cypress Canyon Rd, between Blue Cypress Dr and Cypress Valley Dr**

Date: **Wednesday, September 15, 2021** Total Daily Volume: **2439** 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
3	1	2	2	4	18	74	154	388	104	121	113	96	87	161	285	224	199	154	108	77	34	21	9
1	1	0	0	0	5	8	26	69	33	38	26	22	20	18	65	74	49	35	32	18	11	9	3
0	0	1	0	0	5	7	34	121	30	35	30	23	22	31	99	48	58	41	31	22	8	4	4
2	0	1	1	3	5	35	43	150	24	22	31	24	22	38	64	50	50	44	22	16	8	6	0
0	0	0	1	1	3	24	51	48	17	26	26	27	23	74	57	52	42	34	23	21	7	2	2

Date: **Wednesday, September 15, 2021** Total Daily Volume: **1214** 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	1	0	1	4	16	59	118	223	52	70	56	45	39	94	124	93	76	68	33	23	9	6	4
0	1	0	0	0	4	7	21	60	16	21	17	13	11	10	52	26	16	11	9	2	4	4	2
0	0	0	0	0	5	7	27	87	13	25	13	9	10	16	28	16	22	20	12	11	0	1	1
0	0	0	0	3	5	25	33	60	13	11	14	9	9	24	21	21	19	24	6	5	1	0	0
0	0	0	1	1	2	20	37	16	10	13	12	14	9	44	23	30	19	13	6	5	4	1	1

Date: **Wednesday, September 15, 2021** Total Daily Volume: **1225** 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
3	0	2	1	0	2	15	36	165	52	51	57	51	48	67	161	131	123	86	75	54	25	15	5
1	0	0	0	0	1	1	5	9	17	17	9	9	9	8	13	48	33	24	23	16	7	5	1
0	0	1	0	0	0	0	7	34	17	10	17	14	12	15	71	32	36	21	19	11	8	3	3
2	0	1	1	0	0	10	10	90	11	11	17	15	13	14	43	29	31	20	16	11	7	6	0
0	0	0	0	0	1	4	14	32	7	13	14	13	14	30	34	22	23	21	17	16	3	1	1

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Average Daily Traffic

Location: **Cypress Canyon Rd, between Caminito Sereno and Cypress Canyon Park Dr**

Date: **Tuesday, September 14, 2021** Total Daily Volume: **818** 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
0	1	0	0	0	5	9	21	47	41	26	20	21	18	33	58	104	200	90	80	25	10	6	3
0	1	0	0	0	1	3	6	8	11	6	3	8	5	6	11	37	28	21	57	11	2	2	2
0	0	0	0	0	0	0	7	15	8	5	3	3	4	6	6	33	73	21	12	2	2	0	1
0	0	0	0	0	0	1	3	13	13	7	9	6	3	7	15	14	64	15	4	6	5	3	0
0	0	0	0	0	4	5	5	11	9	8	5	4	6	14	26	20	35	33	7	6	1	1	0

Date: **Tuesday, September 14, 2021** Total Daily Volume: **413** 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
0	0	0	0	0	4	4	14	25	23	15	13	10	10	16	18	42	85	52	59	14	4	3	2
0	0	0	0	0	1	2	5	6	4	4	3	3	3	3	6	16	9	10	48	10	0	0	1
0	0	0	0	0	0	0	5	9	7	2	0	3	2	4	2	14	28	13	6	0	1	0	1
0	0	0	0	0	0	0	1	6	8	4	6	3	2	3	5	8	32	10	2	2	2	2	0
0	0	0	0	0	3	2	3	4	4	5	4	1	3	6	5	4	16	19	3	2	1	1	0

Date: **Tuesday, September 14, 2021** Total Daily Volume: **405** 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
0	1	0	0	0	1	5	7	22	18	11	7	11	8	17	40	62	115	38	21	11	6	3	1
0	1	0	0	0	0	1	1	2	7	2	0	5	2	3	5	21	19	11	9	1	2	2	1
0	0	0	0	0	0	0	2	6	1	3	3	0	2	2	4	19	45	8	6	2	1	0	0
0	0	0	0	0	0	1	2	7	5	3	3	3	1	4	10	6	32	5	2	4	3	1	0
0	0	0	0	0	1	3	2	7	5	3	1	3	3	8	21	16	19	14	4	4	0	0	0

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

Average Daily Traffic

Location: **Cypress Canyon Rd, between Caminito Sereno and Cypress Canyon Park Dr**

Date: **Wednesday, September 15, 2021** Total Daily Volume: **640** 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
1	2	0	0	1	5	12	24	43	22	23	23	39	24	27	48	42	98	79	75	28	18	3	3
0	1	0	0	1	1	1	7	1	7	9	7	7	6	5	15	12	18	16	40	16	13	1	0
0	0	0	0	0	0	0	4	21	3	3	4	6	7	3	10	11	33	10	17	4	2	2	3
0	0	0	0	0	3	1	6	5	5	8	3	9	4	7	11	10	28	19	7	5	1	0	0
1	1	0	0	0	1	10	7	16	7	3	9	17	7	12	12	9	19	34	11	3	2	0	0

Date: **Wednesday, September 15, 2021** Total Daily Volume: **310** 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
0	1	0	0	1	3	6	14	22	15	8	11	20	9	10	26	16	39	30	49	15	11	2	2
0	0	0	0	1	1	1	3	0	4	2	5	4	2	3	7	4	6	4	33	12	10	1	0
0	0	0	0	0	0	0	2	15	1	0	2	4	2	2	6	3	11	5	13	3	1	1	2
0	0	0	0	0	2	1	3	1	3	3	2	2	2	1	8	5	17	9	0	0	0	0	0
0	1	0	0	0	0	4	6	6	7	3	2	10	3	4	5	4	5	12	3	0	0	0	0

Date: **Wednesday, September 15, 2021** Total Daily Volume: **330** 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
1	1	0	0	0	2	6	10	21	7	15	12	19	15	17	22	26	59	49	26	13	7	1	1
0	1	0	0	0	0	0	4	1	3	7	2	3	4	2	8	8	12	12	7	4	3	0	0
0	0	0	0	0	0	0	2	6	2	3	2	2	5	1	4	8	22	5	4	1	1	1	1
0	0	0	0	0	1	0	3	4	2	5	1	7	2	6	3	5	11	10	7	5	1	0	0
1	0	0	0	0	1	6	1	10	0	0	7	7	4	8	7	5	14	22	8	3	2	0	0

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

Average Daily Traffic

Location: **Angelique St, between Scripps Poway Pkwy and Cypress Canyon Park Dr**

Date: **Tuesday, September 14, 2021** Total Daily Volume: **3181** 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
3	3	4	3	8	28	88	181	296	157	159	184	199	179	218	258	251	285	268	186	108	70	31	14
1	0	0	0	1	1	10	44	44	37	42	46	43	58	54	67	54	67	54	64	29	19	9	7
0	0	1	1	1	12	18	42	88	36	46	40	51	39	49	67	75	70	67	61	22	18	10	7
2	0	2	0	2	5	23	43	96	40	41	54	51	46	49	56	64	71	83	36	31	18	10	0
0	3	1	2	4	10	37	52	68	44	30	44	54	36	66	68	58	77	64	25	26	15	2	0

Date: **Tuesday, September 14, 2021** Total Daily Volume: **1705** 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
1	0	1	2	7	21	68	141	190	86	92	96	111	94	122	122	118	139	118	90	37	34	11	4
0	0	0	0	1	1	8	35	29	15	23	23	22	29	28	32	24	28	19	35	11	10	2	3
0	0	0	0	1	8	13	33	65	21	30	24	35	17	33	22	38	38	31	36	4	7	3	1
1	0	1	0	1	4	20	38	59	27	27	25	25	26	22	30	31	30	40	13	11	9	6	0
0	0	0	2	4	8	27	35	37	23	12	24	29	22	39	38	25	43	28	6	11	8	0	0

Date: **Tuesday, September 14, 2021** Total Daily Volume: **1476** 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
2	3	3	1	1	7	20	40	106	71	67	88	88	85	96	136	133	146	150	96	71	36	20	10
1	0	0	0	0	0	2	9	15	22	19	23	21	29	26	35	30	39	35	29	18	9	7	4
0	0	1	1	0	4	5	9	23	15	16	16	16	22	16	45	37	32	36	25	18	11	7	6
1	0	1	0	1	1	3	5	37	13	14	29	26	20	27	26	33	41	43	23	20	9	4	0
0	3	1	0	0	2	10	17	31	21	18	20	25	14	27	30	33	34	36	19	15	7	2	0

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

Average Daily Traffic

Location: **Angelique St, between Scripps Poway Pkwy and Cypress Canyon Park Dr**

Date: **Wednesday, September 15, 2021** Total Daily Volume: **3055** 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
6	8	2	2	7	22	78	192	269	194	191	134	164	178	169	235	269	301	255	175	108	54	21	21
6	4	0	0	0	5	11	34	51	59	38	36	44	48	31	51	55	89	78	46	26	12	3	11
0	2	1	0	3	3	11	61	77	51	41	45	30	35	28	57	69	84	52	50	22	11	6	8
0	2	0	0	1	7	25	48	71	42	69	29	50	44	48	65	73	63	68	39	27	19	5	1
0	0	1	2	3	7	31	49	70	42	43	24	40	51	62	62	72	65	57	40	33	12	7	1

Date: **Wednesday, September 15, 2021** Total Daily Volume: **1599** 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	4	1	0	4	18	62	129	166	119	110	77	90	98	86	97	132	170	107	70	33	12	7	7
0	4	0	0	0	4	9	22	38	30	22	26	23	27	18	21	31	56	34	25	5	1	2	3
0	0	0	0	2	3	10	42	46	34	26	27	19	12	12	26	37	52	22	17	9	3	2	4
0	0	0	0	1	6	19	35	40	28	36	16	27	29	17	27	34	35	29	14	10	6	1	0
0	0	1	0	1	5	24	30	42	27	26	8	21	30	39	23	30	27	22	14	9	2	2	0

Date: **Wednesday, September 15, 2021** Total Daily Volume: **1456** 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
6	4	1	2	3	4	16	63	103	75	81	57	74	80	83	138	137	131	148	105	75	42	14	14
6	0	0	0	0	1	2	12	13	29	16	10	21	21	13	30	24	33	44	21	21	11	1	8
0	2	1	0	1	0	1	19	31	17	15	18	11	23	16	31	32	32	30	33	13	8	4	4
0	2	0	0	0	1	6	13	31	14	33	13	23	15	31	38	39	28	39	25	17	13	4	1
0	0	0	2	2	2	7	19	28	15	17	16	19	21	23	39	42	38	35	26	24	10	5	1

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Average Daily Traffic

Location: **Angelique St, between Cypress Canyon Park Dr and Nikita Ct**

Date: **Tuesday, September 14, 2021** Total Daily Volume: **1703** 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
1	1	2	1	1	6	43	70	261	60	61	92	82	75	106	213	169	146	121	97	36	39	17	3
1	0	1	0	0	1	1	8	42	16	17	25	26	23	17	58	40	35	23	37	9	8	2	0
0	1	0	0	0	1	9	6	78	11	14	23	19	17	16	79	50	46	25	25	8	4	5	1
0	0	0	1	1	2	18	23	101	15	19	23	17	20	21	38	40	34	41	18	9	6	8	1
0	0	1	0	0	2	15	33	40	18	11	21	20	15	52	38	39	31	32	17	10	21	2	1

Date: **Tuesday, September 14, 2021** Total Daily Volume: **804** 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
1	0	1	0	0	1	20	29	116	25	23	47	43	34	34	113	85	79	55	46	20	20	10	2
1	0	1	0	0	0	0	2	10	7	3	15	12	10	6	13	20	17	11	18	4	6	1	0
0	0	0	0	0	0	4	2	14	3	6	10	8	9	7	56	23	28	14	9	2	4	4	1
0	0	0	0	0	1	9	13	65	7	8	10	12	7	5	24	22	18	15	8	7	1	5	0
0	0	0	0	0	0	7	12	27	8	6	12	11	8	16	20	20	16	15	11	7	9	0	1

Date: **Tuesday, September 14, 2021** Total Daily Volume: **899** 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
0	1	1	1	1	5	23	41	145	35	38	45	39	41	72	100	84	67	66	51	16	19	7	1
0	0	0	0	0	1	1	6	32	9	14	10	14	13	11	45	20	18	12	19	5	2	1	0
0	1	0	0	0	1	5	4	64	8	8	13	11	8	9	23	27	18	11	16	6	0	1	0
0	0	0	1	1	1	9	10	36	8	11	13	5	13	16	14	18	16	26	10	2	5	3	1
0	0	1	0	0	2	8	21	13	10	5	9	9	7	36	18	19	15	17	6	3	12	2	0

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

Average Daily Traffic

Location: **Angelique St, between Cypress Canyon Park Dr and Nikita Ct**

Date: **Wednesday, September 15, 2021** Total Daily Volume: **1573** 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
2	1	1	1	1	7	42	88	260	52	81	63	65	59	108	194	133	130	122	81	47	23	9	3
0	1	0	0	0	1	1	12	41	13	18	14	12	14	14	47	37	34	27	28	15	8	4	0
0	0	1	0	0	0	8	16	90	16	26	16	13	11	15	75	34	40	29	24	15	8	1	3
2	0	0	0	0	4	17	22	95	13	20	19	27	20	26	40	27	27	39	18	8	3	4	0
0	0	0	1	1	2	16	38	34	10	17	14	13	14	53	32	35	29	27	11	9	4	0	0

Date: **Wednesday, September 15, 2021** Total Daily Volume: **776** 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
1	0	1	0	0	2	16	34	126	29	41	31	38	29	42	106	70	74	53	39	24	12	5	3
0	0	0	0	0	0	1	6	13	7	10	7	7	5	7	8	25	23	14	14	10	3	1	0
0	0	1	0	0	0	2	6	23	11	11	7	8	4	7	49	20	18	15	14	5	5	1	3
1	0	0	0	0	2	9	7	62	7	13	12	18	15	10	32	12	16	13	6	3	3	3	0
0	0	0	0	0	0	4	15	28	4	7	5	5	5	18	17	13	17	11	5	6	1	0	0

Date: **Wednesday, September 15, 2021** Total Daily Volume: **797** 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
1	1	0	1	1	5	26	54	134	23	40	32	27	30	66	88	63	56	69	42	23	11	4	0
0	1	0	0	0	1	0	6	28	6	8	7	5	9	7	39	12	11	13	14	5	5	3	0
0	0	0	0	0	0	6	10	67	5	15	9	5	7	8	26	14	22	14	10	10	3	0	0
1	0	0	0	0	2	8	15	33	6	7	7	9	5	16	8	15	11	26	12	5	0	1	0
0	0	0	1	1	2	12	23	6	6	10	9	8	9	35	15	22	12	16	6	3	3	0	0

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Average Daily Traffic

Location: **Cypress Canyon Park Dr, between Angelique St and Jaguar Ct**

Date: **Tuesday, September 14, 2021** Total Daily Volume: **1378** 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
3	1	0	2	0	8	38	76	203	46	48	72	59	71	98	175	117	122	96	73	39	21	7	3
1	0	0	0	0	1	3	18	28	12	11	17	14	22	20	54	30	29	20	30	9	4	2	1
0	1	0	0	0	2	2	15	68	13	9	16	11	10	14	66	36	42	19	24	9	2	2	1
2	0	0	2	0	2	17	19	69	10	15	22	17	21	24	24	27	26	29	9	12	5	3	1
0	0	0	0	0	3	16	24	38	11	13	17	17	18	40	31	24	25	28	10	9	10	0	0

Date: **Tuesday, September 14, 2021** Total Daily Volume: **651** 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
2	0	0	1	0	3	16	31	81	22	16	36	31	35	26	100	65	72	48	31	21	8	4	2
1	0	0	0	0	0	0	12	3	7	2	9	7	12	7	17	19	18	10	13	3	2	1	1
0	0	0	0	0	2	0	5	10	6	3	7	2	7	4	53	19	25	10	8	6	1	2	1
1	0	0	1	0	1	9	5	42	4	4	9	12	11	7	16	13	15	11	3	5	3	1	0
0	0	0	0	0	0	7	9	26	5	7	11	10	5	8	14	14	14	17	7	7	2	0	0

Date: **Tuesday, September 14, 2021** Total Daily Volume: **727** 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
1	1	0	1	0	5	22	45	122	24	32	36	28	36	72	75	52	50	48	42	18	13	3	1
0	0	0	0	0	1	3	6	25	5	9	8	7	10	13	37	11	11	10	17	6	2	1	0
0	1	0	0	0	0	2	10	58	7	6	9	9	3	10	13	17	17	9	16	3	1	0	0
1	0	0	1	0	1	8	14	27	6	11	13	5	10	17	8	14	11	18	6	7	2	2	1
0	0	0	0	0	3	9	15	12	6	6	6	7	13	32	17	10	11	11	3	2	8	0	0

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

Average Daily Traffic

Location: **Cypress Canyon Park Dr, between Angelique St and Jaguar Ct**

Date: **Wednesday, September 15, 2021** Total Daily Volume: **1265** 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
1	2	0	2	1	14	32	86	202	52	64	39	52	45	93	161	101	110	87	63	35	14	6	3
0	1	0	0	0	4	1	16	31	19	16	11	11	12	10	46	27	28	21	21	15	6	2	3
0	0	0	0	1	1	5	17	71	15	21	10	12	10	13	58	30	33	21	16	7	3	2	0
1	1	0	0	0	3	13	22	67	10	15	13	16	11	22	33	18	33	22	16	6	2	2	0
0	0	0	2	0	6	13	31	33	8	12	5	13	12	48	24	26	16	23	10	7	3	0	0

Date: **Wednesday, September 15, 2021** Total Daily Volume: **627** 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
0	1	0	1	1	4	12	30	75	29	30	18	31	28	32	97	56	66	48	35	22	7	4	0
0	0	0	0	0	1	0	5	3	14	9	4	7	8	3	11	16	18	15	8	13	3	0	0
0	0	0	0	1	1	1	8	13	8	8	3	4	5	6	44	19	17	10	13	3	2	2	0
0	1	0	0	0	0	7	3	39	3	9	9	12	6	8	27	8	19	10	9	3	1	2	0
0	0	0	1	0	2	4	14	20	4	4	2	8	9	15	15	13	12	13	5	3	1	0	0

Date: **Wednesday, September 15, 2021** Total Daily Volume: **638** 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
1	1	0	1	0	10	20	56	127	23	34	21	21	17	61	64	45	44	39	28	13	7	2	3
0	1	0	0	0	3	1	11	28	5	7	7	4	4	7	35	11	10	6	13	2	3	2	3
0	0	0	0	0	0	4	9	58	7	13	7	8	5	7	14	11	16	11	3	4	1	0	0
1	0	0	0	0	3	6	19	28	7	6	4	4	5	14	6	10	14	12	7	3	1	0	0
0	0	0	1	0	4	9	17	13	4	8	3	5	3	33	9	13	4	10	5	4	2	0	0

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

Average Daily Traffic

Location: **Cypress Canyon Park Dr, North of Cypress Canyon Rd**

Date: **Tuesday, September 14, 2021** Total Daily Volume: **1925** 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
1	3	1	2	7	13	62	160	190	92	67	89	76	98	132	167	157	232	159	106	57	34	13	7
0	1	1	0	1	1	4	41	44	21	16	21	14	17	29	41	41	45	36	47	20	8	4	1
0	0	0	2	0	4	10	42	62	19	13	22	22	20	27	33	43	72	37	28	13	10	3	4
0	2	0	0	3	3	9	36	51	29	20	23	19	28	28	47	36	81	47	19	9	5	6	1
1	0	0	0	3	5	39	41	33	23	18	23	21	33	48	46	37	34	39	12	15	11	0	1

Date: **Tuesday, September 14, 2021** Total Daily Volume: **998** 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
1	2	1	1	0	2	8	59	83	42	33	40	40	49	70	96	87	132	105	71	39	23	8	6
0	0	1	0	0	0	0	10	16	13	9	9	10	5	11	31	22	25	24	33	16	5	1	1
0	0	0	1	0	0	2	18	36	8	7	10	16	12	12	9	25	42	26	16	9	6	2	3
0	2	0	0	0	2	0	12	18	12	6	14	6	17	15	23	22	43	31	14	5	3	5	1
1	0	0	0	0	0	6	19	13	9	11	7	8	15	32	33	18	22	24	8	9	9	0	1

Date: **Tuesday, September 14, 2021** Total Daily Volume: **927** 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
0	1	0	1	7	11	54	101	107	50	34	49	36	49	62	71	70	100	54	35	18	11	5	1
0	1	0	0	1	1	4	31	28	8	7	12	4	12	18	10	19	20	12	14	4	3	3	0
0	0	0	1	0	4	8	24	26	11	6	12	6	8	15	24	18	30	11	12	4	4	1	1
0	0	0	0	3	1	9	24	33	17	14	9	13	11	13	24	14	38	16	5	4	2	1	0
0	0	0	0	3	5	33	22	20	14	7	16	13	18	16	13	19	12	15	4	6	2	0	0

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

Average Daily Traffic

Location: **Cypress Canyon Park Dr, North of Cypress Canyon Rd**

Date: **Wednesday, September 15, 2021** Total Daily Volume: **1722** 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
4	3	1	0	9	10	62	156	180	66	92	60	89	82	108	138	146	170	146	100	50	28	10	12
0	2	1	0	1	1	5	41	46	24	29	19	12	15	19	29	44	43	46	34	9	12	2	7
3	0	0	0	3	4	10	32	58	8	23	11	24	25	18	42	40	52	32	24	18	3	3	2
1	1	0	0	3	2	15	40	41	21	23	14	32	17	36	27	27	43	34	21	13	7	2	1
0	0	0	0	2	3	32	43	35	13	17	16	21	25	35	40	35	32	34	21	10	6	3	2

Date: **Wednesday, September 15, 2021** Total Daily Volume: **864** 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
2	3	0	0	2	1	9	59	72	25	37	28	42	38	58	77	88	100	91	62	34	20	7	9
0	2	0	0	1	0	0	10	15	6	8	8	7	7	11	19	28	25	29	20	4	11	1	5
2	0	0	0	0	0	0	11	27	4	9	5	13	16	3	17	23	29	18	16	12	3	1	1
0	1	0	0	0	1	3	20	10	7	9	8	12	10	20	15	17	26	25	12	10	2	2	1
0	0	0	0	1	0	6	18	20	8	11	7	10	5	24	26	20	20	19	14	8	4	3	2

Date: **Wednesday, September 15, 2021** Total Daily Volume: **858** 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
2	0	1	0	7	9	53	97	108	41	55	32	47	44	50	61	58	70	55	38	16	8	3	3
0	0	1	0	0	1	5	31	31	18	21	11	5	8	8	10	16	18	17	14	5	1	1	2
1	0	0	0	3	4	10	21	31	4	14	6	11	9	15	25	17	23	14	8	6	0	2	1
1	0	0	0	3	1	12	20	31	14	14	6	20	7	16	12	10	17	9	9	3	5	0	0
0	0	0	0	1	3	26	25	15	5	6	9	11	20	11	14	15	12	15	7	2	2	0	0

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

Average Daily Traffic

Location: **Cypress Canyon Park Dr, between Caminito Sereno and Pomerado Rd**

Date: **Tuesday, September 14, 2021** Total Daily Volume: **3507** 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
4	6	1	5	16	35	103	291	302	165	119	158	136	148	218	259	315	477	298	257	95	60	23	16
0	3	1	0	1	4	9	86	86	46	28	29	26	29	60	60	103	76	66	163	40	13	11	5
1	0	0	3	0	7	11	81	86	33	26	35	37	27	45	59	73	139	68	51	21	17	4	7
2	3	0	2	7	12	20	57	82	56	35	46	35	43	50	63	63	175	75	18	11	15	7	3
1	0	0	0	8	12	63	67	48	30	30	48	38	49	63	77	76	87	89	25	23	15	1	1

Date: **Tuesday, September 14, 2021** Total Daily Volume: **1453** 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
2	4	1	1	0	4	17	76	92	57	48	61	69	62	87	134	153	238	151	84	55	34	12	11
0	1	1	0	0	0	1	14	19	24	9	9	17	13	15	30	46	52	36	38	21	8	4	4
1	0	0	1	0	0	2	25	30	8	12	17	22	16	14	22	37	82	42	20	13	7	3	3
0	3	0	0	0	3	1	17	24	15	12	21	15	18	23	27	26	60	42	13	7	8	5	3
1	0	0	0	0	1	13	20	19	10	15	14	15	15	35	55	44	44	31	13	14	11	0	1

Date: **Tuesday, September 14, 2021** Total Daily Volume: **2054** 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
2	2	0	4	16	31	86	215	210	108	71	97	67	86	131	125	162	239	147	173	40	26	11	5
0	2	0	0	1	4	8	72	67	22	19	20	9	16	45	30	57	24	30	125	19	5	7	1
0	0	0	2	0	7	9	56	56	25	14	18	15	11	31	37	36	57	26	31	8	10	1	4
2	0	0	2	7	9	19	40	58	41	23	25	20	25	27	36	37	115	33	5	4	7	2	0
0	0	0	0	8	11	50	47	29	20	15	34	23	34	28	22	32	43	58	12	9	4	1	0

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

Average Daily Traffic

Location: **Cypress Canyon Park Dr, between Caminito Sereno and Pomerado Rd**

Date: **Wednesday, September 15, 2021** Total Daily Volume: **3213** 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
8	6	6	0	17	25	116	267	314	164	136	126	172	161	197	239	228	337	274	230	101	47	25	17
0	3	2	0	1	2	12	79	83	54	28	36	40	33	38	38	72	72	75	106	38	23	7	7
6	0	4	0	5	5	15	56	114	19	38	27	42	41	43	68	57	105	62	54	24	8	7	7
1	1	0	0	6	9	32	69	57	46	46	28	45	43	51	70	44	90	59	34	24	10	5	1
1	2	0	0	5	9	57	63	60	45	24	35	45	44	65	63	55	70	78	36	15	6	6	2

Date: **Wednesday, September 15, 2021** Total Daily Volume: **1298** 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	4	2	0	3	1	21	73	89	50	46	45	74	66	88	105	118	169	147	89	55	27	10	11
0	3	1	0	1	0	2	16	19	15	9	9	19	13	14	16	38	35	41	24	12	11	2	5
4	0	1	0	1	0	3	14	24	10	11	11	20	24	7	27	32	56	30	22	12	6	1	3
0	1	0	0	0	1	4	28	15	14	14	11	14	17	29	23	23	37	34	23	17	4	3	1
1	0	0	0	1	0	12	15	31	11	12	14	21	12	38	39	25	41	42	20	14	6	4	2

Date: **Wednesday, September 15, 2021** Total Daily Volume: **1915** 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
3	2	4	0	14	24	95	194	225	114	90	81	98	95	109	134	110	168	127	141	46	20	15	6
0	0	1	0	0	2	10	63	64	39	19	27	21	20	24	22	34	37	34	82	26	12	5	2
2	0	3	0	4	5	12	42	90	9	27	16	22	17	36	41	25	49	32	32	12	2	6	4
1	0	0	0	6	8	28	41	42	32	32	17	31	26	22	47	21	53	25	11	7	6	2	0
0	2	0	0	4	9	45	48	29	34	12	21	24	32	27	24	30	29	36	16	1	0	2	0

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

Average Daily Traffic

Location: **Mundial St, between Cypress Canyon Park Dr and Libelle Ct**

Date: **Tuesday, September 14, 2021** Total Daily Volume: **229** 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
2	0	0	0	2	3	9	11	20	12	9	25	7	13	30	23	9	12	20	6	9	2	5	0
0	0	0	0	0	0	2	4	8	3	1	7	3	3	18	2	4	1	2	3	0	2	2	0
0	0	0	0	0	0	0	0	8	5	3	1	1	2	3	10	0	5	9	0	5	0	2	0
2	0	0	0	0	1	2	6	4	2	2	10	1	2	4	8	2	2	7	1	2	0	1	0
0	0	0	0	2	2	5	1	0	2	3	7	2	6	5	3	3	4	2	2	2	0	0	0

Date: **Tuesday, September 14, 2021** Total Daily Volume: **142** 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
2	0	0	0	2	2	8	8	17	4	6	12	5	10	20	17	6	5	10	2	2	2	2	0
0	0	0	0	0	0	2	4	7	0	0	6	2	2	14	2	2	0	0	2	0	2	2	0
0	0	0	0	0	0	0	0	7	0	2	0	1	0	2	9	0	3	4	0	2	0	0	0
2	0	0	0	0	0	2	4	3	2	2	4	0	2	2	6	2	0	6	0	0	0	0	0
0	0	0	0	2	2	4	0	0	2	2	2	2	6	2	0	2	2	0	0	0	0	0	0

Date: **Tuesday, September 14, 2021** Total Daily Volume: **87** 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
0	0	0	0	0	1	1	3	3	8	3	13	2	3	10	6	3	7	10	4	7	0	3	0
0	0	0	0	0	0	0	0	1	3	1	1	1	1	4	0	2	1	2	1	0	0	0	0
0	0	0	0	0	0	0	0	1	5	1	1	0	2	1	1	0	2	5	0	3	0	2	0
0	0	0	0	0	1	0	2	1	0	0	6	1	0	2	2	0	2	1	1	2	0	1	0
0	0	0	0	0	0	1	1	0	0	1	5	0	0	3	3	1	2	2	2	2	0	0	0

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

Average Daily Traffic

Location: **Mundial St, between Cypress Canyon Park Dr and Libelle Ct**

Date: **Wednesday, September 15, 2021** Total Daily Volume: **241** 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
0	0	0	2	0	5	7	17	28	11	11	11	13	9	20	17	25	33	23	2	4	3	0	0
0	0	0	0	0	2	0	6	12	1	5	3	0	1	4	4	11	11	3	0	1	2	0	0
0	0	0	0	0	0	2	6	7	4	5	1	5	3	3	6	7	12	5	2	0	0	0	0
0	0	0	0	0	0	2	4	8	4	0	6	1	4	0	2	5	6	4	0	3	0	0	0
0	0	0	2	0	3	3	1	1	2	1	1	7	1	13	5	2	4	11	0	0	1	0	0

Date: **Wednesday, September 15, 2021** Total Daily Volume: **149** 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	2	0	4	6	13	21	7	10	4	6	7	12	14	14	16	10	1	2	0	0	0
0	0	0	0	0	2	0	6	9	0	4	2	0	1	2	4	8	5	0	0	0	0	0	0
0	0	0	0	0	0	2	4	6	3	5	0	4	2	2	4	0	8	4	1	0	0	0	0
0	0	0	0	0	0	2	3	6	2	0	2	0	4	0	2	4	2	2	0	2	0	0	0
0	0	0	2	0	2	2	0	0	2	1	0	2	0	8	4	2	1	4	0	0	0	0	0

Date: **Wednesday, September 15, 2021** Total Daily Volume: **92** 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
0	0	0	0	0	1	1	4	7	4	1	7	7	2	8	3	11	17	13	1	2	3	0	0
0	0	0	0	0	0	0	0	3	1	1	1	0	0	2	0	3	6	3	0	1	2	0	0
0	0	0	0	0	0	0	2	1	1	0	1	1	1	1	2	7	4	1	1	0	0	0	0
0	0	0	0	0	0	0	1	2	2	0	4	1	0	0	0	1	4	2	0	1	0	0	0
0	0	0	0	0	1	1	1	1	0	0	1	5	1	5	1	0	3	7	0	0	1	0	0

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

Average Daily Traffic

Location: **Spring Canyon Rd, between Elderwood Ln and Riesling Dr**

Date: **Tuesday, September 14, 2021** Total Daily Volume: **9045** 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
12	13	5	8	32	76	259	693	759	462	393	469	465	469	724	780	838	835	680	494	288	186	70	35
3	4	0	0	3	15	39	134	228	122	84	113	107	115	129	222	216	201	186	186	91	58	23	13
2	4	1	0	5	14	44	176	211	121	93	116	110	115	136	156	206	226	148	128	77	54	22	5
2	2	3	4	10	17	69	184	185	105	108	104	115	113	207	180	201	224	158	98	57	37	13	9
5	3	1	4	14	30	107	199	135	114	108	136	133	126	252	222	215	184	188	82	63	37	12	8

Date: **Tuesday, September 14, 2021** Total Daily Volume: **4653** 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
8	10	3	5	20	43	108	291	328	229	208	243	246	252	336	457	470	442	371	250	160	107	43	23
2	4	0	0	1	7	17	48	65	67	45	50	63	69	71	111	126	111	102	81	42	30	11	9
2	2	1	0	2	7	21	74	74	54	45	68	49	56	72	95	124	123	75	62	45	30	15	3
2	2	1	2	8	11	26	85	106	52	49	54	62	60	78	95	109	105	93	57	36	24	10	5
2	2	1	3	9	18	44	84	83	56	69	71	72	67	115	156	111	103	101	50	37	23	7	6

Date: **Tuesday, September 14, 2021** Total Daily Volume: **4392** 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
4	3	2	3	12	33	151	402	431	233	185	226	219	217	388	323	368	393	309	244	128	79	27	12
1	0	0	0	2	8	22	86	163	55	39	63	44	46	58	111	90	90	84	105	49	28	12	4
0	2	0	0	3	7	23	102	137	67	48	48	61	59	64	61	82	103	73	66	32	24	7	2
0	0	2	2	2	6	43	99	79	53	59	50	53	53	129	85	92	119	65	41	21	13	3	4
3	1	0	1	5	12	63	115	52	58	39	65	61	59	137	66	104	81	87	32	26	14	5	2

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

Average Daily Traffic

Location: **Spring Canyon Rd, between Elderwood Ln and Riesling Dr**

Date: **Wednesday, September 15, 2021** Total Daily Volume: **8647** 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
16	8	2	2	29	85	224	653	738	420	376	431	446	485	645	760	750	836	629	541	282	151	86	52
7	3	1	0	2	10	37	135	241	105	89	111	111	117	124	177	202	183	152	209	71	57	25	17
2	1	0	0	5	14	36	166	190	106	103	103	100	125	126	185	188	254	153	131	76	47	16	15
5	1	1	0	7	29	56	190	197	105	85	110	109	105	179	178	183	206	177	121	73	30	24	12
2	3	0	2	15	32	95	162	110	104	99	107	126	138	216	220	177	193	147	80	62	17	21	8

Date: **Wednesday, September 15, 2021** Total Daily Volume: **4379** 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
7	5	0	0	20	36	89	266	297	224	189	216	217	264	307	433	393	463	339	281	167	76	57	33
3	2	0	0	1	3	16	44	72	56	49	57	58	69	74	75	115	102	98	100	46	31	18	12
0	1	0	0	3	6	14	77	65	53	54	50	52	77	72	109	95	151	77	71	48	21	10	10
3	0	0	0	5	14	20	86	101	61	36	57	46	55	74	110	88	106	86	65	37	15	12	6
1	2	0	0	11	13	39	59	59	54	50	52	61	63	87	139	95	104	78	45	36	9	17	5

Date: **Wednesday, September 15, 2021** Total Daily Volume: **4268** 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
9	3	2	2	9	49	135	387	441	196	187	215	229	221	338	327	357	373	290	260	115	75	29	19
4	1	1	0	1	7	21	91	169	49	40	54	53	48	50	102	87	81	54	109	25	26	7	5
2	0	0	0	2	8	22	89	125	53	49	53	48	48	54	76	93	103	76	60	28	26	6	5
2	1	1	0	2	15	36	104	96	44	49	53	63	50	105	68	95	100	91	56	36	15	12	6
1	1	0	2	4	19	56	103	51	50	49	55	65	75	129	81	82	89	69	35	26	8	4	3

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

Average Daily Traffic

Location: **Pomerado Rd, West of Stonebridge Pkwy**

Date: **Tuesday, September 14, 2021** Total Daily Volume: **21781** 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
80	53	53	112	308	561	946	1475	1593	1168	1044	1143	1143	1224	1631	1698	2032	1872	1411	953	601	387	205	88
18	17	6	26	31	81	161	292	423	296	236	270	258	269	324	400	507	438	366	310	186	118	68	23
13	10	9	14	56	120	194	353	430	301	269	289	252	287	358	402	479	515	321	235	152	98	49	21
33	10	13	26	95	155	254	402	369	306	275	290	305	348	470	459	504	495	334	223	137	96	51	30
16	16	25	46	126	205	337	428	371	265	264	294	328	320	479	437	542	424	390	185	126	75	37	14

Date: **Tuesday, September 14, 2021** Total Daily Volume: **12025** 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
34	35	41	89	247	400	508	748	894	664	568	621	623	622	805	931	1163	997	781	522	329	219	131	53
11	8	4	22	24	56	98	131	207	158	120	123	147	147	170	216	300	223	202	158	100	64	38	15
7	8	8	10	48	80	109	183	218	177	144	169	123	140	218	218	291	276	171	136	83	58	30	10
7	6	9	19	74	114	133	207	224	167	142	154	165	168	197	234	292	279	192	124	84	50	37	19
9	13	20	38	101	150	168	227	245	162	162	175	188	167	220	263	280	219	216	104	62	47	26	9

Date: **Tuesday, September 14, 2021** Total Daily Volume: **9756** 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
46	18	12	23	61	161	438	727	699	504	476	522	520	602	826	767	869	875	630	431	272	168	74	35
7	9	2	4	7	25	63	161	216	138	116	147	111	122	154	184	207	215	164	152	86	54	30	8
6	2	1	4	8	40	85	170	212	124	125	120	129	147	140	184	188	239	150	99	69	40	19	11
26	4	4	7	21	41	121	195	145	139	133	136	140	180	273	225	212	216	142	99	53	46	14	11
7	3	5	8	25	55	169	201	126	103	102	119	140	153	259	174	262	205	174	81	64	28	11	5

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

Average Daily Traffic

Location: **Pomerado Rd, West of Stonebridge Pkwy**

Date: **Wednesday, September 15, 2021** Total Daily Volume: **21744** 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
98	46	58	104	319	563	894	1433	1599	1139	1087	1058	1127	1287	1546	1740	1869	1955	1389	1100	604	404	204	121
25	14	8	26	30	80	160	282	471	287	253	245	262	310	324	378	478	501	372	352	148	119	66	35
21	11	13	14	58	123	183	323	409	293	281	266	274	313	360	440	483	523	338	328	150	118	44	25
41	10	14	27	102	147	252	412	398	291	250	267	302	325	411	439	482	497	355	231	160	81	49	27
11	11	23	37	129	213	299	416	321	268	303	280	289	339	451	483	426	434	324	189	146	86	45	34

Date: **Wednesday, September 15, 2021** Total Daily Volume: **11765** 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
38	21	46	86	257	388	489	726	843	662	580	558	620	665	743	935	1009	1058	705	594	334	212	122	74
16	6	5	23	24	49	96	121	231	167	146	133	135	174	180	191	264	257	195	177	78	61	38	21
7	6	11	13	43	80	99	163	183	167	141	142	141	171	202	250	274	300	181	190	98	57	29	19
11	3	13	21	80	104	130	223	235	173	140	141	179	160	178	239	248	257	167	125	86	34	30	13
4	6	17	29	110	155	164	219	194	155	153	142	165	160	183	255	223	244	162	102	72	60	25	21

Date: **Wednesday, September 15, 2021** Total Daily Volume: **9979** 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
60	25	12	18	62	175	405	707	756	477	507	500	507	622	803	805	860	897	684	506	270	192	82	47
9	8	3	3	6	31	64	161	240	120	107	112	127	136	144	187	214	244	177	175	70	58	28	14
14	5	2	1	15	43	84	160	226	126	140	124	133	142	158	190	209	223	157	138	52	61	15	6
30	7	1	6	22	43	122	189	163	118	110	126	123	165	233	200	234	240	188	106	74	47	19	14
7	5	6	8	19	58	135	197	127	113	150	138	124	179	268	228	203	190	162	87	74	26	20	13

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Year 2020 Traffic Counts

Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#07	File Name:	ITM-20-021-07
Intersection:	Scripps Poway Parkway & Spring Canyon Road & Ivy Hill Drive	Project:	LLG Ref. 3-20-3272
Date of Count:	Thursday August 6, 2020		Scripps Cypress Point

AM	Ivy Hill Drive Southbound			Scripps Poway Parkway Westbound			Spring Canyon Road Northbound			Scripps Poway Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	0	6	16	164	0	30	0	5	1	189	15	426
7:15	0	0	6	11	166	0	56	3	11	3	200	14	470
7:30	1	4	7	23	206	1	53	0	5	4	182	22	508
7:45	3	3	4	19	219	1	48	3	8	3	229	22	562
8:00	0	0	9	27	179	1	49	5	4	5	178	36	493
8:15	0	1	10	27	200	0	44	0	8	3	141	21	455
8:30	1	5	15	12	190	0	54	1	10	4	140	32	464
8:45	0	4	8	12	172	1	55	2	21	5	140	27	447
Total	5	17	65	147	1496	4	389	14	72	28	1399	189	3825
Approach%	5.7	19.5	74.7	8.9	90.8	0.2	81.9	2.9	15.2	1.7	86.6	11.7	
Total%	0.1	0.4	1.7	3.8	39.1	0.1	10.2	0.4	1.9	0.7	36.6	4.9	

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

Volume	4	7	26	80	770	3	206	11	28	15	789	94	2,033
Approach%	10.8	18.9	70.3	9.4	90.3	0.4	84.1	4.5	11.4	1.7	87.9	10.5	
Total%	0.2	0.3	1.3	3.9	37.9	0.1	10.1	0.5	1.4	0.7	38.8	4.6	
PHF			0.77			0.89			0.88			0.88	0.92

PM	Ivy Hill Drive Southbound			Scripps Poway Parkway Westbound			Spring Canyon Road Northbound			Scripps Poway Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	0	3	8	24	252	1	42	3	20	14	192	31	590
16:15	0	4	5	34	246	1	49	2	27	12	217	34	631
16:30	0	4	7	40	263	0	60	3	21	25	199	22	644
16:45	0	5	7	32	245	0	40	3	27	10	204	40	613
17:00	1	2	10	40	249	1	45	6	32	10	214	49	659
17:15	1	5	6	54	332	0	48	5	23	17	229	30	750
17:30	1	5	4	29	242	1	46	0	25	11	167	27	558
17:45	1	1	4	20	223	2	33	2	19	14	184	45	548
Total	4	29	51	273	2052	6	363	24	194	113	1606	278	4993
Approach%	4.8	34.5	60.7	11.7	88.0	0.3	62.5	4.1	33.4	5.7	80.4	13.9	
Total%	0.1	0.6	1.0	5.5	41.1	0.1	7.3	0.5	3.9	2.3	32.2	5.6	

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

Volume	2	16	30	166	1,089	1	193	17	103	62	846	141	2,666
Approach%	4.2	33.3	62.5	13.2	86.7	0.1	61.7	5.4	32.9	5.9	80.6	13.4	
Total%	0.1	0.6	1.1	6.2	40.8	0.0	7.2	0.6	3.9	2.3	31.7	5.3	
PHF			0.92			0.81			0.93			0.95	0.91

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

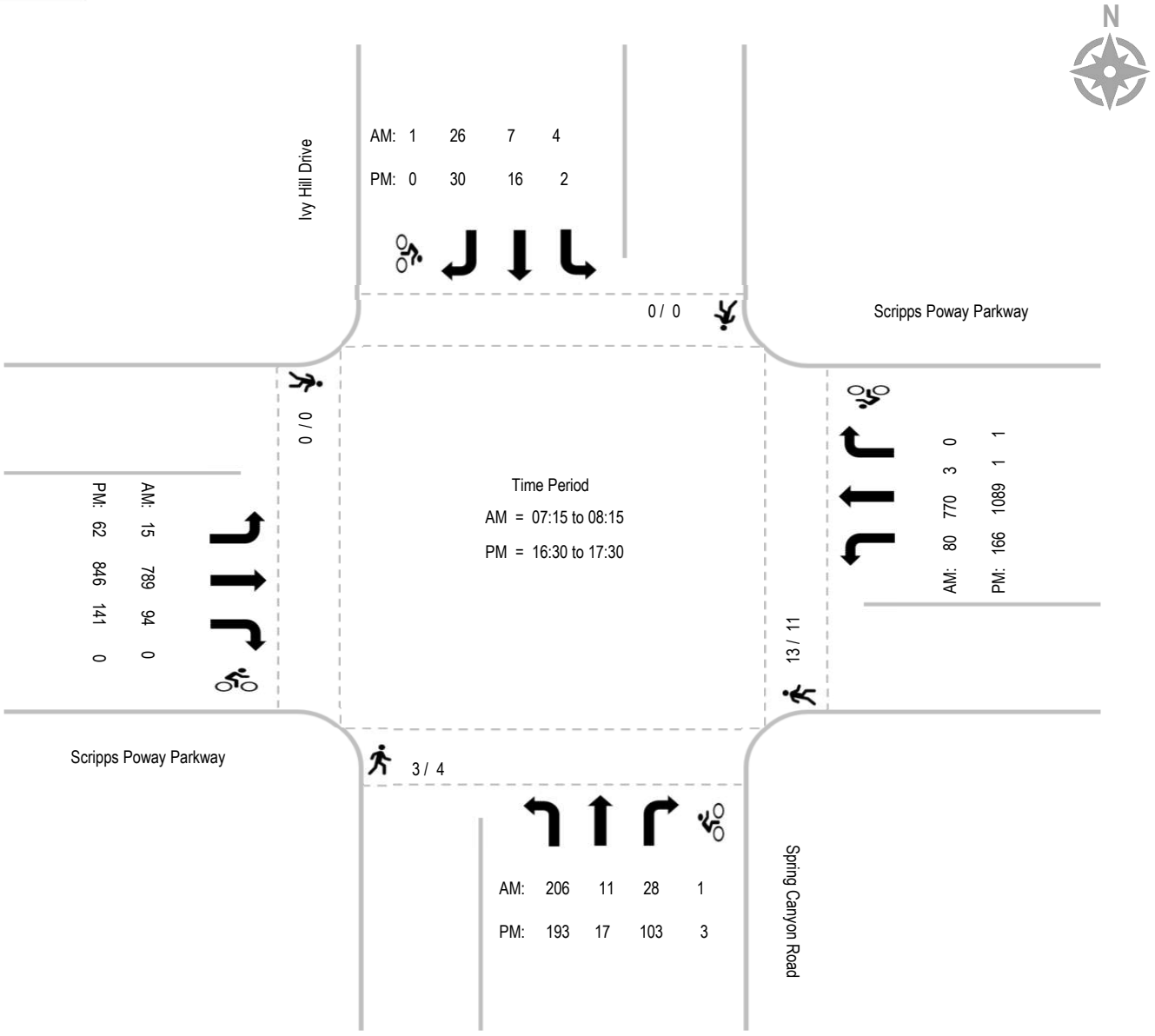
Location:	#07	File Name:	ITM-20-021-07
Intersection:	Scripps Poway Parkway & Spring Canyon Road & Ivy Hill Drive	Project:	LLG Ref. 3-20-3272
Date of Count:	Thursday August 6, 2020		Scripps Cypress Point

AM	Ivy Hill Drive Southbound				Scripps Poway Parkway Westbound				Spring Canyon Road Northbound				Scripps Poway Parkway 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	0	0	0	0	1	0
7:15	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	2	1
7:30	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	2	1
7:45	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0
8:00	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	3	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	3	0	0	0	0	0	0	0	0	0	0	0	3	0
8:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
Ped Total	0				13				3				0				16	
Bike Total		0	0	1		0	0	0		0	1	0		0	0	0		2

PM	Ivy Hill Drive Southbound				Scripps Poway Parkway Westbound				Spring Canyon Road Northbound				Scripps Poway Parkway 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	1	0	1	0	0	0	0	0	0	0	1	1
16:15	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	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	3	0	0	0	0	0	3
17:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	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	1	0	0	0	1	0	0	0	0	0	0	0	2	0
17:45	0	0	0	0	7	0	0	0	1	0	0	0	0	0	0	0	8	0
Ped Total	0				11				4				0				15	
Bike Total		0	0	0		0	1	0		0	0	3		0	0	0		4

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#07	File Name:	ITM-20-021-07
	Intersection:	Scripps Poway Parkway & Spring Canyon Road & Ivy Hill Drive	Project:	LLG Ref. 3-20-3272
	Date of Count:	Thursday August 6, 2020		Scripps Cypress Point



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#01	File Name:	ITM-20-021-01
Intersection:	Cypress Canyon Road & Scripps Poway Parkway	Project:	LLG Ref. 3-20-3272
Date of Count:	Thursday August 6, 2020		Scripps Cypress Point

AM	Cypress Canyon Road Southbound			Scripps Poway Parkway Westbound			Cypress Canyon Road Northbound			Scripps Poway Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	1	1	0	156	0	12	0	1	0	178	5	354
7:15	1	2	0	0	159	0	12	0	2	0	197	14	387
7:30	2	0	0	0	200	0	19	3	3	0	183	5	415
7:45	0	2	0	0	198	1	14	0	3	0	226	14	458
8:00	3	1	1	1	186	0	15	0	3	0	164	8	382
8:15	3	0	0	1	173	3	22	0	3	2	137	11	355
8:30	2	1	1	1	168	1	16	1	3	0	153	10	357
8:45	3	0	0	4	147	2	12	1	4	2	160	7	342
Total	14	7	3	7	1387	7	122	5	22	4	1398	74	3050
Approach%	58.3	29.2	12.5	0.5	99.0	0.5	81.9	3.4	14.8	0.3	94.7	5.0	
Total%	0.5	0.2	0.1	0.2	45.5	0.2	4.0	0.2	0.7	0.1	45.8	2.4	

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

Volume	6	5	1	1	743	1	60	3	11	-	770	41	1,642
Approach%	50.0	41.7	8.3	0.1	99.7	0.1	81.1	4.1	14.9	-	94.9	5.1	
Total%	0.4	0.3	0.1	0.1	45.2	0.1	3.7	0.2	0.7	-	46.9	2.5	
PHF			0.60			0.93			0.74			0.84	0.92

PM	Cypress Canyon Road Southbound			Scripps Poway Parkway Westbound			Cypress Canyon Road Northbound			Scripps Poway Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	6	3	0	7	273	1	17	0	7	0	181	13	508
16:15	3	0	0	3	232	5	16	0	4	3	235	19	520
16:30	3	1	1	7	289	3	9	1	1	4	211	19	549
16:45	5	1	1	1	246	7	10	3	3	3	213	14	507
17:00	4	0	1	6	284	3	17	0	11	2	195	21	544
17:15	0	1	0	6	306	2	16	0	6	3	205	22	567
17:30	2	1	0	6	315	2	21	1	4	4	178	34	568
17:45	2	0	1	2	256	2	20	2	5	2	160	34	486
Total	25	7	4	38	2201	25	126	7	41	21	1578	176	4249
Approach%	69.4	19.4	11.1	1.7	97.2	1.1	72.4	4.0	23.6	1.2	88.9	9.9	
Total%	0.6	0.2	0.1	0.9	51.8	0.6	3.0	0.2	1.0	0.5	37.1	4.1	

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

Volume	11	3	2	19	1,151	14	64	4	24	12	791	91	2,186
Approach%	68.8	18.8	12.5	1.6	97.2	1.2	69.6	4.3	26.1	1.3	88.5	10.2	
Total%	0.5	0.1	0.1	0.9	52.7	0.6	2.9	0.2	1.1	0.5	36.2	4.2	
PHF			0.57			0.92			0.82			0.97	0.91

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

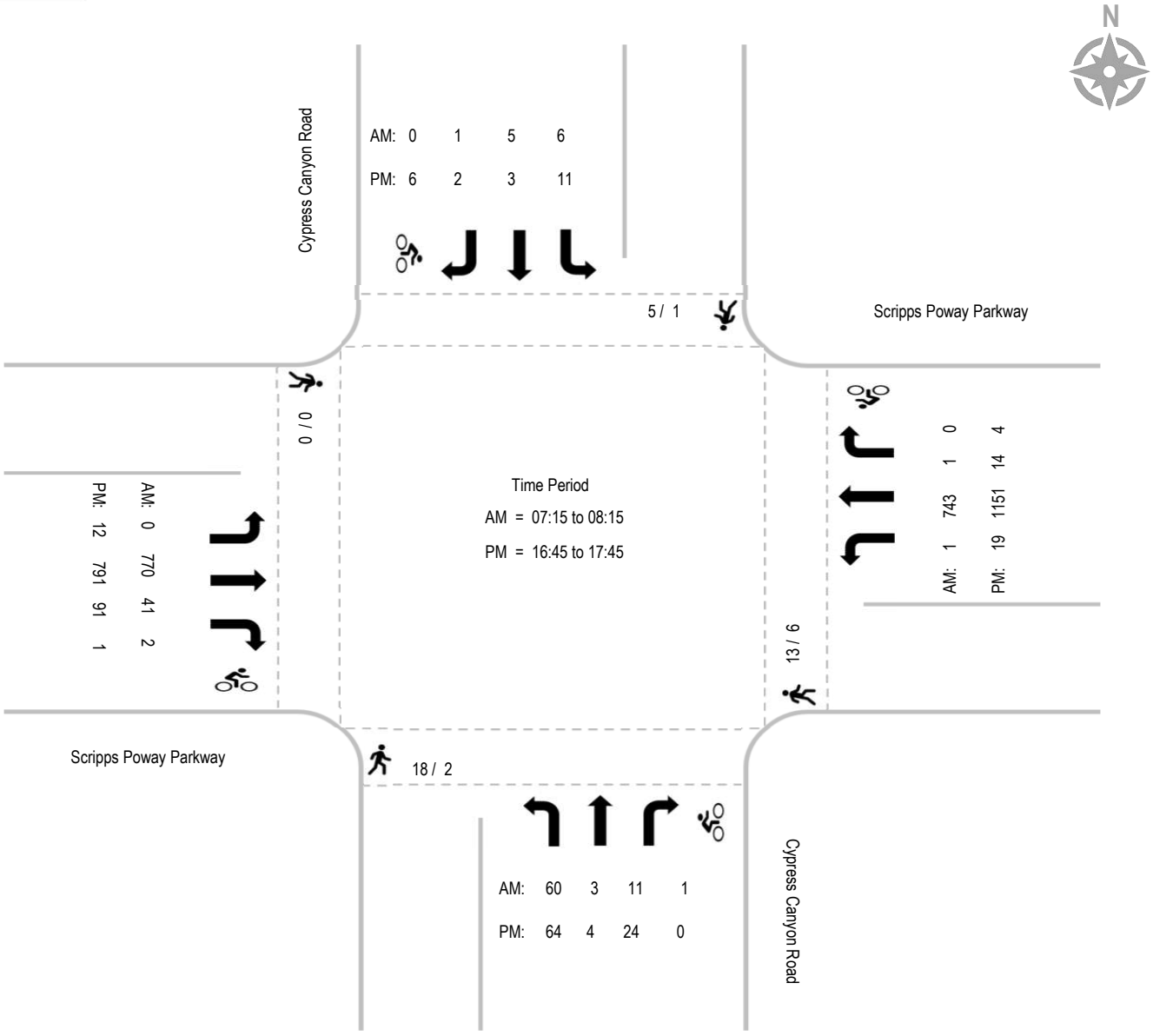
Location:	#01	File Name:	ITM-20-021-01
Intersection:	Cypress Canyon Road & Scripps Poway Parkway	Project:	LLG Ref. 3-20-3272
Date of Count:	Thursday August 6, 2020		Scripps Cypress Point

AM	Cypress Canyon Road Southbound				Scripps Poway Parkway Westbound				Cypress Canyon Road Northbound				Scripps Poway Parkway 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	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3	0
7:15	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	1	2
7:30	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	3	0
7:45	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	6	0
8:00	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	3	0
8:15	0	0	0	0	1	0	0	0	7	0	0	0	0	0	0	0	8	0
8:30	1	0	0	0	3	0	0	0	5	0	0	0	0	0	0	0	9	0
8:45	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	3	1
Ped Total	5				13				18				0				36	
Bike Total		0	0	0		0	0	0		0	1	0		0	1	1		3

PM	Cypress Canyon Road Southbound				Scripps Poway Parkway Westbound				Cypress Canyon Road Northbound				Scripps Poway Parkway 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	0	0	0	1	1	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	2	0	0	0	0	0	0	0	0	0	0	0	2	0
16:45	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3	0
17:00	0	0	2	1	0	0	0	0	1	0	0	0	0	0	0	0	1	3
17:15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
17:30	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	1	2
17:45	0	0	0	3	0	2	0	0	0	0	0	0	0	0	0	0	0	5
Ped Total	1				6				2				0				9	
Bike Total		0	2	4		3	0	1		0	0	0		0	0	1		11

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#01	File Name:	ITM-20-021-01
	Intersection:	Cypress Canyon Road & Scripps Poway Parkway	Project:	LLG Ref. 3-20-3272
	Date of Count:	Thursday August 6, 2020		Scripps Cypress Point



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#02	File Name:	ITM-20-021-02
Intersection:	Scripps Poway Parkway & Springbrook Drive/Angelique Street	Project:	LLG Ref. 3-20-3272
Date of Count:	Thursday August 6, 2020		Scripps Cypress Point

AM	Springbrook Drive Southbound			Scripps Poway Parkway Westbound			Angelique Street Northbound			Scripps Poway Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	21	2	10	3	146	4	3	1	6	2	172	4	374
7:15	25	4	9	4	142	4	5	6	2	0	198	3	402
7:30	21	1	12	4	185	6	9	5	0	2	163	6	414
7:45	27	4	19	3	177	11	4	3	7	7	231	4	497
8:00	21	4	24	3	154	9	4	6	4	5	165	1	400
8:15	26	3	13	2	161	5	5	6	4	9	123	10	367
8:30	21	4	5	3	153	6	14	4	10	6	140	7	373
8:45	34	2	13	3	133	12	10	4	4	6	160	6	387
Total	196	24	105	25	1251	57	54	35	37	37	1352	41	3214
Approach%	60.3	7.4	32.3	1.9	93.8	4.3	42.9	27.8	29.4	2.6	94.5	2.9	
Total%	6.1	0.7	3.3	0.8	38.9	1.8	1.7	1.1	1.2	1.2	42.1	1.3	

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

Volume	94	13	64	14	658	30	22	20	13	14	757	14	1,713
Approach%	55.0	7.6	37.4	2.0	93.7	4.3	40.0	36.4	23.6	1.8	96.4	1.8	
Total%	5.5	0.8	3.7	0.8	38.4	1.8	1.3	1.2	0.8	0.8	44.2	0.8	
PHF			0.86			0.90			0.98			0.81	0.92

PM	Springbrook Drive Southbound			Scripps Poway Parkway Westbound			Angelique Street Northbound			Scripps Poway Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	28	8	12	9	269	32	10	4	5	16	173	8	574
16:15	24	5	11	10	223	28	7	6	10	24	191	5	544
16:30	29	8	12	13	277	35	5	3	10	15	209	7	623
16:45	22	6	8	14	238	32	7	5	9	12	172	3	528
17:00	27	5	10	11	273	40	7	2	7	14	163	15	574
17:15	29	9	12	13	288	41	9	8	4	27	187	10	637
17:30	29	9	6	11	236	33	9	12	6	23	154	12	540
17:45	20	3	9	6	207	25	7	5	3	17	144	8	454
Total	208	53	80	87	2011	266	61	45	54	148	1393	68	4474
Approach%	61.0	15.5	23.5	3.7	85.1	11.3	38.1	28.1	33.8	9.2	86.6	4.2	
Total%	4.6	1.2	1.8	1.9	44.9	5.9	1.4	1.0	1.2	3.3	31.1	1.5	

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

Volume	107	28	42	51	1,076	148	28	18	30	68	731	35	2,362
Approach%	60.5	15.8	23.7	4.0	84.4	11.6	36.8	23.7	39.5	8.2	87.6	4.2	
Total%	4.5	1.2	1.8	2.2	45.6	6.3	1.2	0.8	1.3	2.9	30.9	1.5	
PHF			0.89			0.93			0.90			0.90	0.91

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

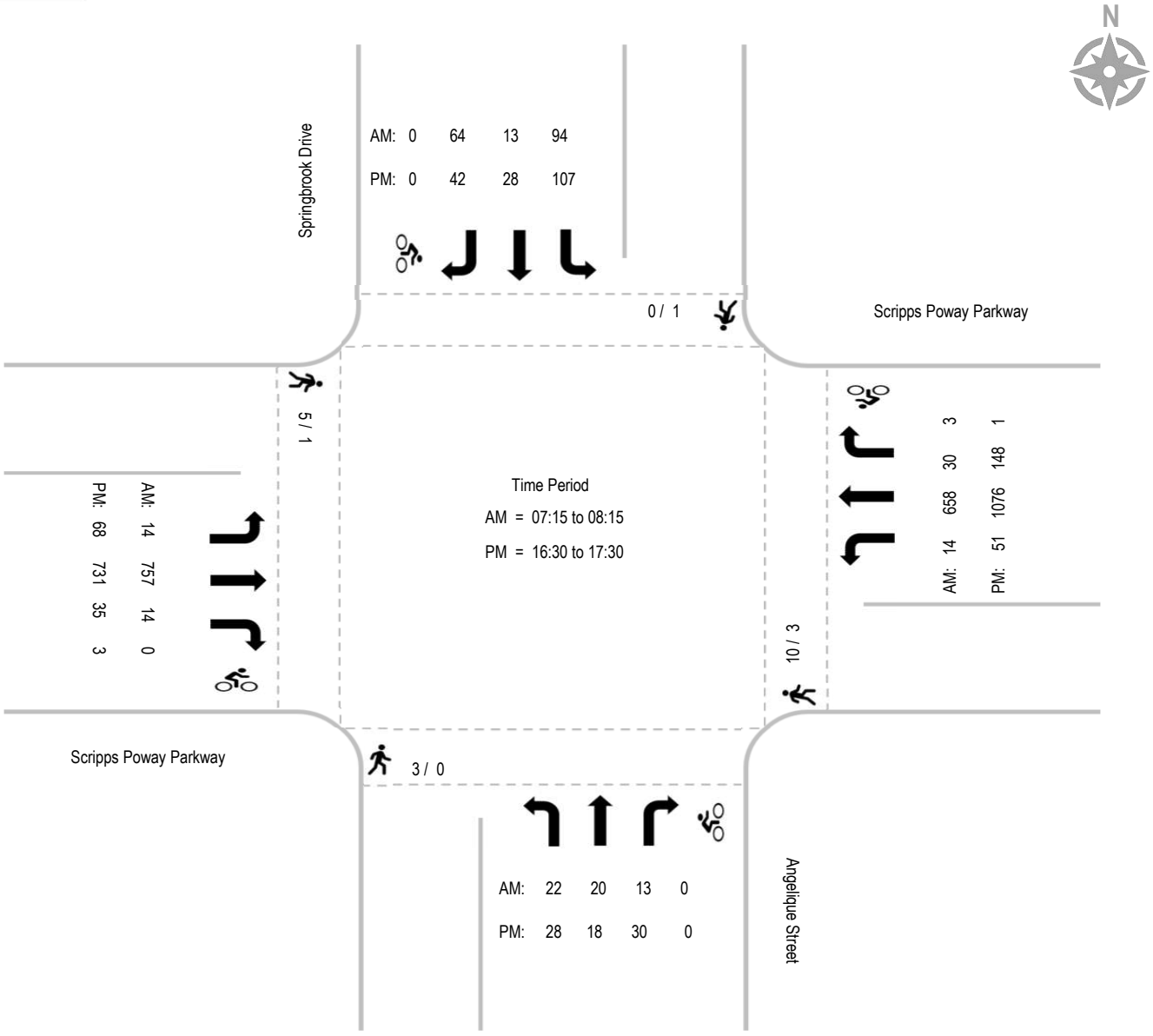
Location:	#02	File Name:	ITM-20-021-02
Intersection:	Scripps Poway Parkway & Springbrook Drive/Angelique Street	Project:	LLG Ref. 3-20-3272
Date of Count:	Thursday August 6, 2020		Scripps Cypress Point

AM	Springbrook Drive Southbound				Scripps Poway Parkway Westbound				Angelique Street Northbound				Scripps Poway Parkway 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	2	0	0	0	0	0	0	0	1	0	0	0	3	0
7:15	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0
7:30	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0
7:45	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	3	0
8:00	0	0	0	0	1	0	0	0	2	0	0	0	1	0	0	0	4	0
8:15	0	0	0	0	1	0	0	3	0	0	0	0	0	0	0	0	1	3
8:30	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
Ped Total	0				10				3				5				18	
Bike Total		0	0	0		0	0	3		0	0	0		0	0	0		3

PM	Springbrook Drive Southbound				Scripps Poway Parkway Westbound				Angelique Street Northbound				Scripps Poway Parkway 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	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0
16:45	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2	0
17:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0	1	3
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	1	0	0	0	0	0	0	0	0	0	1
Ped Total	1				3				0				1				5	
Bike Total		0	0	0		0	0	1		0	0	0		0	3	0		4

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#02	File Name:	ITM-20-021-02
	Intersection:	Scripps Poway Parkway & Springbrook Drive/Angelique Street	Project:	LLG Ref. 3-20-3272
	Date of Count:	Thursday August 6, 2020		Scripps Cypress Point



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#03	File Name:	ITM-20-021-03
Intersection:	Angelique Street & Cypress Canyon Park Drive	Project:	LLG Ref. 3-20-3272
Date of Count:	Thursday August 6, 2020		Scripps Cypress Point

AM	Angelique Street Southbound			Cypress Canyon Park Dr Westbound			Angelique Street Northbound			- Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	1	4	0	2	0	2	0	2	0	0	0	0	11
7:15	1	2	0	1	0	2	0	1	0	0	0	0	7
7:30	0	1	0	4	0	2	0	2	3	0	0	0	12
7:45	2	3	0	4	0	3	0	4	0	0	0	0	16
8:00	3	4	0	2	0	4	0	7	2	0	0	0	22
8:15	2	3	0	1	0	3	0	9	0	0	0	0	18
8:30	5	3	0	2	0	3	0	7	4	0	0	0	24
8:45	1	4	0	0	0	2	0	3	0	0	0	0	10
Total	15	24	0	16	0	21	0	35	9	0	0	0	120
Approach%	38.5	61.5	-	43.2	-	56.8	-	79.5	20.5	-	-	-	
Total%	12.5	20.0	-	13.3	-	17.5	-	29.2	7.5	-	-	-	

AM Intersection Peak Hour: **07:45 to 08:45**

Volume	12	13	-	9	-	13	-	27	6	-	-	-	80
Approach%	48.0	52.0	-	40.9	-	59.1	-	81.8	18.2	-	-	-	
Total%	15.0	16.3	-	11.3	-	16.3	-	33.8	7.5	-	-	-	
PHF			0.78			0.79			0.75			#DIV/0!	0.92

PM	Angelique Street Southbound			Cypress Canyon Park Dr Westbound			Angelique Street Northbound			- Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	2	6	0	2	0	6	0	7	5	0	0	0	28
16:15	4	5	0	1	0	4	0	7	2	0	0	0	23
16:30	3	6	0	2	0	3	0	7	3	0	0	0	24
16:45	7	11	0	5	0	5	0	6	2	0	0	0	36
17:00	9	6	0	1	0	5	0	6	5	0	0	0	32
17:15	5	12	0	7	0	9	0	7	5	0	0	0	45
17:30	7	8	0	1	0	5	0	11	4	0	0	0	36
17:45	3	9	0	2	0	1	0	4	4	0	0	0	23
Total	40	63	0	21	0	38	0	55	30	0	0	0	247
Approach%	38.8	61.2	-	35.6	-	64.4	-	64.7	35.3	-	-	-	
Total%	16.2	25.5	-	8.5	-	15.4	-	22.3	12.1	-	-	-	

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

Volume	28	37	-	14	-	24	-	30	16	-	-	-	149
Approach%	43.1	56.9	-	36.8	-	63.2	-	65.2	34.8	-	-	-	
Total%	18.8	24.8	-	9.4	-	16.1	-	20.1	10.7	-	-	-	
PHF			0.90			0.59			0.77			#DIV/0!	0.91

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

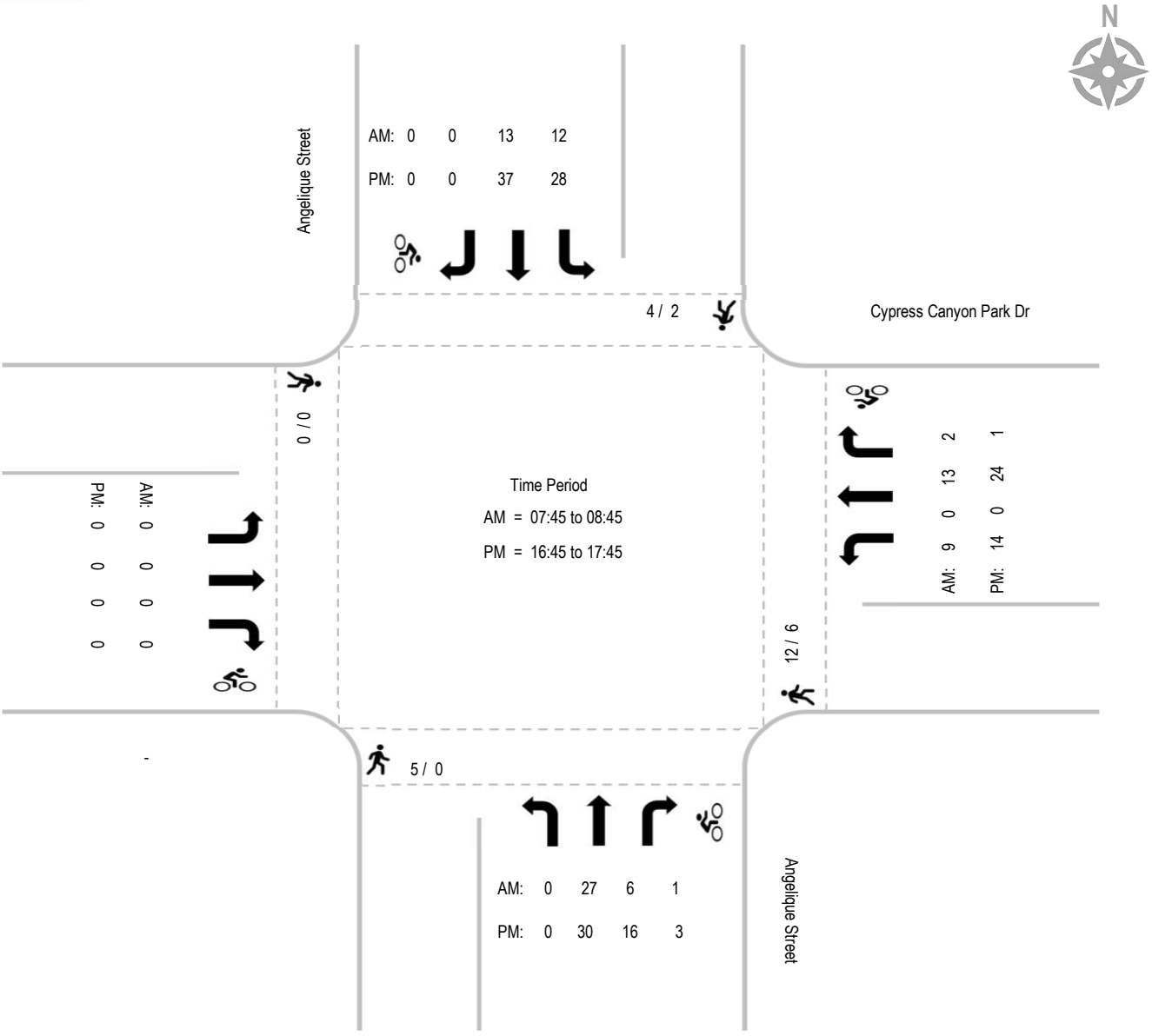
Location:	#03	File Name:	ITM-20-021-03
Intersection:	Angelique Street & Cypress Canyon Park Drive	Project:	LLG Ref. 3-20-3272
Date of Count:	Thursday August 6, 2020		Scripps Cypress Point

AM	Angelique Street Southbound				Cypress Canyon Park Dr Westbound				Angelique Street 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	2	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	6	0
7:15	0	0	0	0	4	0	0	0	1	0	0	0	0	0	0	0	5	0
7:30	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0
7:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
8:00	0	0	0	0	2	2	0	0	1	0	0	1	0	0	0	0	3	3
8:15	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0
8:30	0	0	0	0	1	0	0	0	0	0	0	0	0	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	4				12				5				0				21	
Bike Total		0	0	0		2	0	0		0	0	1		0	0	0		3

PM	Angelique Street Southbound				Cypress Canyon Park Dr Westbound				Angelique Street 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	0	0	0	0	0	0	0
16:15	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
16:30	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	1	1
16:45	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	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	1	0	0	0	0	0	1
17:30	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	1
17:45	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0
Ped Total	2				6				0				0				8	
Bike Total		0	0	0		1	0	0		0	0	3		0	0	0		4

Intersection Turning Movement - Peak Hour Summary

Location:	#03	File Name:	ITM-20-021-03
Intersection:	Angelique Street & Cypress Canyon Park Drive	Project:	LLG Ref. 3-20-3272
Date of Count:	Thursday August 6, 2020		Scripps Cypress Point



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#04	File Name:	ITM-20-021-04
Intersection:	Cypress Canyon Park Road & Cypress Canyon Road	Project:	LLG Ref. 3-20-3272
Date of Count:	Thursday August 6, 2020		Scripps Cypress Point

AM	Cypress Canyon Park Dr Southbound			- Westbound			Cypress Canyon Park Dr Northbound			Cypress Canyon Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	9	0	0	0	0	1	3	0	0	0	1	14
7:15	0	11	1	0	0	0	1	6	0	0	0	2	21
7:30	0	9	0	0	0	0	1	3	0	0	0	2	15
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00	0	14	2	0	0	0	3	3	0	0	0	2	24
8:15	0	10	2	0	0	0	3	4	0	1	0	1	21
8:30	0	14	1	0	0	0	1	15	0	2	0	3	36
8:45	0	9	0	0	0	0	2	6	0	0	0	3	20
Total	0	76	6	0	0	0	12	40	0	3	0	14	151
Approach%	-	92.7	7.3	-	-	-	23.1	76.9	-	17.6	-	82.4	
Total%	-	50.3	4.0	-	-	-	7.9	26.5	-	2.0	-	9.3	

AM Intersection Peak Hour: **08:00 to 09:00**

Volume	-	47	5	-	-	-	9	28	-	3	-	9	101
Approach%	-	90.4	9.6	-	-	-	24.3	75.7	-	25.0	-	75.0	
Total%	-	46.5	5.0	-	-	-	8.9	27.7	-	3.0	-	8.9	
PHF			0.81			#DIV/0!			0.58			0.60	0.92

PM	Cypress Canyon Park Dr Southbound			- Westbound			Cypress Canyon Park Dr Northbound			Cypress Canyon Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	0	11	1	0	0	0	1	12	0	1	0	5	31
16:15	0	10	0	0	0	0	4	16	0	0	0	1	31
16:30	0	11	2	0	0	0	5	12	0	0	0	3	33
16:45	0	10	2	0	0	0	8	20	0	3	0	6	49
17:00	0	8	5	0	0	0	5	16	0	2	0	4	40
17:15	0	8	2	0	0	0	3	22	0	2	0	4	41
17:30	0	11	3	0	0	0	6	18	0	0	0	5	43
17:45	0	7	3	0	0	0	6	15	0	0	0	3	34
Total	0	76	18	0	0	0	38	131	0	8	0	31	302
Approach%	-	80.9	19.1	-	-	-	22.5	77.5	-	20.5	-	79.5	
Total%	-	25.2	6.0	-	-	-	12.6	43.4	-	2.6	-	10.3	

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

Volume	-	37	12	-	-	-	22	76	-	7	-	19	173
Approach%	-	75.5	24.5	-	-	-	22.4	77.6	-	26.9	-	73.1	
Total%	-	21.4	6.9	-	-	-	12.7	43.9	-	4.0	-	11.0	
PHF			0.88			#DIV/0!			0.88			0.72	0.91

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

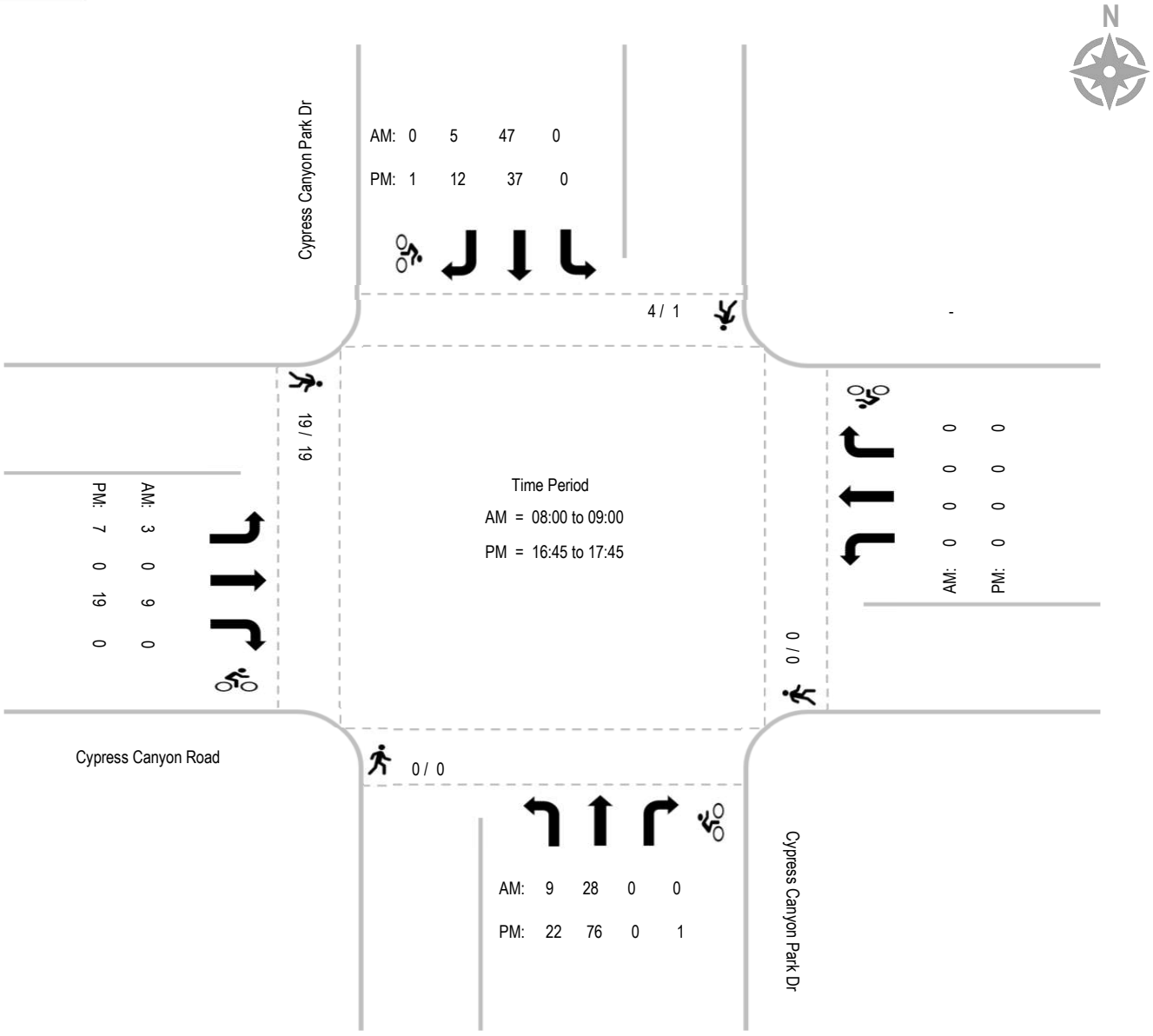
Location:	#04	File Name:	ITM-20-021-04
Intersection:	Cypress Canyon Park Road & Cypress Canyon Road	Project:	LLG Ref. 3-20-3272
Date of Count:	Thursday August 6, 2020		Scripps Cypress Point

AM	Cypress Canyon Park Dr Southbound				- Westbound				Cypress Canyon Park Dr Northbound				Cypress Canyon 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	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0
7:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0
7:30	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	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	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	7	0
Ped Total	4				0				0				19				23	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

PM	Cypress Canyon Park Dr Southbound				- Westbound				Cypress Canyon Park Dr Northbound				Cypress Canyon 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	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	1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	4	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	7	0	0	0	7	0
17:15	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	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	4	0	0	0	4	0
Ped Total	1				0				0				19				20	
Bike Total		1	0	0		0	0	0		0	1	0		0	0	0		2

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#04	File Name:	ITM-20-021-04
	Intersection:	Cypress Canyon Park Road & Cypress Canyon Road	Project:	LLG Ref. 3-20-3272
	Date of Count:	Thursday August 6, 2020		Scripps Cypress Point



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#06	File Name:	ITM-20-021-06
Intersection:	Pomerado Road & Cypress Cyn Pk Dr & Spring Canyon Rd	Project:	LLG Ref. 3-20-3272
Date of Count:	Thursday August 6, 2020		Scripps Cypress Point

AM	Cypress Canyon Park Dr Southbound			Pomerado Road Westbound			Pomerado Road Northbound			Spring Canyon Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	1	8	3	53	30	1	0	4	71	1	21	2	195
7:15	5	10	9	54	24	1	0	3	89	1	31	2	229
7:30	1	11	3	81	36	1	5	2	77	1	22	3	243
7:45	1	9	0	72	46	1	5	5	114	6	46	2	307
8:00	6	17	0	71	38	3	1	4	82	1	43	1	267
8:15	1	9	3	62	38	2	3	2	93	4	45	3	265
8:30	1	15	5	57	34	3	4	9	106	3	40	4	281
8:45	0	5	7	69	36	1	1	8	98	2	45	0	272
Total	16	84	30	519	282	13	19	37	730	19	293	17	2059
Approach%	12.3	64.6	23.1	63.8	34.6	1.6	2.4	4.7	92.9	5.8	89.1	5.2	
Total%	0.8	4.1	1.5	25.2	13.7	0.6	0.9	1.8	35.5	0.9	14.2	0.8	

AM Intersection Peak Hour: **07:45 to 08:45**

Volume	9	50	8	262	156	9	13	20	395	14	174	10	1,120
Approach%	13.4	74.6	11.9	61.4	36.5	2.1	3.0	4.7	92.3	7.1	87.9	5.1	
Total%	0.8	4.5	0.7	23.4	13.9	0.8	1.2	1.8	35.3	1.3	15.5	0.9	
PHF			0.73			0.90			0.86			0.92	0.92

PM	Cypress Canyon Park Dr Southbound			Pomerado Road Westbound			Pomerado Road Northbound			Spring Canyon Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	5	9	11	105	54	4	9	6	111	7	61	10	392
16:15	3	6	3	78	47	5	4	13	143	7	64	3	376
16:30	3	7	3	120	67	5	7	8	143	7	64	4	438
16:45	5	9	4	99	54	3	7	21	116	12	59	3	392
17:00	3	5	8	109	41	3	7	19	144	4	57	6	406
17:15	2	5	5	94	44	3	7	11	112	15	83	5	386
17:30	4	11	4	83	54	2	5	13	92	11	65	5	349
17:45	0	7	5	83	44	5	4	12	95	10	50	3	318
Total	25	59	43	771	405	30	50	103	956	73	503	39	3057
Approach%	19.7	46.5	33.9	63.9	33.6	2.5	4.5	9.3	86.2	11.9	81.8	6.3	
Total%	0.8	1.9	1.4	25.2	13.2	1.0	1.6	3.4	31.3	2.4	16.5	1.3	

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

Volume	13	26	20	422	206	14	28	59	515	38	263	18	1,622
Approach%	22.0	44.1	33.9	65.7	32.1	2.2	4.7	9.8	85.5	11.9	82.4	5.6	
Total%	0.8	1.6	1.2	26.0	12.7	0.9	1.7	3.6	31.8	2.3	16.2	1.1	
PHF			0.82			0.84			0.89			0.77	0.91

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

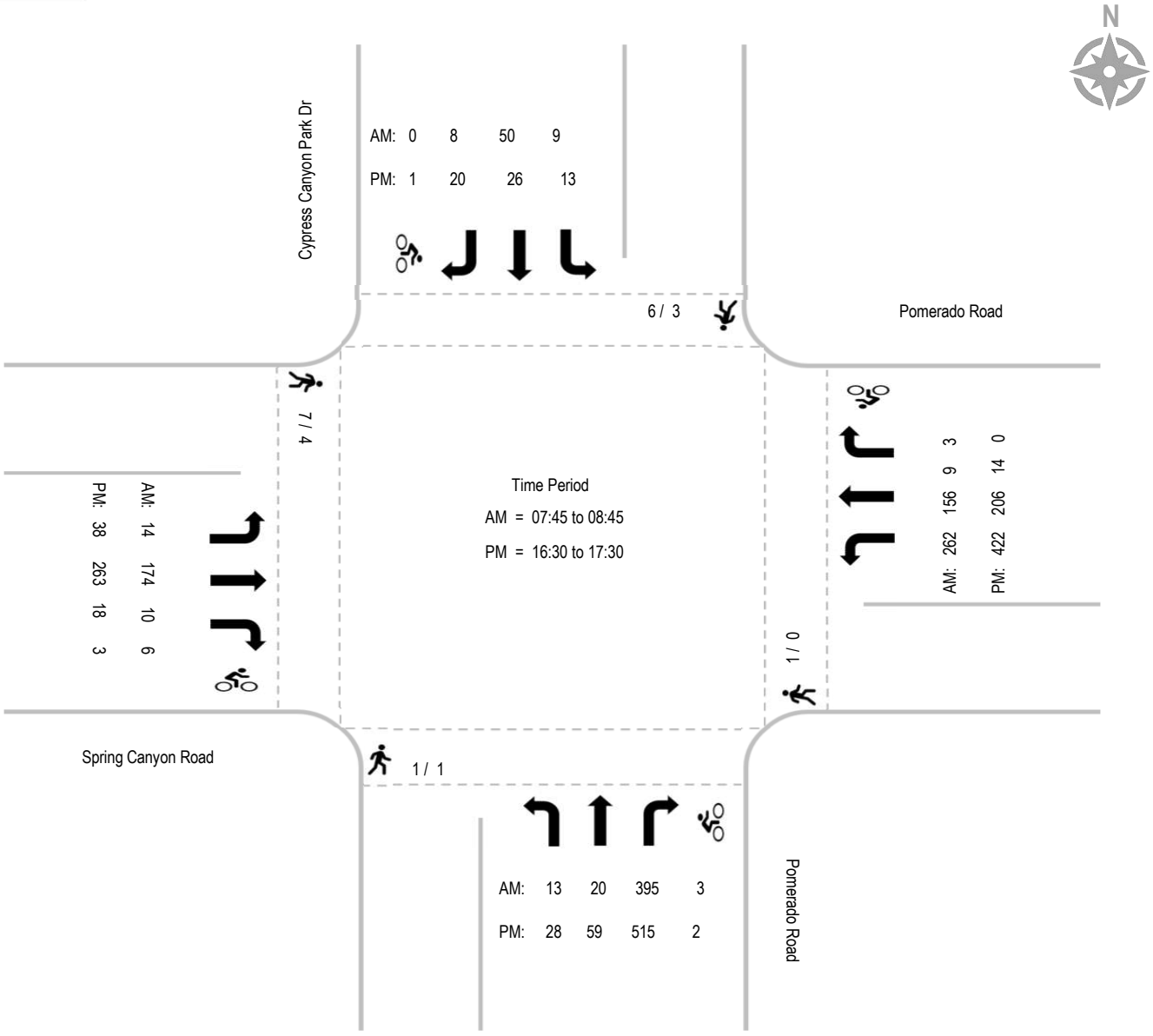
Location:	#06	File Name:	ITM-20-021-06
Intersection:	Pomerado Road & Cypress Cyn Pk Dr & Spring Canyon Rd	Project:	LLG Ref. 3-20-3272
Date of Count:	Thursday August 6, 2020		Scripps Cypress Point

AM	Cypress Canyon Park Dr Southbound				Pomerado Road Westbound				Pomerado Road Northbound				Spring Canyon 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	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	3	1
7:15	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2
7:30	0	0	0	0	0	0	0	0	0	2	0	0	0	0	4	0	0	6
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	1
8:15	1	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	5	1
8:30	1	0	0	0	0	0	0	0	1	0	0	0	3	0	0	0	5	0
8:45	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Ped Total	6				1				1				7				15	
Bike Total		0	0	0		2	1	0		2	0	1		0	5	1		12

PM	Cypress Canyon Park Dr Southbound				Pomerado Road Westbound				Pomerado Road Northbound				Spring Canyon 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	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0
16:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2
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	1	2	1
17:30	1	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
17:45	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	1
Ped Total	3				0				1				4				8	
Bike Total		1	0	0		0	0	0		0	0	2		0	1	2		6

Intersection Turning Movement - Peak Hour Summary

Location:	#06	File Name:	ITM-20-021-06
Intersection:	Pomerado Road & Cypress Cyn Pk Dr & Spring Canyon Rd	Project:	LLG Ref. 3-20-3272
Date of Count:	Thursday August 6, 2020		Scripps Cypress Point



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#05	File Name:	ITM-20-021-05
Intersection:	Stonebridge Parkway & Pomerado Road	Project:	LLG Ref. 3-20-3272
Date of Count:	Thursday August 6, 2020		Scripps Cypress Point

AM	- Southbound			Pomerado Road Westbound			Stonebridge Parkway Northbound			Pomerado Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	0	0	5	47	0	29	0	11	0	85	10	187
7:15	0	0	0	7	53	0	27	0	21	0	106	18	232
7:30	0	0	0	7	90	0	33	0	16	0	84	12	242
7:45	0	0	0	8	78	0	32	0	23	0	125	27	293
8:00	0	0	0	8	70	0	35	0	21	0	115	24	273
8:15	0	0	0	14	65	0	30	0	26	0	103	21	259
8:30	0	0	0	4	75	0	33	0	24	0	131	23	290
8:45	0	0	0	14	76	0	33	0	21	0	120	16	280
Total	0	0	0	67	554	0	252	0	163	0	869	151	2056
Approach%	-	-	-	10.8	89.2	-	60.7	-	39.3	-	85.2	14.8	
Total%	-	-	-	3.3	26.9	-	12.3	-	7.9	-	42.3	7.3	

AM Intersection Peak Hour: **07:45 to 08:45**

Volume	-	-	-	34	288	-	130	-	94	-	474	95	1,115
Approach%	-	-	-	10.6	89.4	-	58.0	-	42.0	-	83.3	16.7	
Total%	-	-	-	3.0	25.8	-	11.7	-	8.4	-	42.5	8.5	
PHF			#DIV/0!			0.94			0.98			0.92	0.92

PM	- Southbound			Pomerado Road Westbound			Stonebridge Parkway Northbound			Pomerado Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	0	0	0	22	130	0	20	0	23	0	146	34	375
16:15	0	0	0	20	125	0	23	0	23	0	174	31	396
16:30	0	0	0	29	157	0	36	0	22	0	154	49	447
16:45	0	0	0	28	131	0	27	0	26	0	138	42	392
17:00	0	0	0	28	120	0	33	0	29	0	152	46	408
17:15	0	0	0	20	106	0	26	0	20	0	143	50	365
17:30	0	0	0	34	101	0	30	0	30	0	104	51	350
17:45	0	0	0	28	86	0	28	0	29	0	99	40	310
Total	0	0	0	209	956	0	223	0	202	0	1110	343	3043
Approach%	-	-	-	17.9	82.1	-	52.5	-	47.5	-	76.4	23.6	
Total%	-	-	-	6.9	31.4	-	7.3	-	6.6	-	36.5	11.3	

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

Volume	-	-	-	105	533	-	119	-	100	-	618	168	1,643
Approach%	-	-	-	16.5	83.5	-	54.3	-	45.7	-	78.6	21.4	
Total%	-	-	-	6.4	32.4	-	7.2	-	6.1	-	37.6	10.2	
PHF			#DIV/0!			0.86			0.88			0.96	0.91

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

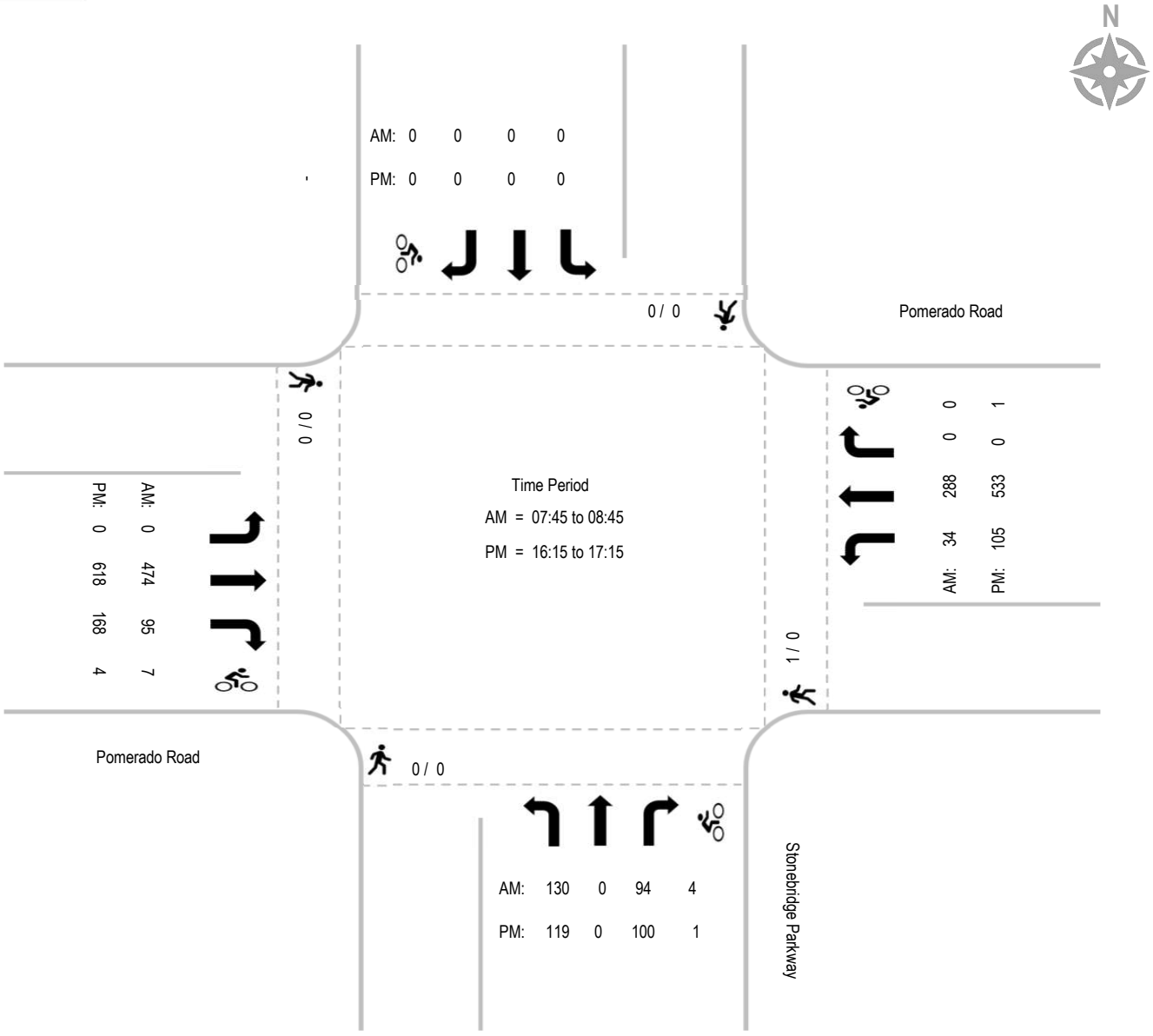
Location:	#05	File Name:	ITM-20-021-05
Intersection:	Stonebridge Parkway & Pomerado Road	Project:	LLG Ref. 3-20-3272
Date of Count:	Thursday August 6, 2020		Scripps Cypress Point

AM	- Southbound				Pomerado Road Westbound				Stonebridge Parkway Northbound				Pomerado 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	0	0	1	0	0	0	1	1	0	3
7:30	0	0	0	0	1	0	0	0	0	0	0	0	0	0	4	0	1	4
7:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
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	1	0	0	1
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	2	0	0	0	0	0	0	2
Ped Total	0				1				0				0				1	
Bike Total		0	0	0		0	0	0		0	4	0		0	6	1		11

PM	- Southbound				Pomerado Road Westbound				Stonebridge Parkway Northbound				Pomerado 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	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
17:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
Ped Total	0				0				0				0				0	
Bike Total		0	0	0		0	1	0		0	0	1		0	1	3		6

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#05	File Name:	ITM-20-021-05
	Intersection:	Stonebridge Parkway & Pomerado Road	Project:	LLG Ref. 3-20-3272
	Date of Count:	Thursday August 6, 2020		Scripps Cypress Point



Linscott, Law & Greenspan, Engineers

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

Average Daily Traffic

Location: **Scripps Poway Parkway, West of Spring Canyon Road**

Date: **Thursday, August 13, 2020** Total Daily Volume: **33312** 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
371	199	137	232	698	1188	1533	1950	1772	1791	1895	1926	1995	2129	2601	2405	2447	2502	1788	1451	1014	613	407	268
75	48	32	32	86	166	308	409	434	433	482	406	507	503	579	591	622	665	495	442	295	189	138	78
81	58	42	54	118	276	376	476	419	415	464	505	473	533	543	575	618	651	470	360	244	178	111	75
151	54	28	77	241	335	428	510	451	467	470	518	514	558	736	611	575	615	427	344	245	133	90	74
64	39	35	69	253	411	421	555	468	476	479	497	501	535	743	628	632	571	396	305	230	113	68	41

Date: **Thursday, August 13, 2020** Total Daily Volume: **16340** 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
96	68	63	151	527	774	775	940	814	826	896	932	992	1008	1177	1075	1209	1199	910	720	534	325	186	143
28	9	11	22	68	104	164	203	192	185	242	190	252	227	273	253	299	308	248	209	147	93	59	37
21	28	14	28	89	169	154	239	182	186	229	251	233	258	265	276	295	301	228	169	138	84	61	48
24	12	15	49	182	215	233	215	204	231	219	247	264	259	302	262	293	311	221	166	123	81	32	35
23	19	23	52	188	286	224	283	236	224	206	244	243	264	337	284	322	279	213	176	126	67	34	23

Date: **Thursday, August 13, 2020** Total Daily Volume: **16972** 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
275	131	74	81	171	414	758	1010	958	965	999	994	1003	1121	1424	1330	1238	1303	878	731	480	288	221	125
47	39	21	10	18	62	144	206	242	248	240	216	255	276	306	338	323	357	247	233	148	96	79	41
60	30	28	26	29	107	222	237	237	229	235	254	240	275	278	299	323	350	242	191	106	94	50	27
127	42	13	28	59	120	195	295	247	236	251	271	250	299	434	349	282	304	206	178	122	52	58	39
41	20	12	17	65	125	197	272	232	252	273	253	258	271	406	344	310	292	183	129	104	46	34	18

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

Average Daily Traffic

Location: **Scripps Poway Parkway, between Spring Canyon Road and Cypress Canyon Road**

Date: **Thursday, August 6, 2020** Total Daily Volume: **30084** 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
305	159	143	205	685	1126	1520	1772	1608	1606	1656	1801	1947	1886	2407	2192	2174	2115	1515	1186	893	551	388	244
52	55	34	26	91	157	315	402	411	421	398	439	432	450	477	536	519	561	450	329	243	168	114	69
52	31	39	32	129	237	382	407	409	400	419	469	487	459	530	531	528	595	392	310	231	128	96	59
125	44	24	70	227	336	399	458	391	396	412	438	520	491	713	608	600	513	338	258	220	136	98	71
76	29	46	77	238	396	424	505	397	389	427	455	508	486	687	517	527	446	335	289	199	119	80	45

Date: **Thursday, August 6, 2020** Total Daily Volume: **14359** 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
64	46	79	137	519	704	833	885	726	772	763	822	892	908	968	1008	1005	959	721	564	425	263	170	126
19	14	16	12	72	94	189	200	183	191	160	200	193	227	217	249	219	254	201	148	110	76	44	35
16	11	19	18	89	152	178	213	163	200	201	207	224	243	222	253	269	253	190	151	105	49	46	35
16	11	15	45	179	203	213	204	181	178	214	191	234	205	256	249	256	233	163	131	116	65	42	33
13	10	29	62	179	255	253	268	199	203	188	224	241	233	273	257	261	219	167	134	94	73	38	23

Date: **Thursday, August 6, 2020** Total Daily Volume: **15725** 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
241	113	64	68	166	422	687	887	882	834	893	979	1055	978	1439	1184	1169	1156	794	622	468	288	218	118
33	41	18	14	19	63	126	202	228	230	238	239	239	223	260	287	300	307	249	181	133	92	70	34
36	20	20	14	40	85	204	194	246	200	218	262	263	216	308	278	259	342	202	159	126	79	50	24
109	33	9	25	48	133	186	254	210	218	198	247	286	286	457	359	344	280	175	127	104	71	56	38
63	19	17	15	59	141	171	237	198	186	239	231	267	253	414	260	266	227	168	155	105	46	42	22

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

Average Daily Traffic

Location: **Spring Canyon Road, West of Pomerado Road**

Date: **Thursday, August 13, 2020** Total Daily Volume: **6620** 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
29	16	3	7	20	53	143	309	371	349	444	458	481	458	475	506	557	582	462	378	251	155	68	45
6	7	1	0	3	11	20	69	78	75	119	102	115	126	114	138	140	156	146	112	80	51	14	10
10	4	2	0	1	8	40	60	79	87	131	115	135	102	109	120	145	155	98	92	55	48	26	8
8	4	0	1	7	13	41	85	95	99	93	116	113	120	119	119	138	142	114	91	55	33	18	18
5	1	0	6	9	21	42	95	119	88	101	125	118	110	133	129	134	129	104	83	61	23	10	9

Date: **Thursday, August 13, 2020** Total Daily Volume: **3544** 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
15	12	1	5	14	26	62	145	201	200	241	243	257	254	257	273	306	309	245	189	128	90	44	27
4	6	1	0	3	6	8	30	42	34	76	49	58	67	63	69	85	84	70	60	43	30	9	6
4	4	0	0	1	3	16	28	42	52	69	59	69	65	63	65	72	87	60	44	27	30	15	6
5	1	0	0	6	8	18	39	54	58	50	66	59	66	63	64	83	76	62	45	29	14	12	9
2	1	0	5	4	9	20	48	63	56	46	69	71	56	68	75	66	62	53	40	29	16	8	6

Date: **Thursday, August 13, 2020** Total Daily Volume: **3076** 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
14	4	2	2	6	27	81	164	170	149	203	215	224	204	218	233	251	273	217	189	123	65	24	18
2	1	0	0	0	5	12	39	36	41	43	53	57	59	51	69	55	72	76	52	37	21	5	4
6	0	2	0	0	5	24	32	37	35	62	56	66	37	46	55	73	68	38	48	28	18	11	2
3	3	0	1	1	5	23	46	41	41	43	50	54	54	56	55	55	66	52	46	26	19	6	9
3	0	0	1	5	12	22	47	56	32	55	56	47	54	65	54	68	67	51	43	32	7	2	3

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

Average Daily Traffic

Location: **Spring Canyon Road, East of Pomerado Road**

Date: **Thursday, August 13, 2020** Total Daily Volume: **17197** 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
71	49	24	50	246	452	692	942	999	981	984	1045	1129	1173	1403	1442	1403	1316	987	773	479	314	147	96
9	17	4	3	28	63	112	204	227	243	238	243	267	301	290	379	354	353	285	230	156	102	38	27
20	10	7	8	42	91	158	225	242	244	261	244	297	269	328	334	361	364	246	210	122	84	43	18
30	15	5	17	85	129	197	252	256	246	236	262	288	337	398	370	373	307	231	177	93	75	42	29
12	7	8	22	91	169	225	261	274	248	249	296	277	266	387	359	315	292	225	156	108	53	24	22

Date: **Thursday, August 13, 2020** Total Daily Volume: **9423** 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
28	29	18	38	192	295	356	503	548	557	510	546	611	646	746	780	773	692	554	404	259	183	97	58
5	10	3	3	16	35	57	117	130	129	122	133	149	171	156	210	191	194	155	131	93	67	23	15
9	5	4	5	34	48	69	116	117	143	146	126	160	151	200	192	196	205	140	100	64	45	29	14
9	7	3	12	71	93	109	127	142	132	123	136	151	180	180	186	216	148	134	90	49	37	30	15
5	7	8	18	71	119	121	143	159	153	119	151	151	144	210	192	170	145	125	83	53	34	15	14

Date: **Thursday, August 13, 2020** Total Daily Volume: **7774** 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
43	20	6	12	54	157	336	439	451	424	474	499	518	527	657	662	630	624	433	369	220	131	50	38
4	7	1	0	12	28	55	87	97	114	116	110	118	130	134	169	163	159	130	99	63	35	15	12
11	5	3	3	8	43	89	109	125	101	115	118	137	118	128	142	165	159	106	110	58	39	14	4
21	8	2	5	14	36	88	125	114	114	113	126	137	157	218	184	157	159	97	87	44	38	12	14
7	0	0	4	20	50	104	118	115	95	130	145	126	122	177	167	145	147	100	73	55	19	9	8

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

Average Daily Traffic

Location: **Cypress Canyon Road, between Scripps Poway Road and Angelique Street**

Date: **Thursday, August 6, 2020** Total Daily Volume: **1377** 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
1	5	2	4	4	12	36	75	80	72	65	70	86	61	87	103	118	151	103	106	71	24	27	14
1	1	1	1	1	1	7	10	16	21	11	17	25	12	21	30	42	33	29	34	22	3	7	7
0	3	0	1	1	2	5	24	22	16	15	14	19	18	17	23	24	50	20	30	17	5	5	3
0	1	0	1	1	3	7	16	25	18	19	18	16	18	20	13	25	41	33	20	16	7	6	2
0	0	1	1	1	6	17	25	17	17	20	21	26	13	29	37	27	27	21	22	16	9	9	2

Date: **Thursday, August 6, 2020** Total Daily Volume: **681** 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
1	2	2	3	4	8	17	38	47	39	41	29	44	29	45	52	54	67	48	51	36	10	10	4
1	0	1	0	1	0	3	6	8	14	8	7	16	7	12	15	20	14	17	19	13	1	3	2
0	2	0	1	1	2	4	10	13	9	9	5	8	8	6	12	13	21	8	12	7	1	3	0
0	0	0	1	1	2	0	13	17	9	7	9	8	9	12	7	11	18	12	10	8	4	2	2
0	0	1	1	1	4	10	9	9	7	17	8	12	5	15	18	10	14	11	10	8	4	2	0

Date: **Thursday, August 6, 2020** Total Daily Volume: **696** 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
0	3	0	1	0	4	19	37	33	33	24	41	42	32	42	51	64	84	55	55	35	14	17	10
0	1	0	1	0	1	4	4	8	7	3	10	9	5	9	15	22	19	12	15	9	2	4	5
0	1	0	0	0	0	1	14	9	7	6	9	11	10	11	11	11	29	12	18	10	4	2	3
0	1	0	0	0	1	7	3	8	9	12	9	8	9	8	6	14	23	21	10	8	3	4	0
0	0	0	0	0	2	7	16	8	10	3	13	14	8	14	19	17	13	10	12	8	5	7	2

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

Average Daily Traffic

Location: **Angelique Street, South of Scripps Poway Parkway**

Date: **Thursday, August 13, 2020** Total Daily Volume: **3433** 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
14	7	7	4	7	15	56	126	210	216	230	264	273	242	187	271	269	311	278	176	136	70	38	26
6	5	0	2	0	2	10	18	46	44	71	55	68	68	42	44	77	72	71	35	32	26	15	5
2	0	3	1	2	5	7	26	45	58	35	69	70	67	48	55	67	77	81	58	35	11	10	4
5	2	1	1	3	2	15	34	60	54	75	72	53	55	46	85	73	93	54	37	38	13	9	8
1	0	3	0	2	6	24	48	59	60	49	68	82	52	51	87	52	69	72	46	31	20	4	9

Date: **Thursday, August 13, 2020** Total Daily Volume: **2215** 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
6	2	4	2	7	15	42	91	154	146	166	186	174	166	124	188	149	187	161	101	79	33	17	15
2	2	0	1	0	2	8	14	30	31	59	40	40	48	34	28	49	48	44	21	18	12	7	3
0	0	1	1	2	5	7	18	37	44	21	48	47	44	28	40	33	48	49	31	18	6	6	1
4	0	1	0	3	2	11	25	44	34	52	57	31	36	28	59	38	59	23	21	24	7	2	5
0	0	2	0	2	6	16	34	43	37	34	41	56	38	34	61	29	32	45	28	19	8	2	6

Date: **Thursday, August 13, 2020** Total Daily Volume: **1218** 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
8	5	3	2	0	0	14	35	56	70	64	78	99	76	63	83	120	124	117	75	57	37	21	11
4	3	0	1	0	0	2	4	16	13	12	15	28	20	8	16	28	24	27	14	14	14	8	2
2	0	2	0	0	0	0	8	8	14	14	21	23	23	20	15	34	29	32	27	17	5	4	3
1	2	0	1	0	0	4	9	16	20	23	15	22	19	18	26	35	34	31	16	14	6	7	3
1	0	1	0	0	0	8	14	16	23	15	27	26	14	17	26	23	37	27	18	12	12	2	3

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

Average Daily Traffic

Location: **Cypress Canyon Park Road, between Cypress Canyon Road and Pomerado Road-Spring Canyon Road**

Date: **Thursday, August 6, 2020** Total Daily Volume: **1975** 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
11	10	8	8	5	16	37	94	113	115	125	110	115	127	160	151	168	174	162	117	81	39	18	11
5	2	5	0	0	5	6	20	29	32	34	14	20	32	40	35	42	45	43	36	24	15	3	4
3	1	2	3	0	2	9	28	22	29	30	35	21	35	29	28	37	42	36	24	25	8	9	1
2	2	1	2	4	4	9	21	33	31	34	30	33	32	36	41	37	45	34	35	14	9	3	1
1	5	0	3	1	5	13	25	29	23	27	31	41	28	55	47	52	42	49	22	18	7	3	5

Date: **Thursday, August 6, 2020** Total Daily Volume: **1017** 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
8	5	4	4	1	2	12	31	42	48	66	46	61	59	85	81	96	113	92	66	53	22	13	7
4	0	3	0	0	1	0	7	8	13	17	8	11	15	23	17	16	28	21	21	17	8	3	3
2	0	0	1	0	1	5	5	8	9	18	13	10	16	14	15	26	30	21	17	17	5	5	0
1	2	1	1	1	0	4	5	12	15	17	10	16	17	16	20	20	27	18	17	6	5	3	1
1	3	0	2	0	0	3	14	14	11	14	15	24	11	32	29	34	28	32	11	13	4	2	3

Date: **Thursday, August 6, 2020** Total Daily Volume: **958** 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
3	5	4	4	4	14	25	63	71	67	59	64	54	68	75	70	72	61	70	51	28	17	5	4
1	2	2	0	0	4	6	13	21	19	17	6	9	17	17	18	26	17	22	15	7	7	0	1
1	1	2	2	0	1	4	23	14	20	12	22	11	19	15	13	11	12	15	7	8	3	4	1
1	0	0	1	3	4	5	16	21	16	17	20	17	15	20	21	17	18	16	18	8	4	0	0
0	2	0	1	1	5	10	11	15	12	13	16	17	17	23	18	18	14	17	11	5	3	1	2

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

Average Daily Traffic

Location: **Cypress Canyon Park Dr, between Angelique St and Jaguar Ct**

Date: **Tuesday, September 22, 2020** Total Daily Volume: **815** 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
3	2	0	0	2	5	23	46	38	48	34	58	48	54	89	59	70	72	65	50	18	22	7	2
2	0	0	0	0	2	2	9	14	11	9	12	13	15	21	15	14	17	16	13	8	8	2	1
1	0	0	0	2	1	2	11	11	13	5	14	8	16	23	14	23	19	18	18	4	7	4	1
0	1	0	0	0	1	11	14	7	12	7	17	11	7	24	13	17	26	17	10	1	4	1	0
0	1	0	0	0	1	8	12	6	12	13	15	16	16	21	17	16	10	14	9	5	3	0	0

Date: **Tuesday, September 22, 2020** Total Daily Volume: **405** 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
2	1	0	0	1	1	8	16	13	24	13	35	22	24	46	29	42	44	38	18	8	13	6	1
1	0	0	0	0	1	0	5	4	5	2	9	6	7	11	7	8	12	10	5	5	5	2	0
1	0	0	0	1	0	1	2	3	7	2	9	6	9	12	10	13	10	8	6	1	3	3	1
0	1	0	0	0	0	5	6	4	5	4	10	5	3	9	7	9	16	12	2	0	3	1	0
0	0	0	0	0	0	2	3	2	7	5	7	5	5	14	5	12	6	8	5	2	2	0	0

Date: **Tuesday, September 22, 2020** Total Daily Volume: **410** 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
1	1	0	0	1	4	15	30	25	24	21	23	26	30	43	30	28	28	27	32	10	9	1	1
1	0	0	0	0	1	2	4	10	6	7	3	7	8	10	8	6	5	6	8	3	3	0	1
0	0	0	0	1	1	1	9	8	6	3	5	2	7	11	4	10	9	10	12	3	4	1	0
0	0	0	0	0	1	6	8	3	7	3	7	6	4	15	6	8	10	5	8	1	1	0	0
0	1	0	0	0	1	6	9	4	5	8	8	11	11	7	12	4	4	6	4	3	1	0	0

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Linscott, Law & Greenspan, Engineers

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

Average Daily Traffic

Location: **Cypress Canyon Rd, between Cypress Canyon Park Dr and Cypress Canyon Park Driveway**

Date: **Tuesday, September 22, 2020** Total Daily Volume: **601** 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
1	0	1	0	1	2	12	27	30	36	22	20	31	22	36	44	58	96	77	33	23	13	15	1
0	0	1	0	0	0	0	3	8	8	5	9	7	7	8	8	10	19	15	19	7	4	9	1
0	0	0	0	0	1	1	10	7	7	4	0	9	10	11	8	16	40	13	9	4	2	3	0
0	0	0	0	0	1	7	10	9	10	9	8	5	2	6	13	12	24	17	2	6	3	3	0
1	0	0	0	1	0	4	4	6	11	4	3	10	3	11	15	20	13	32	3	6	4	0	0

Date: **Tuesday, September 22, 2020** Total Daily Volume: **296** 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
0	0	1	0	1	1	8	8	12	24	13	9	12	16	18	18	18	37	53	23	7	6	11	0
0	0	1	0	0	0	0	0	2	4	2	3	4	6	4	4	4	5	8	15	2	1	8	0
0	0	0	0	0	0	1	4	4	3	2	0	4	6	8	4	3	10	6	6	0	2	1	0
0	0	0	0	0	1	4	4	4	6	6	5	3	2	5	3	4	15	9	2	2	0	2	0
0	0	0	0	1	0	3	0	2	11	3	1	1	2	1	7	7	7	30	0	3	3	0	0

Date: **Tuesday, September 22, 2020** Total Daily Volume: **305** 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
1	0	0	0	0	1	4	19	18	12	9	11	19	6	18	26	40	59	24	10	16	7	4	1
0	0	0	0	0	0	0	3	6	4	3	6	3	1	4	4	6	14	7	4	5	3	1	1
0	0	0	0	0	1	0	6	3	4	2	0	5	4	3	4	13	30	7	3	4	0	2	0
0	0	0	0	0	0	3	6	5	4	3	3	2	0	1	10	8	9	8	0	4	3	1	0
1	0	0	0	0	0	1	4	4	0	1	2	9	1	10	8	13	6	2	3	3	1	0	0

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Historical Counts Comparison

Historical Traffic Counts (Peak Hour) Comparison

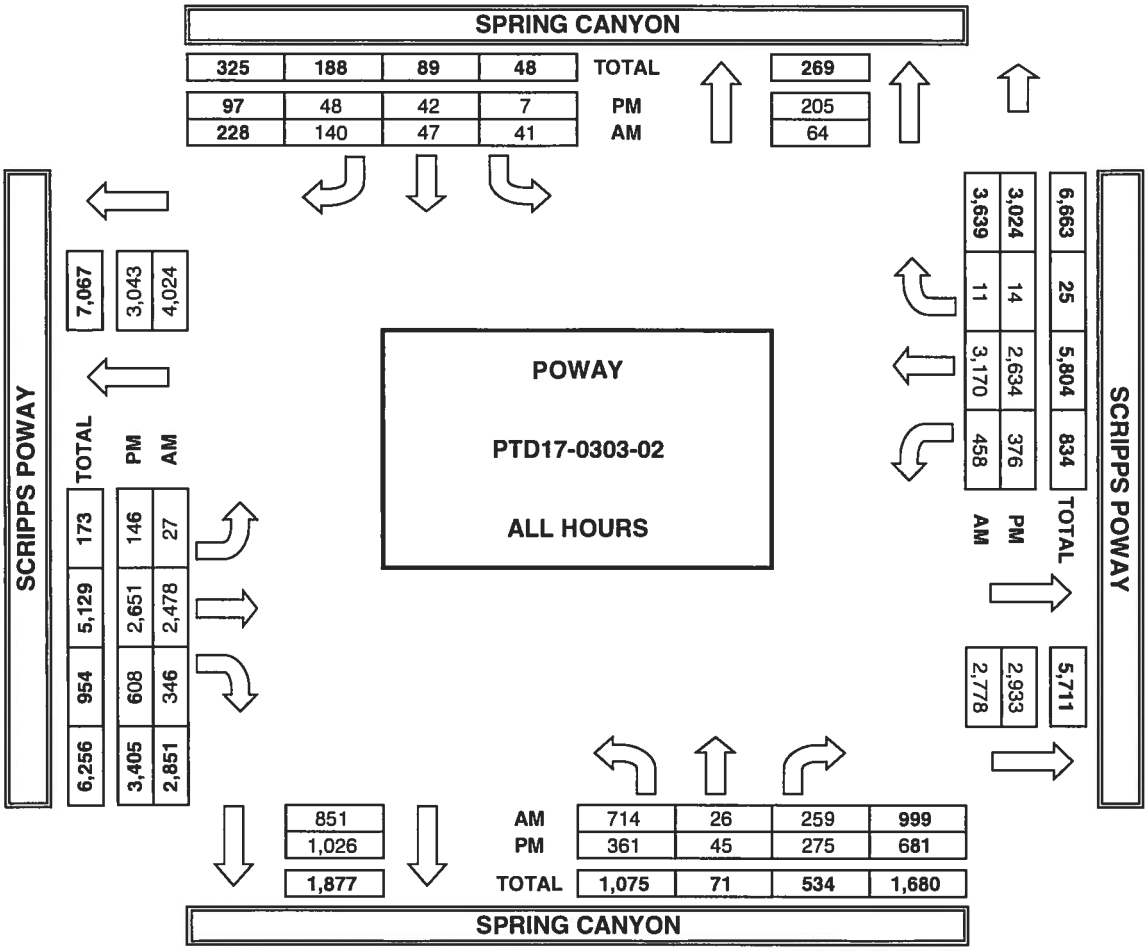
INTERSECTION	DIRECTION	March 2017 Counts [a]						2020 Counts					
		Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm
1. Scripps Poway Parkway / Spring Canyon Road	Sb	73	22	29	22	4	5	26	30	7	16	4	2
	Wb	3	10	1594	1333	194	228	3	1	770	1089	80	166
	Nb	93	148	15	32	348	184	28	103	11	17	206	193
	Eb	117	322	1411	1394	70	16	94	141	789	846	15	63

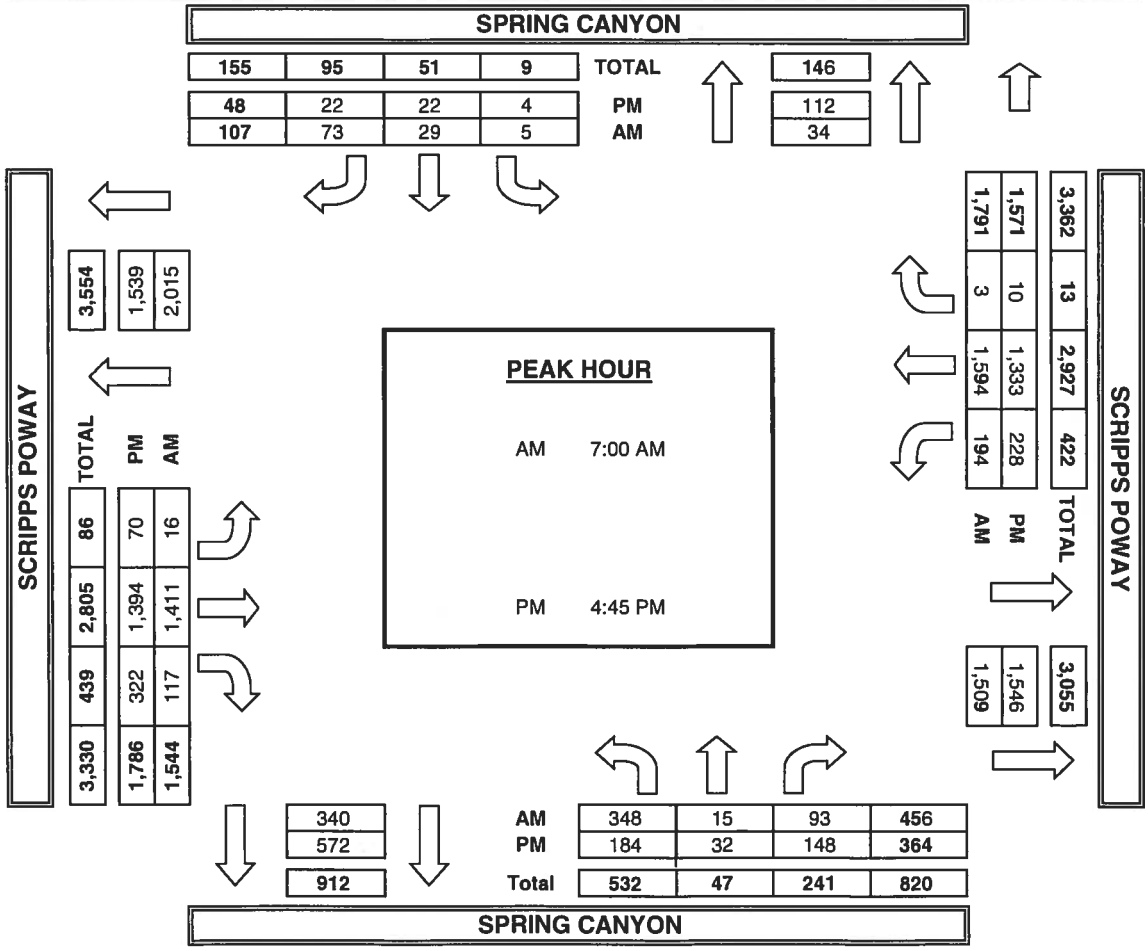
a. The 2017 intersection counts were obtained from the Scripps Mesa Joint Occupancy Project Traffic Impact Study

	AM Total	PM Total
Year 2017	3,951	3,716
Year 2020	2,033	2,667
Reduction From Year 2017	-94%	-39%
Growth Factor Applied to Year 2020 Counts	**100%**	**50%**

PACIFIC TECHNICAL DATA

TURNING MOVEMENT COUNTS





Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#07	File Name:	ITM-20-021-07
Intersection:	Scripps Poway Parkway & Spring Canyon Road & Ivy Hill Drive	Project:	LLG Ref. 3-20-3272
Date of Count:	Thursday August 6, 2020		Scripps Cypress Point

AM	Ivy Hill Drive Southbound			Scripps Poway Parkway Westbound			Spring Canyon Road Northbound			Scripps Poway Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	0	6	16	164	0	30	0	5	1	189	15	426
7:15	0	0	6	11	166	0	56	3	11	3	200	14	470
7:30	1	4	7	23	206	1	53	0	5	4	182	22	508
7:45	3	3	4	19	219	1	48	3	8	3	229	22	562
8:00	0	0	9	27	179	1	49	5	4	5	178	36	493
8:15	0	1	10	27	200	0	44	0	8	3	141	21	455
8:30	1	5	15	12	190	0	54	1	10	4	140	32	464
8:45	0	4	8	12	172	1	55	2	21	5	140	27	447
Total	5	17	65	147	1496	4	389	14	72	28	1399	189	3825
Approach%	5.7	19.5	74.7	8.9	90.8	0.2	81.9	2.9	15.2	1.7	86.6	11.7	
Total%	0.1	0.4	1.7	3.8	39.1	0.1	10.2	0.4	1.9	0.7	36.6	4.9	

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

Volume	4	7	26	80	770	3	206	11	28	15	789	94	2,033
Approach%	10.8	18.9	70.3	9.4	90.3	0.4	84.1	4.5	11.4	1.7	87.9	10.5	
Total%	0.2	0.3	1.3	3.9	37.9	0.1	10.1	0.5	1.4	0.7	38.8	4.6	
PHF			0.77			0.89			0.88			0.88	0.92

PM	Ivy Hill Drive Southbound			Scripps Poway Parkway Westbound			Spring Canyon Road Northbound			Scripps Poway Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	0	3	8	24	252	1	42	3	20	14	192	31	590
16:15	0	4	5	34	246	1	49	2	27	12	217	34	631
16:30	0	4	7	40	263	0	60	3	21	25	199	22	644
16:45	0	5	7	32	245	0	40	3	27	10	204	40	613
17:00	1	2	10	40	249	1	45	6	32	10	214	49	659
17:15	1	5	6	54	332	0	48	5	23	17	229	30	750
17:30	1	5	4	29	242	1	46	0	25	11	167	27	558
17:45	1	1	4	20	223	2	33	2	19	14	184	45	548
Total	4	29	51	273	2052	6	363	24	194	113	1606	278	4993
Approach%	4.8	34.5	60.7	11.7	88.0	0.3	62.5	4.1	33.4	5.7	80.4	13.9	
Total%	0.1	0.6	1.0	5.5	41.1	0.1	7.3	0.5	3.9	2.3	32.2	5.6	

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

Volume	2	16	30	166	1,089	1	193	17	103	62	846	141	2,666
Approach%	4.2	33.3	62.5	13.2	86.7	0.1	61.7	5.4	32.9	5.9	80.6	13.4	
Total%	0.1	0.6	1.1	6.2	40.8	0.0	7.2	0.6	3.9	2.3	31.7	5.3	
PHF			0.92			0.81			0.93			0.95	0.91

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

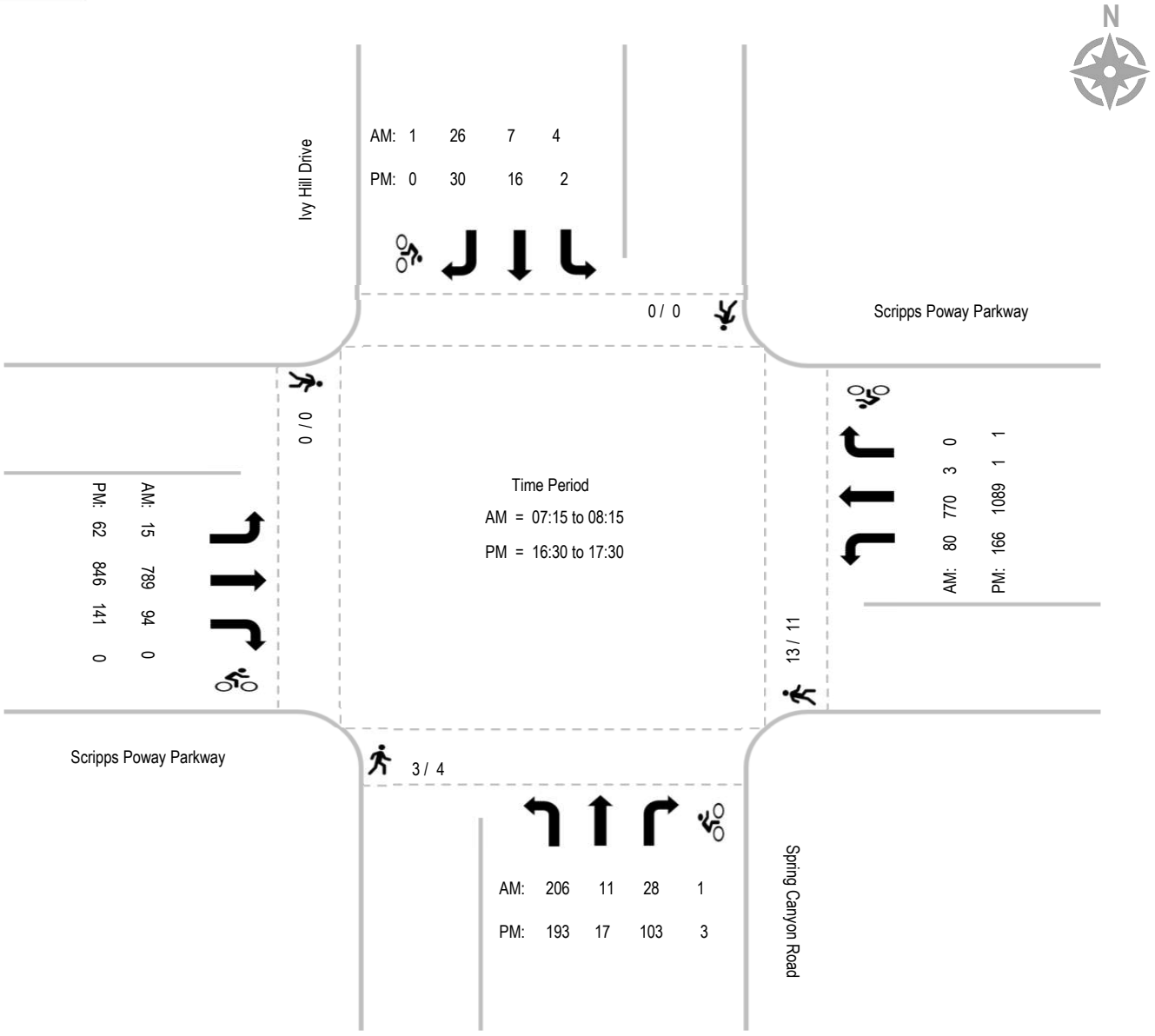
Location:	#07	File Name:	ITM-20-021-07
Intersection:	Scripps Poway Parkway & Spring Canyon Road & Ivy Hill Drive	Project:	LLG Ref. 3-20-3272
Date of Count:	Thursday August 6, 2020		Scripps Cypress Point

AM	Ivy Hill Drive Southbound				Scripps Poway Parkway Westbound				Spring Canyon Road Northbound				Scripps Poway Parkway 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	0	0	0	0	1	0
7:15	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	2	1
7:30	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	2	1
7:45	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0
8:00	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	3	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	3	0	0	0	0	0	0	0	0	0	0	0	3	0
8:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
Ped Total	0				13				3				0				16	
Bike Total		0	0	1		0	0	0		0	1	0		0	0	0		2

PM	Ivy Hill Drive Southbound				Scripps Poway Parkway Westbound				Spring Canyon Road Northbound				Scripps Poway Parkway 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	1	0	1	0	0	0	0	0	0	0	1	1
16:15	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	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	3	0	0	0	0	0	3
17:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	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	1	0	0	0	1	0	0	0	0	0	0	0	2	0
17:45	0	0	0	0	7	0	0	0	1	0	0	0	0	0	0	0	8	0
Ped Total	0				11				4				0				15	
Bike Total		0	0	0		0	1	0		0	0	3		0	0	0		4

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#07	File Name:	ITM-20-021-07
	Intersection:	Scripps Poway Parkway & Spring Canyon Road & Ivy Hill Drive	Project:	LLG Ref. 3-20-3272
	Date of Count:	Thursday August 6, 2020		Scripps Cypress Point



INTERSECTION: IVY HILL DR/SPRING CANYON RD @ SCRIPPS POWAY PKWY

233 Program

Group Assignment:
Field Master Assignment:
System Reference Number:

N/S Street: IVY HILL/SPRING CANYON
E/W Street: SCRIPPS POWAY

Last Database Change:
Timing sheets by: M2S
Approved by:
Drawing Number: 28216-8-D
Timing implemented on: 04/01/15

SCRIPPS POWAY | SCRIPPS POWAY | IVY HILL | SPRING CANYON

4

Row	Phase Numbers---->	1	2	3	4	5	6	7	8
0	Ped Walk		7				7		7
1	Ped FDW		21				15		30
2	Min Green	4	10			4	10	4	4
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension	2.0	3.8			2.0	3.9	2.0	2.0
6	Max Gap	2.0	3.8			2.0	3.9	2.0	2.0
7	Min Gap	2.0	0.2			2.0	0.2	2.0	2.0
8	Max Limit	34	70			34	70	44	44
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every		0.8				0.8		
E	Yellow Change	3.4	5.0			3.4	4.7	3.9	5.0
F	Red Clear	1.0	1.0			1.0	1.0	1.0	1.0

Phase Timing - Bank 1 <F/1+Phase+Row>

Row		E
	RR-1 Delay	
	RR-1 Clear	
	EV-A Delay	0
	EV-A Clear	0
	EV-B Delay	
	EV-B Clear	
	EV-C Delay	0
	EV-C Clear	0
	EV-D Delay	0
	EV-D Clear	0
	RR-2 Delay	
	RR-2 Clear	
	View EV Delay	- - -
	View EV Clear	- - -
	View RR Delay	- - -
	View RR Clear	- - -

Preempt Timing <F/1+E+Row>

Row		F
0	Permit	12__5678
1	Red Lock	
2	Yellow Lock	
3	Min Recall	
4	Ped Recall	
5	*View Set Peds*	_2__6_8
6	Rest In Walk	
7	Red Rest	
8	Double Entry	
9	Max Recall	
A	Soft Recall	_2__6__
B	Max 2	
C	Cond. Service	
D	Man Cntrl Calls	12345678
E	Yellow Start	_2__6__
F	First Phases	_____7_

Phase Functions <F/1+F+Row>

Current Calculated Cycle Length: C/0 + B + F

	9	A	B	C	D
	- - -	- - -	- - -	- - -	- - -
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing <F/1+Column+Phase>

Drop Number	4	<C/0+0+0>
Zone Number	4	<C/0+0+1>
Area Number	1	<C/0+0+2>
Area Address	185	<C/0+0+3>
QuicNet Channel: Scripps Pwy FM		(QuicNet)

Communication Addresses

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

(Outputs specified in Assignable Outputs at E/127+A+E & F)

Exclusive Walk	0	<F/1+0+0>
Exclusive FDW	0	<F/1+0+1>
All Red Clear	0.0	<F/1+0+2>

Exclusive Ped Phase

Flash Start	0	<F/1+0+E>
Red Revert	5.0	<F/1+0+F>
All Red Start	0.0	<F/1+C+0>

Start / Revert Times

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

Manual Plan	0	<C/0+A+1>
Manual Offset	0	<C/0+B+1>

Manual Selection

Free Lag	_2__6_8	<C/1+F+0>

How to Set Page Access Code:
F/1 -- C + 0 + F = 1

Notes: Field master located at Scripps Poway Parkway and Cypress Canyon.

Overlap Assignments

<E/29+Column+Row>

Row		Overlap 1	2	3	4	5	6	7	8
0	Load Switch Number								
1	Veh Set 1 - Phases								
2	Veh Set 2 - Phases								
3	Veh Set 3 - Phases								
4	Neg Veh Phases								
5	Neg Ped Phases								
6	Green Omit Phases								
7	Green Clear Omit Phs.								
8									
9									
A									
B									
C									
D	Green Clear								
E	Yellow Change								
F	Red Clear								

Specials

<F/2+F+Row>

	F	Row
Fast Green Flash Phase		0
Green Flash Phases		1
Flashing Walk Phases		2
Guaranteed Passage		3
Simultaneous Gap Term	12345678	4
Sequential Timing		5
Advance Walk Phases		6
Delay Walk Phases		7
External Recall		8
Start-up Overlap Green		9
Max Extension		A
Inhibit Ped Reservice		B
Semi-Actuated		C
Start-up Overlap Yellow		D
Start-up Vehicle Calls	12345678	E
Start-up Ped Calls	12345678	F

Configuration

<E/125+E+Row>

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Flash to PE Circuits	
6	Flash Entry Phases	
7	Disable Yellow Range	
8	Disable Ovp Yel Range	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	7
C	EV-C Phases	1 6
D	EV-D Phases	8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration

<E/125+F+Row>

	F
Ext. Permit 1 Phases	
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	12345678
Ped for 2P Output	2
Ped for 6P Output	6
Ped for 4P Output	
Ped for 8P Output	8
Yellow Flash Phases	
Low Priority A Phases	
Low Priority B Phases	
Low Priority C Phases	
Low Priority D Phases	
Restricted Phases	
Extra 2 Config. Bits	3

Preemption Priority

(* RR-1 is always Highest, and RR-2 is always Second Highest)

<E/125+C+Row>

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

Coordination Transition Minimums

<C/5+2+Row>

	2	Row
		0
Phase 1	0	1
Phase 2	0	2
Phase 3	0	3
Phase 4	0	4
Phase 5	0	5
Phase 6	0	6
Phase 7	0	7
Phase 8	0	8
		9
		A
		B
		C
		D
		E
		F

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Extended Status
6 = International Ped
7 = Flash - Clear Outputs
8 = Split Ring

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

Extra 2 Flags
1 = AWB During Initial
2 = LMU Installed
3 = Disable Min Walk
4 = QuicNet/4 System
5 = Ignore P/P on EV
6 =
7 = Reserved
8 =

Flash to PE & PE Non-Lock
1 = EV A 5 = RR 1
2 = EV B 6 = RR 2
3 = EV C 7 = SE 1
4 = EV D 8 = SE 2

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Daylight Savings Time

Begin Month	0	<C/5+2+A>
Begin Week	0	<C/5+2+B>
End Month	0	<C/5+2+C>
End Week	0	<C/5+2+D>

Daylight Savings Date:
If set to all zeros, standard dates will be used.

INTERSECTION: IVY HILL DR/SPRING CANYON RD @ SCRIPPS POWAY PKWY

233 Program

Row	Detector Name	0 C1 Pin Number	1 Attributes	2 Phase(s)	3 Assign	1 Delay	3 Carry-Over
0	2I2U	39	45_7_	2	123 8		1.8
1	6J2U	40	45_7_	6	123 8		1.8
2		41	45_7_	4	123 8		
3	8J6U	42	45_7_	8	123 8	10.0	
4	2I2L	43	45_7_	2	123 8		1.8
5	6J2L	44	45_7_	6	123 8		1.8
6		45	45_7_	4	123 8		
7		46	45_7_	8	123 8		
8		47	67_	2	123 8		
9		48	67_	6	123 8		
A		49	67_	4	123 8		
B		50	67_	8	123 8		
C		55	45_7_	5	123 8		
D		56	45_7_	1	123 8		
E	7J5U	57	45_7_	7_	123 8	10.0	
F		58	45_7_	3	123 8		

Program Type:

	Ped / Phase / Overlap 1	2	3	4	5	6	7	8	Row
Walk									0
Don't Walk									1
Phase Green									2
Phase Yellow									3
Phase Red									4
Overlap Green									5
Overlap Yellow									6
Overlap Red									7

Redirect Phase Outputs <E/127+Column+Row>

Cabinet Type	0

<E/125+D+0>

Enable Redirection
(Enable Redirection = 30)

Max OFF (minutes)	5	<D/0+0+1>
Max ON (minutes)	60	<D/0+0+2>

Detector Failure Monitor

	D	Row
		0
Output Port 1		1
Output Port 2		2
Output Port 3		3
Output Port 4		4
Output Port 5		5
Output Port 6		6
Output Port 7		7

Dimming <E/125+D+Row>

Row	Detector Name	4 C1 Pin Number	5 Attributes	6 Phase(s)	7 Assign	2 Delay	4 Carry-Over
0		59	45_7_	5	123 8		
1		60	45_7_	1	123 8		
2		61	45_7_	7_	123 8		
3		62	45_7_	3	123 8		
4	2I3U	63	45_7_	2	123 8		1.8
5	6I3U	64	45_7_	6	123 8		1.8
6		65	45_7_	4	123 8		
7		66	45_7_	8	123 8		
8		67	2	2	123 8		
9		68	2	6	123 8		
A		69	2	4	123 8		
B		70	2	8	123 8		
C	2I3L (Bike Loop)	76	45_7_	2	123 8		1.8
D	6I3L (Bike Loop)	77	45_7_	6	123 8		1.8
E		78	45_7_	4	123 8		
F		79	45_7_	8	123 8		

Detector Assignments <E/126+Column+Row> <D/0+Column+Row>

Detector Attributes
1 = Full Time Delay
2 = Ped Call
3 =
4 = Count
5 = Extension
6 = Type 3
7 = Calling
8 = Alternate

Det. Assignments
1 = Det. Set 1
2 = Det. Set 2
3 = Det. Set 3
4 =
5 =
6 = Failure - Min Recall
7 = Failure - Max Recall
8 = Report on Failure

	D
Number of Digits	
1 st Digit	
2 ed Digit	
3 ed Digit	
4 th Digit	
5 th Digit	
6 th Digit	
7 th Digit	
8 th Digit	
9 th Digit	
10 th Digit	
11 th Digit	
12 th Digit	
13 th Digit	
14 th Digit	
15 th Digit	

<C/5+D+Row>

Dial-Back Telephone Number

Disable Alarms
1 = Stop Time
2 = Flash Sense
3 = Keyboard Entry
4 = Manual Plan
5 = Police Control
6 = External Alarm
7 = Detector Failure
8 =

	B	Row
DELAY-A	1	A
DELAY-B	1	B
DELAY-C	0	C
DELAY-D	0	D
DELAY-E	0	E
DELAY-F	0	F

<D/0+B+Row> (seconds)

Delay Logic Times

Omit Alarm	

<C/5+F+0>

Disable Alarm Reporting

Time	0	<C/5+C+0>

Redial Time (minutes)
(View Redial Timer at E/2+D+6)

INTERSECTION: IVY HILL DR/SPRING CANYON RD @ SCRIPPS POWAY PKWY

233 Program

TOD Coordination <9/0.1+Row> (Bank 1)

Row	Time	Plan	Offset	Day of Week
0	06 : 30	6	A	_23456_
1	11 : 00	7	A	_23456_
2	14 : 00	8	A	_23456_
3	19 : 00	E	A	1234567
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function <7/0.1+Row>

Time	Funct.	Day of Week

<E/27+4+Row>

Column 4
Phases/Bits

Holiday Dates <8/1.1+Row> (Bank 1)

Row	Day	Year	Month	Holiday Type
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Holiday Events <9/1.1+Row> (Bank 1)

Row	Time	Plan	Offset	Holiday Type
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

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

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

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

Cycle Timer:
Master: C/0 + A + 0
Ring A: C/0 + B + 0
Ring B: C/0 + D + 0

Interval Timer:
Ring A: F/0 + A + Interval Row
Ring B: F/0 + B + Interval Row

Master Plan: C/0 + A + 2
Current Plan: C/0 + A + 3
TOD Plan: C/0 + A + 5

TOD Coordination <9/0.2+Row> (Bank 2)

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

Holiday TOD Function <7/0.2+Row>

Time	Funct.	Holiday Type

<E/28+Row>

Column 4
Phases/Bits

Holiday Dates <8/1.2+Row> (Bank 2)

Row	Day	Year	Month	Holiday Type
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Holiday Events <9/1.2+Row> (Bank 2)

Row	Time	Plan	Offset	Holiday Type
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

INTERSECTION: IVY HILL DR/SPRING CANYON RD @ SCRIPPS POWAY PKWY

233 Program

Row	Plan Name ---->	Plan 1	2	3	4	5	6 AM	7 MID	8 PM	9
0	Cycle Length						140	120	128	
1	Phase 1 - ForceOff						113	98	112	
2	Phase 2 - ForceOff						16	0	0	
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff									
5	Phase 5 - ForceOff						16	16	26	
6	Phase 6 - ForceOff						0	0	0	
7	Phase 7 - ForceOff						77	72	82	
8	Phase 8 - ForceOff						56	51	61	
9	Ring Offset									
A	Offset 1						16	13	122	
B	Offset 2									
C	Offset 3									
D	Perm 1 - End						16	12	13	
E	Hold Release						255	255	255	
F	Zone Offset						0	0	0	

Coordination - Timing Plans **<C/1+Plan+Row>**

Coord Extra
1 = Programmed WALK Time for Sy... ...ses
2 = Always Terminate Sync Phase Peds

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

Sync Phases **<C/1+E+Row>**

Row		1	2	3	4	5	6	7	8	9
0	Ped Adjustment									
1	Perm 2 - Start						15			
2	Perm 2 - End						17			
3	Perm 3 - Start						72			
4	Perm 3 - End						78			
5	Reservice Time									
6	Reservice Phases									
7										
8	Pretimed Phases									
9	Max Recall									
A	Perm 1 Veh Phase						5			
B	Perm 1 Ped Phase									
C	Perm 2 Veh Phase						78			
D	Perm 2 Ped Phase						8			
E	Perm 3 Veh Phase						1			
F	Perm 3 Ped Phase						26			

Coordination - Parameters **<C/2+Plan+Row>**

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

Lag Phases **<C/1+F+Row>**

Coordination Timing By: M2S
Implemention Date: 1/13/2015

Row	Column 9	Column A	Column B	Column C	Column D	Column E	Column F	Row
0	Spec. Funct. 1	NOT-3	Max 2	Pretimed	Set Monday	Dial 2 (7-Wire)	Sim Term	0
1	Spec. Funct. 2	NOT-4	System Det 1	Plan 1	Ext. Perm 1	Dial 3 (7-Wire)	EV-A 71	1
2	Spec. Funct. 3	OR-4 (a)	System Det 2	Plan 2	Ext. Perm 2	Offset 1 (7-Wire)	EV-B 72	2
3	Spec. Funct. 4	OR-4 (b)	System Det 3	Plan 3	Dimming	Offset 2 (7-Wire)	EV-C 73	3
4	NAND-3 (a)	OR-5 (a)	System Det 4	Plan 4	Set Clock	Offset 3 (7-Wire)	EV-D 74	4
5	NAND-3 (b)	OR-5 (b)	System Det 5	Plan 5	Stop Time	Free (7-Wire)	RR-1 51	5
6	NAND-4 (a)	OR-6 (a)	System Det 6	Plan 6	Flash Sense 81	Flash (7-Wire)	RR-2 52	6
7	NAND-4 (b)	OR-6 (b)	System Det 7	Plan 7	Manual Enable	Excl. Ped Omit	Spec. Event 1	7
8	OR-7 (a)	Fig 3 Diamond	System Det 8	Plan 8	Man. Advance	NOT-1	Spec. Event 2	8
9	OR-7 (b)	Fig 4 Diamond	Max Inhibit (nema)	Plan 9	External Alarm	NOT-2	External Lag	9
A	OR-7 (c)	AND-4 (a)	Force A (nema)	DELAY-A	Phase Bank 2	OR-1 (a)	AND-1 (a)	A
B	OR-7 (d)	AND-4 (b)	Force B (nema)	DELAY-B	Phase Bank 3	OR-1 (b)	AND-1 (b)	B
C	OR-8 (a)	NAND-1 (a)	C.N.A. (nema)	DELAY-C	Overlap Set 2	OR-2 (a)	AND-2 (a)	C
D	OR-8 (b)	NAND-1 (b)	Hold (nema)	DELAY-D	Overlap Set 3	OR-2 (b)	AND-2 (b)	D
E	OR-8 (c)	NAND-2 (a)	Max Recall	DELAY-E	Detector Set 2	OR-3 (a)	AND-3 (a)	E
F	OR-8 (d)	NAND-2 (b)	Min Recall	DELAY-F	Detector Set 3	OR-3 (b)	AND-3 (b)	F

Assignable Inputs **<E/126+Column+Row>**

Row	Column 9	Column A	Column B	Column C	Column D	Column E	Column F	Row
0	Phase ON - 1	Preempt Fail	Flasher 0	Free	NOT-1	TOD Out 1	Dial 2 (7-Wire)	0
1	Phase ON - 2	Sp Evnt Out 1	Flasher 1	Plan 1	OR-1	TOD Out 2	Dial 3 (7-Wire)	1
2	Phase ON - 3	Sp Evnt Out 2	Fast Flasher	Plan 2	OR-2	TOD Out 3	Offset 1 (7-Wire)	2
3	Phase ON - 4	Sp Evnt Out 3	Fig 3 Diamond	Plan 3	OR-3	TOD Out 4	Offset 2 (7-Wire)	3
4	Phase ON - 5	Sp Evnt Out 4	Fig 4 Diamond	Plan 4	AND-1	TOD Out 5	Offset 3 (7-Wire)	4
5	Phase ON - 6	Sp Evnt Out 5		Plan 5	AND-2	TOD Out 6	Free (7-Wire)	5
6	Phase ON - 7	Sp Evnt Out 6		Plan 6	AND-3	TOD Out 7	Flash (7-Wire)	6
7	Phase ON - 8	Sp Evnt Out 7		Plan 7	NOT-2	TOD Out 8	Preempt	7
8	Ph. Check - 1	Sp Evnt Out 8	NOT-3	Plan 8	EV-A	Adv. Warn - 1	Low Priority A	8
9	Ph. Check - 2		NOT-4	Plan 9	EV-B	Adv. Warn - 2	Low Priority B	9
A	Ph. Check - 3	Detector Fail	OR-4	Spec. Funct. 3	EV-C	DELAY-A	Low Priority C	A
B	Ph. Check - 4	Spec. Funct. 1	OR-5	Spec. Funct. 4	EV-D	DELAY-B	Low Priority D	B
C	Ph. Check - 5	Spec. Funct. 2	OR-6	NAND-3	RR-1	DELAY-C		C
D	Ph. Check - 6	Central Control	AND-4	NAND-4	RR-2	DELAY-D		D
E	Ph. Check - 7	Excl. Ped DW	NAND-1	OR-7	Spec. Event 1	DELAY-E		E
F	Ph. Check - 8	Excl. Ped WK	NAND-2	OR-8	Spec. Event 2	DELAY-F		F

Assignable Outputs **<E/127+Column+Row>**

INTERSECTION: CYPRESS CANYON RD/VILLAGE RIDGE RD @ SCRIPPS POWAY PKWY

223 Program

Group Assignment:
Field Master Assignment:

N/S Street Name: SCRIPPS CREEK/VILLAGE RIDGE
E/W Street Name: SCRIPPS POWAY

SCRIPPS POWAY

SCRIPPS VILLAGE RIGDE CYPRESS CANYON

4

Row	Phase # --->	1	2	3	4	5	6	7	8
	Column # --->	Phase							
0	Ped Walk		7				7		7
1	Ped FDW		22				15		24
2	Min Green	4	10			4	10	4	4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	5.3			2.0	5.2	2.0	2.0
6	Max Gap	2.0	5.3			2.0	5.2	2.0	2.0
7	Min Gap	2.0	0.2			2.0	0.2	2.0	2.0
8	Max Limit	30	60			30	60	40	40
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1				0.1		
D	Every		0.6				0.6		
E	Yellow	3.4	4.7			3.4	5.0	3.9	4.3
F	Red Clear	1.0	1.0			1.0	1.0	1.0	1.0

Phase Timing - Bank 1
F + Phase + Row
<F Page>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

F + E + Row

Row		F
0	Permit	12__5678
1	Red Lock	
2	Yellow Lock	
3	Min Recall	
4	Ped Recall	
5	Peds (View)	_2___6_8
6	Rest In Walk	
7	Red Rest	
8	Dbl Entry	
9	Max Recall	
A	Soft Recall	_2___6__
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	_2___6__
F	1st Phases	_____7_

F + F + Row

NOTE: FDW IS CALCULATED USING A WALKING SPEED OF 3.5 FPS (SCHOOL XWALK).

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	6	C + 0 + 0
Zone Number	6	C + 0 + 1
Area Number	1	C + 0 + 2
Area Address	187	C + 0 + 3
QuicNet Channel	Scripps Pwy FM	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2___6_8	0

Lag Phases <C Page>

Overlap Timing

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

<F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	0	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

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

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

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	234

Disable Communication Ports
D + D + 9

Timing Sheet By: M2S
Approved By:
Drawing Number: 26247-29-D
Timing Implemented On: 04/01/15

INTERSECTION: CYPRESS CANYON RD/VILLAGE RIDGE RD @ SCRIPPS POWAY PKWY — 223 Program

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function

7 + ROW

<D Page>

D + F + ROW

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

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	6
7	Ped 4P	
8	Ped 8P	8
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration <E Page>

E + F + ROW

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	7
C	EV-C Phases	1 6
D	EV-D Phases	8
E	Extra 1 Config. Bits	1 34
F	IC Select (Interconnect)	2

Configuration

For access, set F + 9 + E = 1

E + E + ROW

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

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

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

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

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

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

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over
0		
1		1.8
2		1.8
3		
4		
5		
6		
7		
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	1I1	14
	2I2U	1
Bike Loop	2I2L	5
	2I3U	21
	2I3L	25
	2I4	9
	3I5	16
	4I6U	3
	4I6L	7
	4I7U	23
	4I7L	27
	4I8	11
	1I9U	18
	3I9L	20
---	---	---
---	---	---

Row	2 Delay	4 Carry-over
0		
1		1.8
2		1.8
3		
4		
5		
6		
7		
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	5J1	13
	6J2U	2
Bike Loop	6J2L	6
	6J3U	22
	6J3L	26
	6J4	10
	7J5	15
	8J6U	4
	8J6L	8
	8J7U	24
	8J7L	28
	8J8	12
	5J9U	17
	7J9L	19
---	---	---
---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	5678
E	-- -- -- -- -- -- -- --	1234
F	-- 25 26 27 28 -- -- --	2345

Active Detectors <D Page>

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

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number		F+C+1
Time Before Yellow		F+C+3

Advance Warning Beacon - Sign 1

Phase Number		F+D+1
Time Before Yellow		F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

INTERSECTION: CYPRESS CANYON RD/VILLAGE RIDGE RD @ SCRIPPS POWAY PKWY

223 Program

Coordination Timing By: **M2S**
Implemented On: **1/13/2015**

		Plan								
	Column # —>	1	2	3	4	5	6	7	8	9
Row	Plan Name —>						AM	MID	PM	
0	Cycle Length						140	120	128	
1	Phase 1 - ForceOff						71	84	67	
2	Phase 2 - ForceOff						0	0	0	
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff									
5	Phase 5 - ForceOff						71	17	67	
6	Phase 6 - ForceOff						0	0	0	
7	Phase 7 - ForceOff						55	68	51	
8	Phase 8 - ForceOff						31	48	31	
9	Ring Offset									
A	Offset A						97	73	81	
B	Offset B									
C	Offset C									
D	Permissive						14	12	13	
E	Hold Release						255	255	255	
F	Ped Shift						0	0	0	

Coordination <C Page>
C + Plan + ROW

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	06 : 30	6	A	23456
1	11 : 00	7	A	23456
2	14 : 00	8	A	23456
3	19 : 00	E	A	1234567
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination
<9 Key with C+0+9=1>

	E	Row		F
		0	Free Lag	
Plan 1		1	Plan 1 - Lag	
Plan 2		2	Plan 2 - Lag	
Plan 3		3	Plan 3 - Lag	
Plan 4		4	Plan 4 - Lag	
Plan 5		5	Plan 5 - Lag	
Plan 6	2 6	6	Plan 6 - Lag	2 67
Plan 7	2 6	7	Plan 7 - Lag	2 5 7
Plan 8	2 6	8	Plan 8 - Lag	2 67
Plan 9		9	Plan 9 - Lag	
Coord Ped*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases
C + E + FUNCTION #

Lag Phases <C Page>
C + F + FUNCTION #

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

Transition Type	0

TBC Transition
C + D + D

Transition Type
0 = Shortway
Non-zero = Lengthen

INTERSECTION: ANGELIQUE ST/SPRINGBROOK DR @ SCRIPPS POWAY PKWY

223 Program

Group Assignment:
Field Master Assignment:

N/S Street Name: ANGELIQUE/SPRINGBROOK
E/W Street Name: SCRIPPS POWAY

Phase Timing - Bank 1
F + Phase + Row

Row		SCRIPPS POWAY 1	2	3	SPRINGBROOK 4	5	SCRIPPS POWAY 6	7	ANGELIQUE 8
	Column # ---> / Phase # --->	Phase 1	2	3	4	5	6	7	8
0	Ped Walk		7		7		7		7
1	Ped FDW		14		22		11		22
2	Min Green	4	10		4	4	10		4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	5.3		2.0	2.0	5.2		2.0
6	Max Gap	2.0	5.3		2.0	2.0	5.2		2.0
7	Min Gap	2.0	0.2		0.2	2.0	0.2		2.0
8	Max Limit	30	60		40	30	60		40
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1		0.1		0.1		
D	Every		0.6		1.7		0.6		
E	Yellow	3.4	4.7		4.3	3.4	5.0		3.9
F	Red Clear	1.0	1.0		1.0	1.0	1.0		1.0

<F Page>

Row	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

F + E + Row

Row	F
Permit	12_456_8
Red Lock	
Yellow Lock	
Min Recall	_2___6__
Ped Recall	
Peds (View)	_2_4_6_8
Rest In Walk	
Red Rest	
Dbl Entry	___4___8
Max Recall	
Soft Recall	
Max 2	
Cond Serv	
Ped Lock	12345678
Yellow Start	_2___6__
1st Phases	___4___8

F + F + Row

Max Initial	0
Red Revert	5.0
All Red Start	0.0

F + 0 + E
F + 0 + F
F + C + O

Start / Revert Times

Drop Number	8	C + 0 + 0
Zone Number	8	C + 0 + 1
Area Number	1	C + 0 + 2
Area Address	189	C + 0 + 3
QuicNet Channel	Scripps Pwy FM	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6_8	0

Lag Phases <C Page>

Overlap Timing

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

<F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	0	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

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

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

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	_234___

Disable Communication Ports
D + D + 9

Timing Sheet By: M2S
Approved By:
Drawing Number: 28890-4-D
Timing Implemented On: 04/01/15

INTERSECTION: ANGELIQUE ST/SPRINGBROOK DR @ SCRIPPS POWAY PKWY

223 Program

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function

7 + ROW

<D Page>

D + F + ROW

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

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	6
7	Ped 4P	4
8	Ped 8P	8
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration <E Page>

E + F + ROW

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4
C	EV-C Phases	1 6
D	EV-D Phases	8
E	Extra 1 Config. Bits	1 34
F	IC Select (Interconnect)	2

Configuration

For access, set F + 9 + E = 1

E + E + ROW

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

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

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

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

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

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

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

INTERSECTION: ANGELIQUE ST/SPRINGBROOK DR @ SCRIPPS POWAY PKWY 223 Program

Row	1 Delay	3 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		1.8
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	1I1	14
	2I2U	1
	2I2L	5
	2I3U	21
	2I3L	25
	2I4	9
	3I5	16
	4I6U	3
	4I6L	7
	4I7U	23
	4I7L	27
	4I8	11
	1I9U	18
	3I9L	20
---	---	---
---	---	---

Row	2 Delay	4 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7	10.0	
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	5J1	13
	6J2U	2
	6J2L	6
	6J3U	22
	6J3L	26
	6J4	10
	7J5	15
	8J6U	4
	8J6L	8
	8J7U	24
	8J7L	28
	8J8	12
	5J9U	17
	7J9L	19
---	---	---
---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

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

Active Detectors <D Page>

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

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number		F+C+1
Time Before Yellow		F+C+3

Advance Warning Beacon - Sign 1

Phase Number		F+D+1
Time Before Yellow		F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

INTERSECTION: ANGELIQUE ST/SPRINGBROOK DR @ SCRIPPS POWAY PKWY

223 Program

Coordination Timing By: **M2S**
Implemented On: **1/13/2015**

Row	Column # ---->	Plan 1	2	3	4	5	6	7	8	9
	Plan Name ---->						AM	MID	PM	
0	Cycle Length						140	120	128	
1	Phase 1 - ForceOff						67	47	51	
2	Phase 2 - ForceOff						0	0	0	
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff						50	31	30	
5	Phase 5 - ForceOff						67	52	61	
6	Phase 6 - ForceOff						0	0	0	
7	Phase 7 - ForceOff									
8	Phase 8 - ForceOff						50	31	30	
9	Ring Offset									
A	Offset A						48	31	30	
B	Offset B									
C	Offset C									
D	Permissive						14	12	13	
E	Hold Release						255	255	255	
F	Ped Shift						0	0	0	

Coordination **<C Page>**

C + Plan + ROW

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	06 : 30	6	A	_23456_
1	11 : 00	7	A	_23456_
2	14 : 00	8	A	_23456_
3	19 : 00	E	A	1234567
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination

<9 Key with C+0+9=1>

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

	E	Row		F
		0	Free Lag	
Plan 1		1	Plan 1 - Lag	
Plan 2		2	Plan 2 - Lag	
Plan 3		3	Plan 3 - Lag	
Plan 4		4	Plan 4 - Lag	
Plan 5		5	Plan 5 - Lag	
Plan 6	_2___6__	6	Plan 6 - Lag	_2_4_6_8
Plan 7	_2___6__	7	Plan 7 - Lag	_2_4_6_8
Plan 8	_2___6__	8	Plan 8 - Lag	_2_4_6_8
Plan 9		9	Plan 9 - Lag	
Coord Ped*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases

C + E + FUNCTION #

Lag Phases <C Page>

C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

Transition Type
0 = Shortway
Non-zero = Lengthen

INTERSECTION: CYPRESS CANYON PARK DR & POMERADO/SPRING CANYON RD — 233 Program

Group Assignment:
Field Master Assignment:
System Reference Number:

N/S Street: POMERADO
E/W Street: SPRING CYN

Last Database Change:

Timing sheets by: MC
Approved by: EFF
Timing implemented on:

		POMERADO		SPRING CANYON		CYPRESS CYN PARK		POMERADO	
		Phase							
Row	Phase Numbers---->	1	2	3	4	5	6	7	8
0	Ped Walk		7		7		7		7
1	Ped FDW		21		21		24		13
2	Min Green	4	10	4	4	4	4	4	10
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension	2.0	3.3	2.0	4.3	2.0	3.7	2.0	4.3
6	Max Gap	2.0	3.3	2.0	4.3	2.0	3.7	2.0	4.3
7	Min Gap	2.0	0.2	2.0	0.2	2.0	0.2	2.0	0.2
8	Max Limit	30	60	50	40	30	40	30	60
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW	0	0	0	0	0	0	0	0
C	Cond Serv Check								
D	Reduce Every		0.7		0.7		0.9		0.7
E	Yellow Change	3.4	4.7	3.4	5.8	3.4	3.9	3.4	4.8
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 1 <F/1+Phase+Row>

Row		E
	RR-1 Delay	
	RR-1 Clear	
	EV-A Delay	0
	EV-A Clear	0
	EV-B Delay	0
	EV-B Clear	0
	EV-C Delay	0
	EV-C Clear	0
	EV-D Delay	0
	EV-D Clear	0
	RR-2 Delay	
	RR-2 Clear	
	View EV Delay	- - -
	View EV Clear	- - -
	View RR Delay	- - -
	View RR Clear	- - -

Preempt Timing <F/1+E+Row>

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

Phase Functions <F/1+F+Row>

Current Calculated Cycle Length: C/0 + B + F

	9	A	B	C	D
	---	---	---	---	---
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing <F/1+Column+Phase>

Drop Number	8	<C/0+0+0>
Zone Number	8	<C/0+0+1>
Area Number	3	<C/0+0+2>
Area Address	152	<C/0+0+3>
QuicNet Channel	85	(QuicNet)

Communication Addresses

Flash Start	0	<F/1+0+E>
Red Revert	5.0	<F/1+0+F>
All Red Start	0.0	<F/1+C+0>

Start / Revert Times

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

(Outputs specified in Assignable Outputs at E/127+A+E & F)

Exclusive Walk	0	<F/1+0+0>
Exclusive FDW	0	<F/1+0+1>
All Red Clear	0.0	<F/1+0+2>

Exclusive Ped Phase

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

Manual Plan	14	<C/0+A+1>
Manual Offset	0	<C/0+B+1>

Manual Selection

Free Lag	2 4 6 8	<C/1+F+0>

How to Set Page Access Code:
F/1 -- C + 0 + F = 1

Notes: Copy of 152 program 10/30/90 timing sheets.
Converted to 233 program timing sheets.

F-1 - 0 - 8 = 1 Enable EV ADVANCE

INTERSE ION: CYPRESS CANYON PARK DR & POMER D RD/SPRING CANYON RD — 233 Progr n

Overlap Assignments <E/29+Column+Row>

Row		Overlap 1	2	3	4	5	6	7	8
0	Load Switch Number								
1	Veh Set 1 - Phases	23							
2	Veh Set 2 - Phases								
3	Veh Set 3 - Phases								
4	Neg Veh Phases	1 4							
5	Neg Ped Phases	2 4							
6	Green Omit Phases	2							
7	Green Clear Omit Phs.								
8									
9									
A									
B									
C									
D	Green Clear								
E	Yellow Change								
F	Red Clear								

Specials <F/2+F+Row>

	F	Row
Fast Green Flash Phase		0
Green Flash Phases		1
Flashing Walk Phases		2
Guaranteed Passage		3
Simultaneous Gap Term	12345678	4
Sequential Timing		5
Advance Walk Phases		6
Delay Walk Phases		7
External Recall		8
Start-up Overlap Green		9
Max Extension		A
Inhibit Ped Reservice		B
Semi-Actuated		C
Start-up Overlap Yellow		D
Start-up Vehicle Calls	12345678	E
Start-up Ped Calls	12345678	F

Configuration <E/125+E+Row>

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Flash to PE Circuits	
6	Flash Entry Phases	
7	Disable Yellow Range	
8	Disable Ovp Yel Range	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4 7
C	EV-C Phases	1 6
D	EV-D Phases	3 8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration <E/125+F+Row>

	F
Ext. Permit 1 Phases	
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	12345678
Ped for 2P Output	2
Ped for 6P Output	6
Ped for 4P Output	4
Ped for 8P Output	8
Yellow Flash Phases	
Low Priority A Phases	
Low Priority B Phases	
Low Priority C Phases	
Low Priority D Phases	
Restricted Phases	
Extra 2 Config. Bits	3

Preemption Priority <E/125+C+Row>

(* RR-1 is always Highest, and RR-2 is always Second Highest)

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

Coordination Transition Minimums <C/5+2+Row>

	2	Row
		0
Phase 1	0	1
Phase 2	0	2
Phase 3	0	3
Phase 4	0	4
Phase 5	0	5
Phase 6	0	6
Phase 7	0	7
Phase 8	0	8
		9
		A
		B
		C
		D
		E
		F

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Extended Status
6 = International Ped
7 = Flash - Clear Outputs
8 = Split Ring

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

Extra 2 Flags
1 = AWB During Initial
2 = LMU Installed
3 = Disable Min Walk
4 = QuicNet/4 System
5 = Ignore P/P on EV
6 =
7 = Reserved
8 =

Flash to PE & PE Non-Lock
1 = EV A 5 = RR 1
2 = EV B 6 = RR 2
3 = EV C 7 = SE 1
4 = EV D 8 = SE 2

Time and Date
8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Daylight Savings Time

Begin Month	3 0	<C/5+2+A>
Begin Week	2 0	<C/5+2+B>
End Month	11 0	<C/5+2+C>
End Week	1 0	<C/5+2+D>

Daylight Savings Date:
If set to all zeros, standard dates will be used.

INTERSE ION: CYPRESS CANYON PARK DR & POMER D RD/SPRING CANYON RD — 233 Progr n

Row	Detector Name	0 C1 Pin Number	1 Attributes	2 Phase(s)	3 Assign	1 Delay	3 Carry-Over
0	2I2U	39	45_7_	2	123		1.8
1	6J2U	40	45_7_	6	123		1.8
2	4I6U	41	45_7_	4	123		1.8
3	8J6U	42	45_7_	8	123		1.8
4	2I2L	43	45_7_	2	123		
5		44	45_7_	6	123		
6		45	45_7_	4	123		
7		46	45_7_	8	123		
8		47	67_	2	123		
9		48	67_	6	123		
A		49	67_	4	123		
B		50	67_	8	123		
C		55	45_7_	5	123		
D		56	45_7_	1 7	123		
E		57	45_7_	7	123		
F		58	45_7_	3	123		

Row	Detector Name	4 C1 Pin Number	5 Attributes	6 Phase(s)	7 Assign	2 Delay	4 Carry-Over
0		59	45_7_	5	123		
1		60	45_7_	1 7	123		
2		61	45_7_	7	123		
3		62	45_7_	3	123		
4	2I3U	63	45_7_	2	123	1.8	
5	6J3U	64	45_7_	6	123	1.8	
6	4I7U	65	45_7_	4	123		10.0
7	8J7U	66	45_7_	8	123		10.0
8		67	2	2	123		
9		68	2	6	123		
A		69	2	4	123		
B		70	2	8	123		
C		76	45_7_	2	123		
D		77	45_7_	6	123		
E		78	45_7_	4	123		
F		79	45_7_	8	123		

Detector Assignments <E/126+Column+Row> <D/0+Column+Row>

Detector Attributes
1 = Full Time Delay
2 = Ped Call
3 =
4 = Count
5 = Extension
6 = Type 3
7 = Calling
8 = Alternate

Det. Assignments
1 = Det. Set 1
2 = Det. Set 2
3 = Det. Set 3
4 =
5 =
6 = Failure - Min Recall
7 = Failure - Max Recall
8 = Report on Failure

Program Type:

	Ped / Phase / Overlap 1	2	3	4	5	6	7	8	Row
Walk									0
Don't Walk									1
Phase Green									2
Phase Yellow									3
Phase Red									4
Overlap Green 35	36								5
Overlap Yellow 37	38								6
Overlap Red									7

OVL A.

Redirect Phase Outputs <E/127+Column+Row>

Cabinet Type	30

<E/125+D+0>

Enable Redirection
(Enable Redirection = 30)

Max OFF (minutes)	5	<D/0+0+1>
Max ON (minutes)	60	<D/0+0+2>

Detector Failure Monitor

Row		D
0		
1	Output Port 1	
2	Output Port 2	
3	Output Port 3	
4	Output Port 4	
5	Output Port 5	
6	Output Port 6	
7	Output Port 7	

Dimming <E/125+D+Row>

	D
Number of Digits	
1 st Digit	
2 ed Digit	
3 ed Digit	
4 th Digit	
5 th Digit	
6 th Digit	
7 th Digit	
8 th Digit	
9 th Digit	
10 th Digit	
11 th Digit	
12 th Digit	
13 th Digit	
14 th Digit	
15 th Digit	

<C/5+D+Row>

Dial-Back Telephone Number

Disable Alarms
1 = Stop Time
2 = Flash Sense
3 = Keyboard Entry
4 = Manual Plan
5 = Police Control
6 = External Alarm
7 = Detector Failure
8 =

Row		B
A	DELAY-A	1
B	DELAY-B	1
C	DELAY-C	0
D	DELAY-D	0
E	DELAY-E	0
F	DELAY-F	0

<D/0+B+Row> (seconds)

Delay Logic Times

Omit Alarm	#NAME?

<C/5+F+0>

Disable Alarm Reporting

Time	0	<C/5+C+0>

Redial Time (minutes)
(View Redial Timer at E/2+D+6)

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

TOD Coordination <9/0.1+Row>
(Bank 1)

Time	Funct.	Day of Week

TOD Function <7/0.1+Row>

Column 4 Phases/Bits

<E/27+4+Row>

Row	Day	Year	Month	Holiday Type
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Holiday Dates <8/1.1+Row>
(Bank 1)

Time	Plan	Offset	Holiday Type

Holiday Events <9/1.1+Row>
(Bank 1)

Row
0
1
2
3
4
5
6
7
8
9
A
B
C
D
E
F

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

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

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

Cycle Timer:
Master: C/0 + A + 0
Ring A: C/0 + B + 0
Ring B: C/0 + D + 0

Interval Timer:
Ring A: F/0 + A + Interval Row
Ring B: F/0 + B + Interval Row

Master Plan: C/0 + A + 2
Current Plan: C/0 + A + 3
TOD Plan: C/0 + A + 5

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

TOD Coordination <9/0.2+Row>
(Bank 2)

Time	Funct.	Holiday Type

Holiday TOD Function <7/0.2+Row>

Column 4 Phases/Bits

<E/28+Row>

Row	Day	Year	Month	Holiday Type
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Holiday Dates <8/1.2+Row>
(Bank 2)

Time	Plan	Offset	Holiday Type

Holiday Events <9/1.2+Row>
(Bank 2)

Row
0
1
2
3
4
5
6
7
8
9
A
B
C
D
E
F

Row	Plan Name ---->	Plan 1	2	3	4	5	6	7	8	9	Row
0	Cycle Length										0
1	Phase 1 - ForceOff										1
2	Phase 2 - ForceOff										2
3	Phase 3 - ForceOff										3
4	Phase 4 - ForceOff										4
5	Phase 5 - ForceOff										5
6	Phase 6 - ForceOff										6
7	Phase 7 - ForceOff										7
8	Phase 8 - ForceOff										8
9	Ring Offset										9
A	Offset 1										A
B	Offset 2										B
C	Offset 3										C
D	Perm 1 - End										D
E	Hold Release										E
F	Zone Offset										F

Coordination - Timing Plans <C/1+Plan+Row>

Coord Extra
1 = Programmed WALK Time for Sync Phases
2 = Always Terminate Sync Phase Peds

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

Sync Phases <C/1+E+Row>

Row											Row
0	Ped Adjustment										0
1	Perm 2 - Start										1
2	Perm 2 - End										2
3	Perm 3 - Start										3
4	Perm 3 - End										4
5	Reservice Time										5
6	Reservice Phases										6
7											7
8	Pretimed Phases										8
9	Max Recall										9
A	Perm 1 Veh Phase										A
B	Perm 1 Ped Phase										B
C	Perm 2 Veh Phase										C
D	Perm 2 Ped Phase										D
E	Perm 3 Veh Phase										E
F	Perm 3 Ped Phase										F

Coordination - Parameters <C/2+Plan+Row>

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

Lag Phases <C/1+F+Row>

Coordination Timing By:

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Spec. Funct. 1		NOT-3		Max 2		Pretimed		Set Monday		Dial 2 (7-Wire)		Sim Term		0
1	Spec. Funct. 2		NOT-4		System Det 1	60	Plan 1		Ext. Perm 1		Dial 3 (7-Wire)		EV-A	71	1
2	Spec. Funct. 3		OR-4 (a)		System Det 2	62	Plan 2		Ext. Perm 2		Offset 1 (7-Wire)		EV-B	72	2
3	Spec. Funct. 4		OR-4 (b)		System Det 3	59	Plan 3		Dimming		Offset 2 (7-Wire)		EV-C	73	3
4	NAND-3 (a)		OR-5 (a)		System Det 4	61	Plan 4		Set Clock		Offset 3 (7-Wire)		EV-D	74	4
5	NAND-3 (b)		OR-5 (b)		System Det 5	80	Plan 5		Stop Time	82	Free (7-Wire)		RR-1	51	5
6	NAND-4 (a)		OR-6 (a)		System Det 6	53	Plan 6		Flash Sense	81	Flash (7-Wire)		RR-2	52	6
7	NAND-4 (b)		OR-6 (b)		System Det 7	54	Plan 7		Manual Enable		Excl. Ped Omit		Spec. Event 1		7
8	OR-7 (a)		Fig 3 Diamond		System Det 8	75	Plan 8		Man. Advance		NOT-1		Spec. Event 2		8
9	OR-7 (b)		Fig 4 Diamond		Max Inhibit (nema)		Plan 9		External Alarm		NOT-2		External Lag		9
A	OR-7 (c)		AND-4 (a)		Force A (nema)		DELAY-A		Phase Bank 2		OR-1 (a)		AND-1 (a)		A
B	OR-7 (d)		AND-4 (b)		Force B (nema)		DELAY-B		Phase Bank 3		OR-1 (b)		AND-1 (b)		B
C	OR-8 (a)		NAND-1 (a)		C.N.A. (nema)		DELAY-C		Overlap Set 2		OR-2 (a)		AND-2 (a)		C
D	OR-8 (b)		NAND-1 (b)		Hold (nema)		DELAY-D		Overlap Set 3		OR-2 (b)		AND-2 (b)		D
E	OR-8 (c)		NAND-2 (a)		Max Recall		DELAY-E		Detector Set 2		OR-3 (a)		AND-3 (a)		E
F	OR-8 (d)		NAND-2 (b)		Min Recall		DELAY-F		Detector Set 3		OR-3 (b)		AND-3 (b)		F

Assignable Inputs **<E/126+Column+Row>**

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Phase ON - 1		Preempt Fail		Flasher 0		Free		NOT-1		TOD Out 1		Dial 2 (7-Wire)		0
1	Phase ON - 2		Sp Evnt Out 1		Flasher 1		Plan 1		OR-1		TOD Out 2		Dial 3 (7-Wire)		1
2	Phase ON - 3		Sp Evnt Out 2		Fast Flasher		Plan 2		OR-2		TOD Out 3		Offset 1 (7-Wire)		2
3	Phase ON - 4		Sp Evnt Out 3		Fig 3 Diamond		Plan 3		OR-3		TOD Out 4		Offset 2 (7-Wire)		3
4	Phase ON - 5		Sp Evnt Out 4		Fig 4 Diamond		Plan 4		AND-1		TOD Out 5		Offset 3 (7-Wire)		4
5	Phase ON - 6		Sp Evnt Out 5				Plan 5		AND-2		TOD Out 6		Free (7-Wire)		5
6	Phase ON - 7		Sp Evnt Out 6				Plan 6		AND-3		TOD Out 7		Flash (7-Wire)	81	6
7	Phase ON - 8		Sp Evnt Out 7				Plan 7		NOT-2		TOD Out 8		Preempt		7
8	Ph. Check - 1		Sp Evnt Out 8		NOT-3		Plan 8		EV-A		Adv. Warn - 1		Low Priority A		8
9	Ph. Check - 2				NOT-4		Plan 9		EV-B		Adv. Warn - 2		Low Priority B		9
A	Ph. Check - 3		Detector Fail		OR-4		Spec. Funct. 3		EV-C		DELAY-A		Low Priority C		A
B	Ph. Check - 4		Spec. Funct. 1		OR-5		Spec. Funct. 4		EV-D		DELAY-B		Low Priority D		B
C	Ph. Check - 5		Spec. Funct. 2		OR-6		NAND-3		RR-1		DELAY-C				C
D	Ph. Check - 6		Central Control		AND-4		NAND-4		RR-2		DELAY-D				D
E	Ph. Check - 7		Excl. Ped DW		NAND-1		OR-7		Spec. Event 1		DELAY-E				E
F	Ph. Check - 8		Excl. Ped WK		NAND-2		OR-8		Spec. Event 2		DELAY-F				F

Assignable Outputs **<E/127+Column+Row>**

INTERSECTION: Pomerado Rd & Stonebridge Py

233 Program

Group Assignment:
Field Master Assignment:
System Reference Number:

N/S Street: **Pomerado Rd**
E/W Street: **Stonebridge Py**

Last Database Change:

Timing sheets by: **FA1**
Approved by: **EFF**
Timing implemented on:

Row	Phase Numbers---->	1	2	3	4	5	6	7	8
0	Ped Walk		7						7
1	Ped FDW		18						16
2	Min Green	4	10				10		4
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension	2.0	4.1				4.8		2.7
6	Max Gap	2.0	4.1				4.8		2.7
7	Min Gap	2.0	0.2				0.2		0.2
8	Max Limit	30	60				60		40
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW		1						1
C	Cond Serv Check								
D	Reduce Every		0.8				0.6		1.2
E	Yellow Change	3.4	5.9				4.7		4.0
F	Red Clear	1.0	1.0				1.0		1.0

Phase Timing - Bank 1 <F/1+Phase+Row>

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

Preempt Timing <F/1+E+Row>

Row		F
0	Permit	12 6 8
1	Red Lock	
2	Yellow Lock	
3	Min Recall	2 6
4	Ped Recall	
5	*View Set Peds*	2 8
6	Rest In Walk	
7	Red Rest	
8	Double Entry	
9	Max Recall	
A	Soft Recall	
B	Max 2	
C	Cond. Service	
D	Man Cntrl Calls	12345678
E	Yellow Start	2 6
F	First Phases	8

Phase Functions <F/1+F+Row>

Current Calculated Cycle Length: C/0 + B + F

	9	A	B	C	D
	---	---	---	---	---
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing <F/1+Column+Phase>

Drop Number	19	<C/0+0+0>
Zone Number	19	<C/0+0+1>
Area Number	3	<C/0+0+2>
Area Address	153	<C/0+0+3>
QuicNet Channel	COM 55:	(QuicNet)

Communication Addresses

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

(Outputs specified in Assignable Outputs at E/127+A+E & F)

Exclusive Walk	0	<F/1+0+0>
Exclusive FDW	0	<F/1+0+1>
All Red Clear	0.0	<F/1+0+2>

Exclusive Ped Phase

Flash Start	0	<F/1+0+E>
Red Revert	5.0	<F/1+0+F>
All Red Start	0.0	<F/1+C+0>

Start / Revert Times

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

Manual Plan	14	<C/0+A+1>
Manual Offset	0	<C/0+B+1>

Manual Selection

Notes: Drawing 31765-22-D

Free Lag	2 6 8	<C/1+F+0>

How to Set Page Access Code:
F/1 – C + 0 + F = 1

Overlap Assignments

<E/29+Column+Row>

Row		Overlap 1	2	3	4	5	6	7	8
0	Load Switch Number								
1	Veh Set 1 - Phases								
2	Veh Set 2 - Phases								
3	Veh Set 3 - Phases								
4	Neg Veh Phases								
5	Neg Ped Phases								
6	Green Omit Phases								
7	Green Clear Omit Phs.								
8									
9									
A									
B									
C									
D	Green Clear								
E	Yellow Change								
F	Red Clear								

Specials

<F/2+F+Row>

	F	Row
Fast Green Flash Phase		0
Green Flash Phases		1
Flashing Walk Phases		2
Guaranteed Passage		3
Simultaneous Gap Term	12345678	4
Sequential Timing		5
Advance Walk Phases		6
Delay Walk Phases		7
External Recall		8
Start-up Overlap Green		9
Max Extension		A
Inhibit Ped Reservice		B
Semi-Actuated		C
Start-up Overlap Yellow		D
Start-up Vehicle Calls	12345678	E
Start-up Ped Calls	12345678	F

Configuration

<E/125+E+Row>

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Flash to PE Circuits	
6	Flash Entry Phases	
7	Disable Yellow Range	
8	Disable Ovp Yel Range	
9	Overlap Yellow Flash	
A	EV-A Phases	2
B	EV-B Phases	
C	EV-C Phases	1 6
D	EV-D Phases	8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration

<E/125+F+Row>

	F
Ext. Permit 1 Phases	
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	12345678
Ped for 2P Output	2
Ped for 6P Output	
Ped for 4P Output	
Ped for 8P Output	8
Yellow Flash Phases	
Low Priority A Phases	
Low Priority B Phases	
Low Priority C Phases	
Low Priority D Phases	
Restricted Phases	
Extra 2 Config. Bits	3

Preemption Priority

(* RR-1 is always Highest, and RR-2 is always Second Highest)

<E/125+C+Row>

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

Coordination Transition Minimums

<C/5+2+Row>

	2	Row
		0
Phase 1	0	1
Phase 2	0	2
Phase 3	0	3
Phase 4	0	4
Phase 5	0	5
Phase 6	0	6
Phase 7	0	7
Phase 8	0	8
		9
		A
		B
		C
		D
		E
		F

Extra 1 Flags

1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Extended Status
6 = International Ped
7 = Flash - Clear Outputs
8 = Split Ring

IC Select Flags

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

Extra 2 Flags

1 = AWB During Initial
2 = LMU Installed
3 = Disable Min Walk
4 = QuicNet/4 System
5 = Ignore P/P on EV
6 =
7 = Reserved
8 =

Flash to PE & PE Non-Lock

1 = EV A 5 = RR 1
2 = EV B 6 = RR 2
3 = EV C 7 = SE 1
4 = EV D 8 = SE 2

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Daylight Savings Time

Begin Month	0	<C/5+2+A>
Begin Week	0	<C/5+2+B>
End Month	0	<C/5+2+C>
End Week	0	<C/5+2+D>

Daylight Savings Date:
If set to all zeros, standard dates will be used.

INTERSECTION: Pomerado Rd & Stonebridge Py

233 Program

Row	Detector Name	C1 Pin Number	0 Attributes	1 Phase(s)	2 Assign	3 Delay	1 Carry-Over
0	2I2U	39	45_7_	2	123 8		1.8
1	6J2U	40	45_7_	6	123 8		1.8
2		41	45_7_	4	123 8		
3	8J6U	42	45_7_	8	123 8		1.8
4	2I2L	43	45_7_	2	123 8		1.8
5	6J2L	44	45_7_	6	123 8		1.8
6		45	45_7_	4	123 8		
7		46	45_7_	8	123 8		
8		47	67_	2	123 8		
9		48	67_	6	123 8		
A		49	67_	4	123 8		
B		50	67_	8	123 8		
C		55	45_7_	5	123 8		
D		56	45_7_	1 7_	123 8		
E		57	45_7_	7	123 8		
F		58	45_7_	3	123 8		

Program Type:

	Ped / Phase / Overlap 1	2	3	4	5	6	7	8	Row
Walk									0
Don't Walk									1
Phase Green									2
Phase Yellow									3
Phase Red									4
Overlap Green									5
Overlap Yellow									6
Overlap Red									7

Redirect Phase Outputs <E/127+Column+Row>

Cabinet Type	0

<E/125+D+0>

Enable Redirection
(Enable Redirection = 30)

Max OFF (minutes)	5	<D/0+0+1>
Max ON (minutes)	60	<D/0+0+2>

Detector Failure Monitor

	D	Row
		0
Output Port 1		1
Output Port 2		2
Output Port 3		3
Output Port 4		4
Output Port 5		5
Output Port 6		6
Output Port 7		7

Dimming <E/125+D+Row>

Row	Detector Name	C1 Pin Number	4 Attributes	5 Phase(s)	6 Assign	7 Delay	2 Carry-Over	4
0		59	45_7_	5	123 8			
1		60	45_7_	1 7_	123 8			
2		61	45_7_	7	123 8			
3		62	45_7_	3	123 8			
4		63	45_7_	2	123 8			
5		64	45_7_	6	123 8			
6		65	45_7_	4	123 8			
7		66	45_7_	8	123 8			
8		67	2	2	123 8			
9		68	2	6	123 8			
A		69	2	4	123 8			
B		70	2	8	123 8			
C		76	45_7_	2	123 8			
D		77	45_7_	6	123 8			
E		78	45_7_	4	123 8			
F	8J7L	79	45_7_	8	123 8	10.0		

Detector Assignments <E/126+Column+Row> <D/0+Column+Row>

Detector Attributes
1 = Full Time Delay
2 = Ped Call
3 =
4 = Count
5 = Extension
6 = Type 3
7 = Calling
8 = Alternate

Det. Assignments
1 = Det. Set 1
2 = Det. Set 2
3 = Det. Set 3
4 =
5 =
6 = Failure - Min Recall
7 = Failure - Max Recall
8 = Report on Failure

	D
Number of Digits	
1 st Digit	
2 ed Digit	
3 ed Digit	
4 th Digit	
5 th Digit	
6 th Digit	
7 th Digit	
8 th Digit	
9 th Digit	
10 th Digit	
11 th Digit	
12 th Digit	
13 th Digit	
14 th Digit	
15 th Digit	

<C/5+D+Row>

Dial-Back Telephone Number

Disable Alarms
1 = Stop Time
2 = Flash Sense
3 = Keyboard Entry
4 = Manual Plan
5 = Police Control
6 = External Alarm
7 = Detector Failure
8 =

	B	Row
DELAY-A	1	A
DELAY-B	1	B
DELAY-C	0	C
DELAY-D	0	D
DELAY-E	0	E
DELAY-F	0	F

<D/0+B+Row> (seconds)

Delay Logic Times

Omit Alarm	#NAME?

<C/5+F+0>

Disable Alarm Reporting

Time	0	<C/5+C+0>

Redial Time (minutes)
(View Redial Timer at E/2+D+6)

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

TOD Coordination <9/0.1+Row>
(Bank 1)

Time	Funct.	Day of Week	Column 4 Phases/Bits

TOD Function <7/0.1+Row> <E/27+4+Row>

Row	Day	Year	Month	Holiday Type
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Holiday Dates <8/1.1+Row>
(Bank 1)

Time	Plan	Offset	Holiday Type

Holiday Events <9/1.1+Row>
(Bank 1)

Row
0
1
2
3
4
5
6
7
8
9
A
B
C
D
E
F

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

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

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

Cycle Timer:
Master: C/0 + A + 0
Ring A: C/0 + B + 0
Ring B: C/0 + D + 0

Interval Timer:
Ring A: F/0 + A + Interval Row
Ring B: F/0 + B + Interval Row

Master Plan: C/0 + A + 2
Current Plan: C/0 + A + 3
TOD Plan: C/0 + A + 5

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

TOD Coordination <9/0.2+Row>
(Bank 2)

Time	Funct.	Holiday Type	Column 4 Phases/Bits

Holiday TOD Function <7/0.2+Row> <E/28+Row>

Row	Day	Year	Month	Holiday Type
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Holiday Dates <8/1.2+Row>
(Bank 2)

Time	Plan	Offset	Holiday Type

Holiday Events <9/1.2+Row>
(Bank 2)

Row
0
1
2
3
4
5
6
7
8
9
A
B
C
D
E
F

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Spec. Funct. 1		NOT-3		Max 2		Pretimed		Set Monday		Dial 2 (7-Wire)		Sim Term		0
1	Spec. Funct. 2		NOT-4		System Det 1		Plan 1		Ext. Perm 1		Dial 3 (7-Wire)		EV-A	71	1
2	Spec. Funct. 3		OR-4 (a)		System Det 2		Plan 2		Ext. Perm 2		Offset 1 (7-Wire)		EV-B	72	2
3	Spec. Funct. 4		OR-4 (b)		System Det 3		Plan 3		Dimming		Offset 2 (7-Wire)		EV-C	73	3
4	NAND-3 (a)		OR-5 (a)		System Det 4		Plan 4		Set Clock		Offset 3 (7-Wire)		EV-D	74	4
5	NAND-3 (b)		OR-5 (b)		System Det 5		Plan 5		Stop Time		Free (7-Wire)		RR-1	51	5
6	NAND-4 (a)		OR-6 (a)		System Det 6		Plan 6		Flash Sense	81	Flash (7-Wire)		RR-2	52	6
7	NAND-4 (b)		OR-6 (b)		System Det 7		Plan 7		Manual Enable		Excl. Ped Omit		Spec. Event 1		7
8	OR-7 (a)		Fig 3 Diamond		System Det 8		Plan 8		Man. Advance		NOT-1		Spec. Event 2		8
9	OR-7 (b)		Fig 4 Diamond		Max Inhibit (nema)		Plan 9		External Alarm		NOT-2		External Lag		9
A	OR-7 (c)		AND-4 (a)		Force A (nema)		DELAY-A		Phase Bank 2		OR-1 (a)		AND-1 (a)		A
B	OR-7 (d)		AND-4 (b)		Force B (nema)		DELAY-B		Phase Bank 3		OR-1 (b)		AND-1 (b)		B
C	OR-8 (a)		NAND-1 (a)		C.N.A. (nema)		DELAY-C		Overlap Set 2		OR-2 (a)		AND-2 (a)		C
D	OR-8 (b)		NAND-1 (b)		Hold (nema)		DELAY-D		Overlap Set 3		OR-2 (b)		AND-2 (b)		D
E	OR-8 (c)		NAND-2 (a)		Max Recall		DELAY-E		Detector Set 2		OR-3 (a)		AND-3 (a)		E
F	OR-8 (d)		NAND-2 (b)		Min Recall		DELAY-F		Detector Set 3		OR-3 (b)		AND-3 (b)		F

Assignable Inputs **<E/126+Column+Row>**

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Phase ON - 1		Preempt Fail		Flasher 0		Free		NOT-1		TOD Out 1		Dial 2 (7-Wire)		0
1	Phase ON - 2		Sp Evnt Out 1		Flasher 1		Plan 1		OR-1		TOD Out 2		Dial 3 (7-Wire)		1
2	Phase ON - 3		Sp Evnt Out 2		Fast Flasher		Plan 2		OR-2		TOD Out 3		Offset 1 (7-Wire)		2
3	Phase ON - 4		Sp Evnt Out 3		Fig 3 Diamond		Plan 3		OR-3		TOD Out 4		Offset 2 (7-Wire)		3
4	Phase ON - 5		Sp Evnt Out 4		Fig 4 Diamond		Plan 4		AND-1		TOD Out 5		Offset 3 (7-Wire)		4
5	Phase ON - 6		Sp Evnt Out 5				Plan 5		AND-2		TOD Out 6		Free (7-Wire)		5
6	Phase ON - 7		Sp Evnt Out 6				Plan 6		AND-3		TOD Out 7		Flash (7-Wire)		6
7	Phase ON - 8		Sp Evnt Out 7				Plan 7		NOT-2		TOD Out 8		Preempt		7
8	Ph. Check - 1		Sp Evnt Out 8		NOT-3		Plan 8		EV-A		Adv. Warn - 1		Low Priority A		8
9	Ph. Check - 2				NOT-4		Plan 9		EV-B		Adv. Warn - 2		Low Priority B		9
A	Ph. Check - 3		Detector Fail		OR-4		Spec. Funct. 3		EV-C		DELAY-A		Low Priority C		A
B	Ph. Check - 4		Spec. Funct. 1		OR-5		Spec. Funct. 4		EV-D		DELAY-B		Low Priority D		B
C	Ph. Check - 5		Spec. Funct. 2		OR-6		NAND-3		RR-1		DELAY-C				C
D	Ph. Check - 6		Central Control		AND-4		NAND-4		RR-2		DELAY-D				D
E	Ph. Check - 7		Excl. Ped DW		NAND-1		OR-7		Spec. Event 1		DELAY-E				E
F	Ph. Check - 8		Excl. Ped WK		NAND-2		OR-8		Spec. Event 2		DELAY-F				F

Assignable Outputs **<E/127+Column+Row>**

INTERSECTION: Pomerado Rd & Stonebridge Py

233 Program

Coord Extra
1 = Programmed WALK Time for Sync Phases
2 = Always Terminate Sync Phase Peds

Row	Plan Name --->	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6	Plan 7	Plan 8	Plan 9	Row
0	Cycle Length										0
1	Phase 1 - ForceOff										1
2	Phase 2 - ForceOff										2
3	Phase 3 - ForceOff										3
4	Phase 4 - ForceOff										4
5	Phase 5 - ForceOff										5
6	Phase 6 - ForceOff										6
7	Phase 7 - ForceOff										7
8	Phase 8 - ForceOff										8
9	Ring Offset										9
A	Offset 1										A
B	Offset 2										B
C	Offset 3										C
D	Perm 1 - End										D
E	Hold Release										E
F	Zone Offset										F

Coordination - Timing Plans <C/1+Plan+Row>

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

Sync Phases <C/1+E+Row>

Row		Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6	Plan 7	Plan 8	Plan 9	Row
0	Ped Adjustment										0
1	Perm 2 - Start										1
2	Perm 2 - End										2
3	Perm 3 - Start										3
4	Perm 3 - End										4
5	Reservice Time										5
6	Reservice Phases										6
7											7
8	Pretimed Phases										8
9	Max Recall										9
A	Perm 1 Veh Phase										A
B	Perm 1 Ped Phase										B
C	Perm 2 Veh Phase										C
D	Perm 2 Ped Phase										D
E	Perm 3 Veh Phase										E
F	Perm 3 Ped Phase										F

NOT NEEDED

Coordination - Parameters <C/2+Plan+Row>

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

Lag Phases <C/1+F+Row>

Coordination Timing By:

APPENDIX B

INTERSECTION METHODOLOGY

SIGNALIZED INTERSECTIONS

For signalized intersections, level of service criteria are stated in terms of the average control delay per vehicle for a 15-minute analysis period. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. **Table 1** summarizes the delay thresholds for signalized intersections.

Level of service A describes operations with very low delay, (i.e. less than 10.0 seconds per vehicle). This occurs when progression is extremely favorable, and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.

Level of service B describes operations with delay in the range 10.1 seconds and 20.0 seconds per vehicle. This generally occurs with good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.

TABLE 1

LEVEL OF SERVICE THRESHOLDS FOR SIGNALIZED INTERSECTIONS

AVERAGE CONTROL DELAY PER VEHICLE (SECONDS/VEHICLE)			LEVEL OF SERVICE
0.0	≤	10.0	A
10.1	to	20.0	B
21.1	to	35.0	C
35.1	to	55.0	D
55.1	to	80.0	E
	≥	80.0	F

Source: Highway Capacity Manual, 2000.

Level of service C describes operations with delay in the range 20.1 seconds and 35.0 seconds per vehicle. These higher delays may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.

Level of service D describes operations with delay in the range 35.1 seconds and 55.0 seconds per vehicle. At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or higher v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are more frequent.

Level of service E describes operations with delay in the range of 55.1 seconds to 80.0 seconds per vehicle. This is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.

Level of service F describes operations with delay in excess of over 80.0 seconds per vehicle. This is considered to be unacceptable to most drivers. This condition often occurs with over-saturation (i.e., when arrival flow rates exceed the capacity of the intersection). It may also occur at high v/c ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

UNSIGNALIZED INTERSECTIONS

For unsignalized intersections, level of service is determined by the computed or measured control delay and is defined for each minor movement. Level of service is not defined for the intersection as a whole. **Table 2** depicts the criteria, which are based on the average control delay for any particular minor movement.

TABLE 2

LEVEL OF SERVICE THRESHOLDS FOR UNSIGNALIZED INTERSECTIONS

AVERAGE CONTROL DELAY PER VEHICLE (SECONDS/VEHICLE)	LEVEL OF SERVICE	EXPECTED DELAY TO MINOR STREET TRAFFIC
0.0 ≤ 10.0	A	Little or no delay
10.1 to 15.0	B	Short traffic delays
15.1 to 25.0	C	Average traffic delays
25.1 to 35.0	D	Long traffic delays
35.1 to 50.0	E	Very long traffic delays
≥ 50.0	F	Severe congestion

Source: Highway Capacity Manual, 2000.

Level of Service F exists when there are insufficient gaps of suitable size to allow a side street demand to safely cross through a major street traffic stream. This level of service is generally evident from extremely long control delays experienced by side-street traffic and by queuing on the minor-street approaches. The method, however, is based on a constant critical gap size; that is, the critical gap remains constant no matter how long the side-street motorist waits. LOS F may also appear in the form of side-street vehicles selecting smaller-than-usual gaps. In such cases, safety may be a problem, and some disruption to the major traffic stream may result. It is important to note that LOS F may not always result in long queues but may result in adjustments to normal gap acceptance behavior, which are more difficult to observe in the field than queuing.

APPENDIX C

CITY OF SAN DIEGO ROADWAY CLASSIFICATION TABLE

Roadway Segment LOS by Classification and Average Daily Traffic (ADT)

Table Appendix F-1 provides street classifications and associated LOS thresholds dependent on the roadway's average daily traffic (ADT).

TABLE APPENDIX F-1

ROADWAY CLASSIFICATIONS, LOS, AND AVERAGE DAILY TRAFFIC (ADT)

STREET CLASSIFICATION	LANES	LEVEL OF SERVICE				
		A	B	C	D	E
Expressway	8 lanes	40,000	56,000	80,000	93,500	107,000
Expressway	7 lanes	35,000	49,000	70,000	82,000	93,500
Expressway	6 lanes	30,000	42,000	60,000	70,000	80,000
Prime Arterial[1]	8 lanes	35,000	50,000	70,000	75,000	80,000
Prime Arterial[1]	7 lanes	30,000	42,500	60,000	65,000	70,000
Prime Arterial	6 lanes	25,000	35,000	50,000	55,000	60,000
Prime Arterial[10]	5 lanes	20,000	28,000	40,000	45,000	50,000
Prime Arterial[11]	4 lanes	17,500	24,500	35,000	40,000	45,000
Major Arterial[2]	7 lanes	22,500	31,500	45,000	50,000	55,000
Major Arterial	6 lanes	20,000	28,000	40,000	45,000	50,000
Major Arterial[3]	5 lanes	17,500	24,500	35,000	40,000	45,000
Major Arterial	4 lanes	15,000	21,000	30,000	35,000	40,000
Major Arterial	3 lanes	11,250	15,750	22,500	26,250	30,000
Major Arterial	2 lanes	7,500	10,500	15,000	17,500	20,000
Major Arterial *(one-way)*[4]	3 lanes	12,500	16,500	22,500	25,000	27,500
Major Arterial *(one-way)*[5]	2 lanes	10,000	13,000	17,500	20,000	22,500

STREET CLASSIFICATION	LANES	LEVEL OF SERVICE				
		A	B	C	D	E
Collector *(with two-way left turn lane)*	5 lanes	12,500	17,500	25,000	30,750	37,500
Collector *(with two-way left turn lane)*	4 lanes	10,000	14,000	20,000	25,000	30,000
Collector *(with two-way left turn lane)*	3 lanes	7,500	10,500	15,000	18,750	22,500
Collector *(with two-way left turn lane)*	2 lanes	5,000	7,000	10,000	13,000	15,000
Collector *(without two-way left turn lane)*	4 lanes	5,000	7,000	10,000	13,000	15,000
Collector *(without two-way left turn lane)*[6]	3 lanes	4,000	5,000	7,500	10,000	11,000
Collector *(without two-way left turn lane)*	2 lanes	2,500	3,500	5,000	6,500	8,000
Collector *(with no fronting property)*	2 lanes	4,000	5,500	7,500	9,000	10,000
Collector *(one-way)*[7]	3 lanes	11,000	14,000	19,000	22,500	26,000
Collector *(one-way)*[8]	2 lanes	7,500	9,500	12,500	15,000	17,500
Collector *(one-way)*[9]	1 lane	2,500	3,500	5,000	6,500	7,500
Sub-Collector *(Single-family)*	2 lanes	--	--	2,200	--	--

Notes:

The volumes and the average daily level of service listed above are only intended as a general planning guideline. 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.

[1]Calculated assuming that each additional lane above a 6-Ln Arterial adds 5,000 ADT for LOS A, 7,500 ADT for LOS B and 10,000 ADT for LOS C, D, and E

[2]Calculated assuming that ADT is 1/2 way between steps of a 6-Ln Major Arterial & 6 Ln Prime Arterial

[3]Calculated assuming that ADT is 1/2 way between steps of a 4-Ln Major Arterial & 6 Ln Major Arterial

[4]Calculated using: Capacity = 0.5 (6-Ln Major (2-way) + Added Capacity of 2,500 ADT)

[5]Calculated using: Capacity = 0.5 (4-Ln Major (2-way) + Added Capacity of 2,500 ADT)

[6]Calculated using: Capacity = 4-Ln Collector (no center lane) * (3/4)

[7]Calculated using: Capacity = 2-Ln Collector (one-way) * (3/2)

[8]Calculated using: Capacity = 0.5 (4-Ln Collector w/continuous left turn lane) + Added Capacity of 2,500 ADT)

[9]Calculated using: Capacity = 0.5 (2-Ln Collector w/ continuous left turn lane). Capacity took into account parking friction from both sides of roadway

[10] Calculated by applying same differences between 8-Ln Prime & 7-Ln Prime & 7-Ln Prime & 6-Ln Prime

[11] Calculated assuming ratio between 6-Ln Prime & 6-Ln Major applied to 4-Ln Major

APPENDIX D

SANDAG SERIES 14 SELECT ZONE MODEL RUNS

Forecast Modeling Notes

A Series 14 SANDAG Travel Demand Model was run for the proposed project with and without the Cypress Canyon Road extension. The SANDAG base land use for project MGRA 12249 includes 46 single family residential units. To derive the without project traffic volumes, the 46 dwelling units were removed. The proposed project development of 112 residential units were then added onto the without project scenario to develop with project traffic volumes. A few modeling notes are shown below:

<u>Cypress Canyon Park Drive - No connection</u>

1. The total ADT on Cypress Canyon Park Drive (without connection) – east of Angelique Street per the model is 2,682 Average Daily Traffic (ADT).
    - *Without Project:* Subtracting the 46 dwelling units (= 460 ADT and 66% distribution per the model), the total ADT on this segment is estimated as 2,380 ADT.
    - *With Project:* Adding the proposed project of 1,096 ADT at 46%, the total ADT is estimated as 2,885 ADT.

<u>Cypress Canyon Park Drive – With Connection</u>

1. The total ADT on Cypress Canyon Park Drive (with connection) – east of Angelique Street per the model is 1,402 ADT.
    - However, the model assumes that the Mundial Street can load onto the Cypress Canyon Road extension, which is not allowed or proposed. Therefore, the traffic loading of 836 ADT was added to the Cypress Canyon Park Drive to total 2,238 ADT.
    - *Without Project:* Subtracting the 46 dwelling units (= 460 ADT and 70% distribution per the model), the total ADT on this segment is estimated as 1,920 ADT.
    - *With Project:* The project does not add any trips to this segment; therefore, the total ADT remains as 1,920 ADT.

<u>Summary</u>

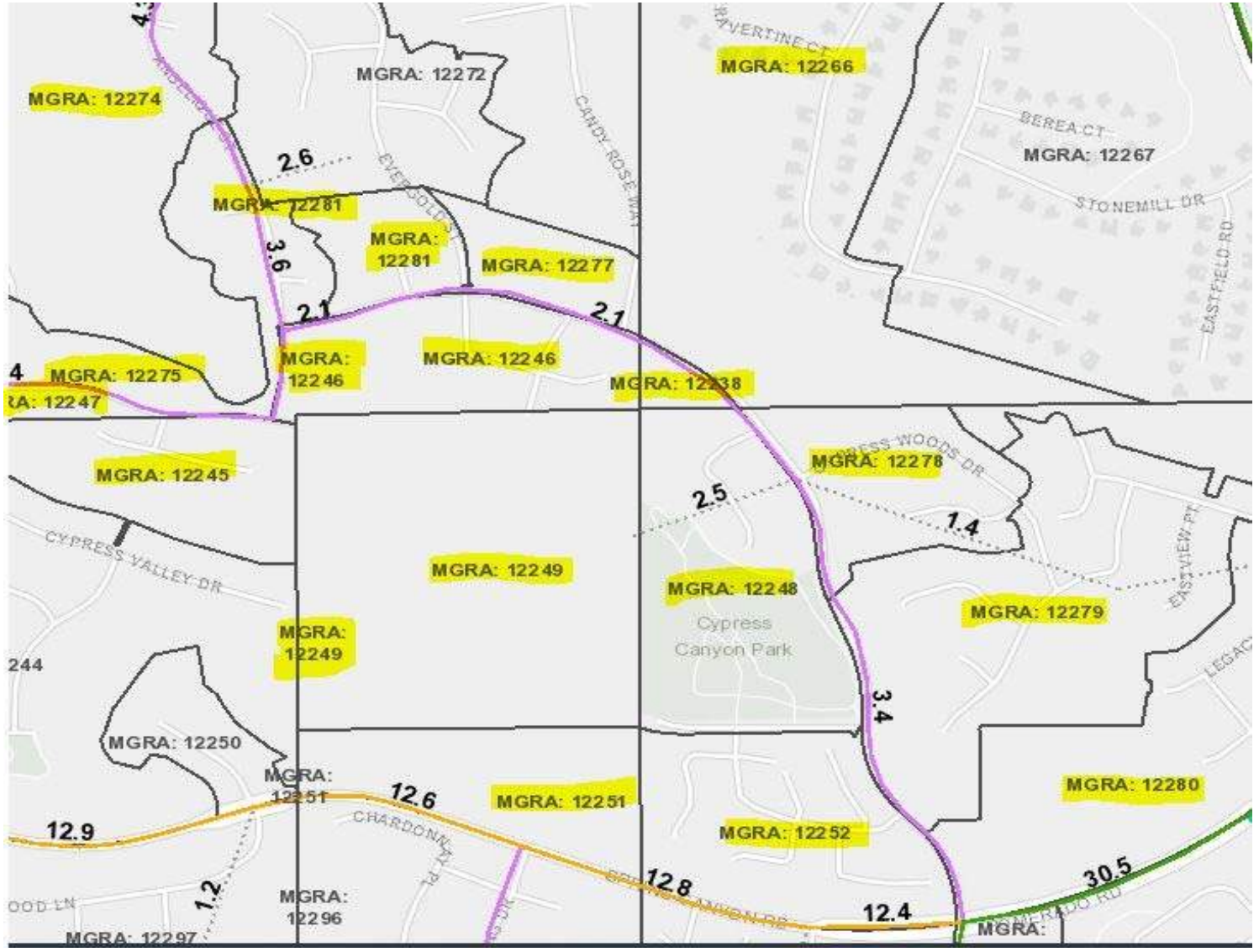
1. The total ADT on Cypress Canyon Road extension per the model is estimated as 1,370 ADT.
    - The reduction in ADT on Cypress Canyon Park Drive – east of Angelique Street due the connection is estimated as 965 ADT (2,885 without connection minus 1,920 with connection).
    - The model identifies induced demand due to the Cypress Road connection on the following segments. The induced demand comparison provided below is on the without project ADT's:
        - Cypress Canyon Park Drive: Cypress Canyon Road to Spring Canyon Road
            - Without connection: 1,810 ADT
            - With Connection: 2,560 ADT
            - Induced Demand: 750 ADT

- Angelique Street: Scripps Poway Parkway to Cypress Canyon Park Drive
    - Without connection: 4,130 ADT
    - With Connection: 4,610 ADT
    - Induced Demand: 480 ADT

- Cypress Canyon Road: Blue Cypress Drive to Angelique Street
    - Without connection: 2,640 ADT
    - With Connection: 2,510 ADT
    - Induced Demand: 130 ADT

SANDAG Model Inputs - TAZ 12249

yr	mgra	lu	lu_description	acres	hs_sf	hs_mf	hs_mh	emp_adj	hotel_rooms
2050	12249	1100	Single Family Residential	14.976	46	0	0	0	0
2050	12249	9101	Single Family Residential Without Units	3.469	0	0	0	0	0



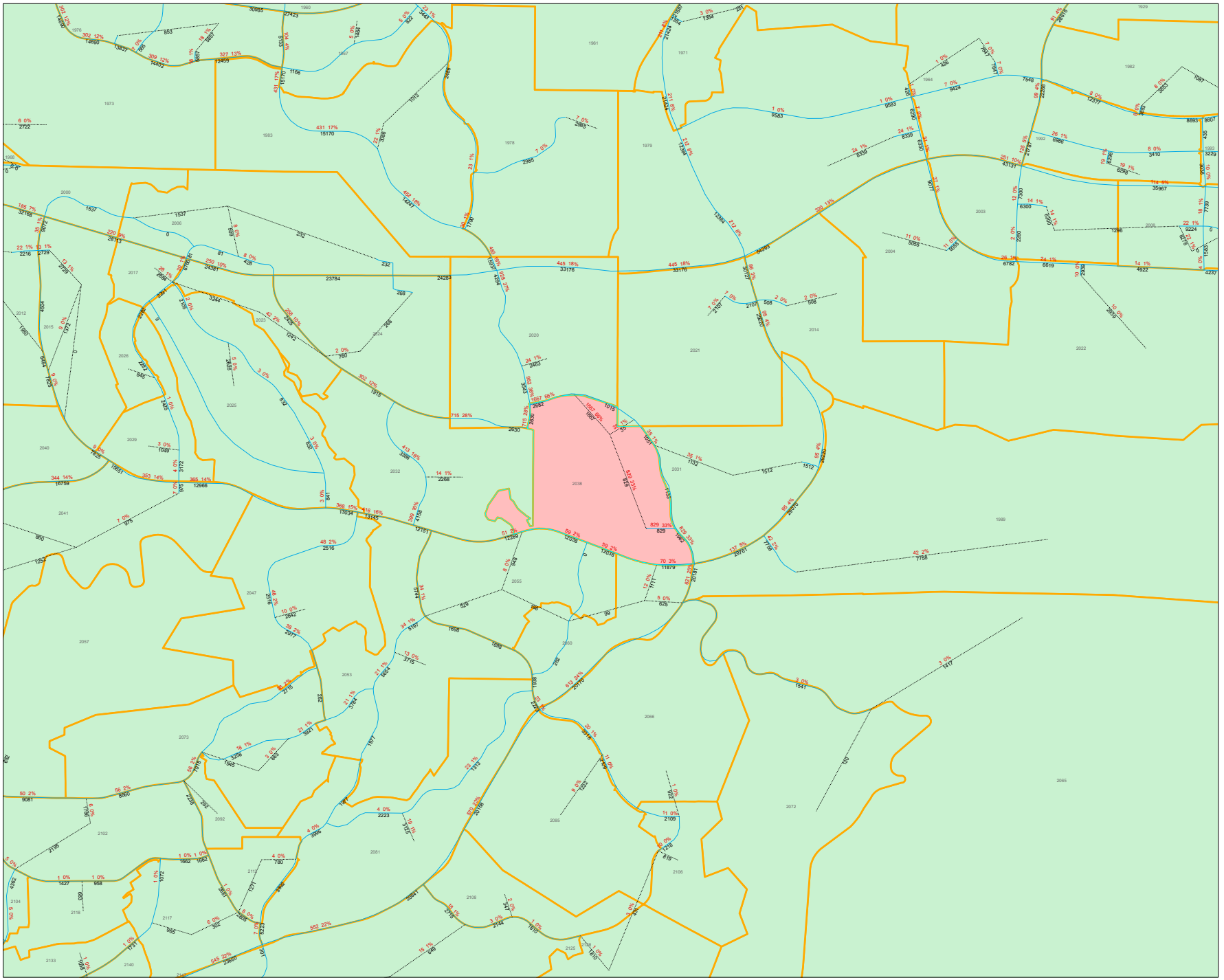
SANDAG
SR14
versiom14_1_1
hwy_load 574

2050rc
No Build

Cypress Canyon II

Select Zone Run

TAZ 2038



Selected Zone(s)

Select Zone Vol and %

Model Estimated ADT

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N

0 0.055 0.11 0.165
Miles

SANDAG
servicebureau

Date: January 27, 2021

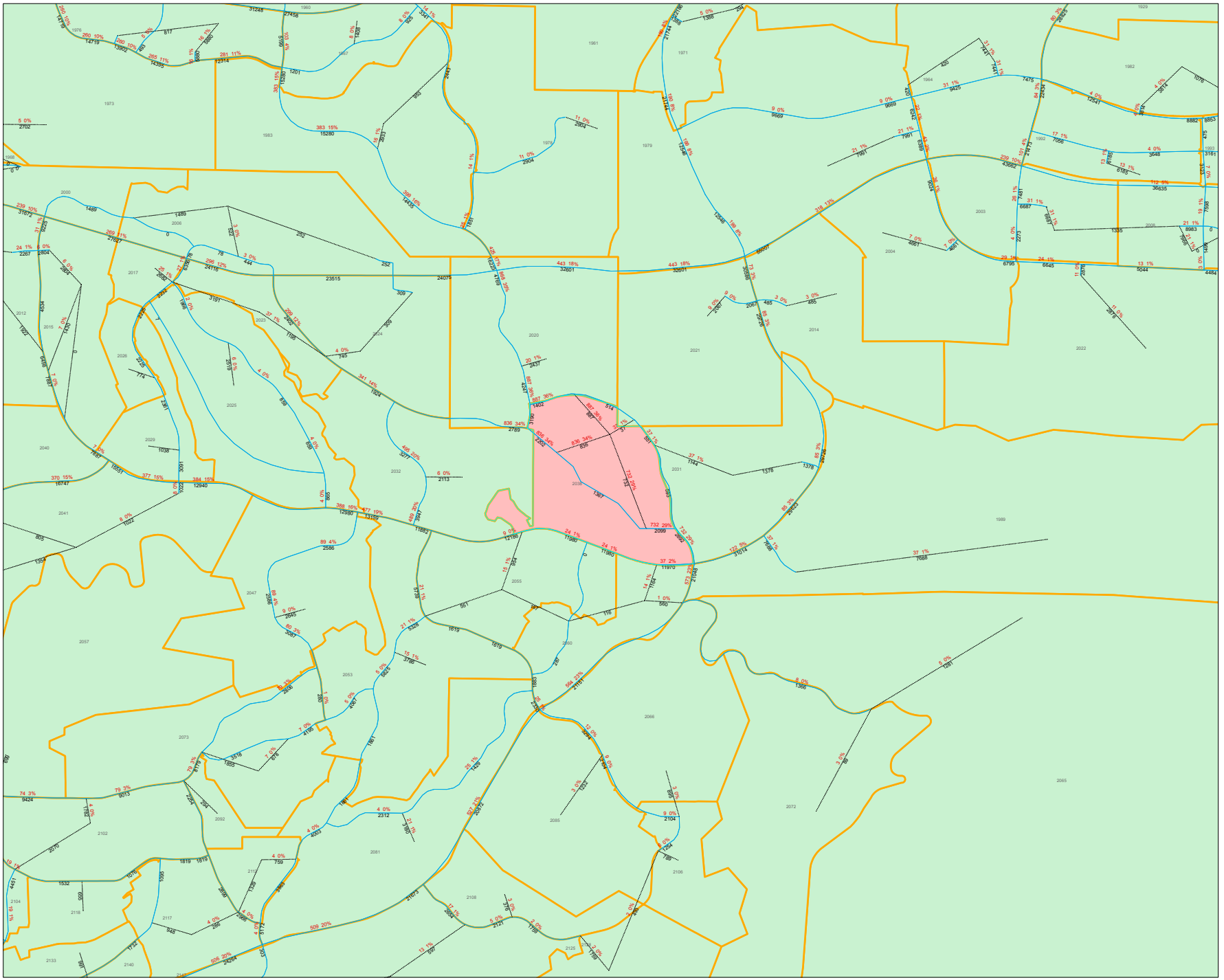
SANDAG
SR14
versiom14_1_1
hwy_load 581

2050rc
Build

Cypress Canyon II

Select Zone Run

TAZ 2038



join

<all other values>

ifc

1; 2; 3; 4; 5; 6; 7; 8; 9

10

Selected Zone(s)

\# Select Zone Vol and %

\# Model Estimated ADT

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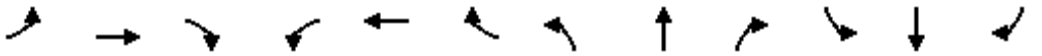
0 0.055 0.11 0.165
Miles

SANDAG
servicebureau

Date: February, 2021

APPENDIX E

EXISTING INTERSECTION ANALYSIS CALCULATION SHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1578	188	160	1540	6	412	22	56	8	14	52
Future Volume (veh/h)	30	1578	188	160	1540	6	412	22	56	8	14	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.95	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	1753	209	178	1711	7	475	0	62	9	16	58
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	2587	785	201	3129	13	622	0	264	35	63	74
Arrive On Green	0.02	0.51	0.51	0.11	0.60	0.60	0.17	0.00	0.17	0.05	0.05	0.05
Sat Flow, veh/h	1781	5106	1550	1781	5248	21	3563	0	1512	661	1176	1395
Grp Volume(v), veh/h	33	1753	209	178	1110	608	475	0	62	25	0	58
Grp Sat Flow(s),veh/h/ln	1781	1702	1550	1781	1702	1866	1781	0	1512	1837	0	1395
Q Serve(g_s), s	2.6	36.1	10.8	13.8	27.3	27.4	17.8	0.0	4.9	1.8	0.0	5.8
Cycle Q Clear(g_c), s	2.6	36.1	10.8	13.8	27.3	27.4	17.8	0.0	4.9	1.8	0.0	5.8
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	0.36		1.00
Lane Grp Cap(c), veh/h	42	2587	785	201	2029	1112	622	0	264	98	0	74
V/C Ratio(X)	0.78	0.68	0.27	0.88	0.55	0.55	0.76	0.00	0.23	0.25	0.00	0.78
Avail Cap(c_a), veh/h	88	2587	785	234	2029	1112	942	0	400	133	0	101
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	68.0	25.9	19.7	61.2	16.9	16.9	55.0	0.0	49.7	63.6	0.0	65.4
Incr Delay (d2), s/veh	11.1	1.4	0.8	25.5	1.1	1.9	0.8	0.0	0.2	0.5	0.0	16.2
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	1.3	14.8	4.1	7.7	10.9	12.2	8.1	0.0	1.9	0.9	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.1	27.4	20.5	86.7	18.0	18.9	55.8	0.0	49.9	64.1	0.0	81.7
LnGrp LOS	E	C	C	F	B	B	E	A	D	E	A	F
Approach Vol, veh/h		1995			1896			537			83	
Approach Delay, s/veh		27.5			24.7			55.1			76.4	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.2	76.9		12.4	7.7	89.5		30.5				
Change Period (Y+Rc), s	4.4	6.0		4.9	4.4	* 6		6.0				
Max Green Setting (Gmax), s	18.4	53.2		10.1	6.9	* 65		37.0				
Max Q Clear Time (g_c+I1), s	15.8	38.1		7.8	4.6	29.4		19.8				
Green Ext Time (p_c), s	0.1	12.5		0.0	0.0	22.4		1.0				

Intersection Summary		
HCM 6th Ctrl Delay		30.5
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1540	82	2	1486	2	120	6	22	12	10	2
Future Volume (veh/h)	0	1540	82	2	1486	2	120	6	22	12	10	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.96	1.00		0.80
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	0	1711	91	2	1651	2	133	7	24	13	11	2
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	1	2057	109	4	2307	3	765	79	273	52	43	8
Arrive On Green	0.00	0.60	0.60	0.00	0.63	0.63	0.22	0.22	0.22	0.03	0.03	0.03
Sat Flow, veh/h	1781	3428	181	1781	3642	4	3456	359	1231	1781	1474	268
Grp Volume(v), veh/h	0	880	922	2	805	848	133	0	31	13	0	13
Grp Sat Flow(s),veh/h/ln	1781	1777	1832	1781	1777	1869	1728	0	1590	1781	0	1742
Q Serve(g_s), s	0.0	55.0	56.7	0.2	42.5	42.6	4.4	0.0	2.2	1.0	0.0	1.0
Cycle Q Clear(g_c), s	0.0	55.0	56.7	0.2	42.5	42.6	4.4	0.0	2.2	1.0	0.0	1.0
Prop In Lane	1.00		0.10	1.00		0.00	1.00		0.77	1.00		0.15
Lane Grp Cap(c), veh/h	1	1066	1099	4	1126	1184	765	0	352	52	0	51
V/C Ratio(X)	0.00	0.83	0.84	0.53	0.72	0.72	0.17	0.00	0.09	0.25	0.00	0.25
Avail Cap(c_a), veh/h	51	1066	1099	51	1126	1184	765	0	352	52	0	51
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)	0.00	1.00	1.00	0.74	0.74	0.74	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	22.2	22.5	69.8	17.2	17.2	44.1	0.0	43.3	66.4	0.0	66.5
Incr Delay (d2), s/veh	0.0	7.3	7.7	27.5	2.9	2.8	0.5	0.0	0.5	11.1	0.0	11.7
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	0.0	24.3	25.8	0.1	17.6	18.5	1.9	0.0	0.9	0.6	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	29.5	30.2	97.3	20.1	20.0	44.6	0.0	43.8	77.5	0.0	78.1
LnGrp LOS	A	C	C	F	C	B	D	A	D	E	A	E
Approach Vol, veh/h		1802			1655			164			26	
Approach Delay, s/veh		29.9			20.1			44.5			77.8	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.7	90.0		9.0	0.0	94.7		36.3				
Change Period (Y+Rc), s	4.4	* 6		4.9	4.4	6.0		5.3				
Max Green Setting (Gmax), s	4.3	* 81		4.1	4.0	80.3		31.0				
Max Q Clear Time (g_c+I1), s	2.2	58.7		3.0	0.0	44.6		6.4				
Green Ext Time (p_c), s	0.0	20.0		0.0	0.0	28.9		0.3				

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

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	1514	28	28	1316	60	44	40	26	188	26	128
Future Volume (veh/h)	28	1514	28	28	1316	60	44	40	26	188	26	128
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	1760	33	33	1530	70	51	47	30	219	30	149
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	42	2293	989	42	2293	989	194	230	147	290	58	288
Arrive On Green	0.02	0.65	0.65	0.02	0.65	0.65	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1781	3554	1532	1781	3554	1532	1196	1050	670	1308	264	1313
Grp Volume(v), veh/h	33	1760	33	33	1530	70	51	0	77	219	0	179
Grp Sat Flow(s),veh/h/ln	1781	1777	1532	1781	1777	1532	1196	0	1721	1308	0	1577
Q Serve(g_s), s	2.6	48.7	1.1	2.6	37.6	2.4	5.5	0.0	5.1	23.0	0.0	14.0
Cycle Q Clear(g_c), s	2.6	48.7	1.1	2.6	37.6	2.4	19.5	0.0	5.1	28.1	0.0	14.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.39	1.00		0.83
Lane Grp Cap(c), veh/h	42	2293	989	42	2293	989	194	0	377	290	0	345
V/C Ratio(X)	0.78	0.77	0.03	0.78	0.67	0.07	0.26	0.00	0.20	0.76	0.00	0.52
Avail Cap(c_a), veh/h	88	2293	989	71	2293	989	232	0	431	328	0	391
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)	0.47	0.47	0.47	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	68.0	17.5	9.0	68.0	15.5	9.2	56.7	0.0	44.7	56.2	0.0	48.2
Incr Delay (d2), s/veh	5.5	1.2	0.0	11.1	1.6	0.1	0.3	0.0	0.1	7.0	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	19.4	0.4	1.3	15.2	0.8	1.7	0.0	2.2	8.2	0.0	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.5	18.7	9.0	79.1	17.0	9.4	57.0	0.0	44.8	63.2	0.0	48.6
LnGrp LOS	E	B	A	E	B	A	E	A	D	E	A	D
Approach Vol, veh/h		1826			1633			128			398	
Approach Delay, s/veh		19.5			18.0			49.7			56.6	
Approach LOS		B			B			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.7	96.3		36.0	7.7	96.3		36.0
Change Period (Y+Rc), s	4.4	* 6		5.3	4.4	6.0		* 5.3
Max Green Setting (Gmax), s	5.6	* 84		34.7	6.9	82.7		* 35
Max Q Clear Time (g_c+I1), s	4.6	50.7		30.1	4.6	39.6		21.5
Green Ext Time (p_c), s	0.0	29.0		0.5	0.0	32.0		0.3

Intersection Summary	
HCM 6th Ctrl Delay	23.5
HCM 6th LOS	C

Notes

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

Intersection	
Int Delay, s/veh	3.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	26	54	12	24	26
Future Vol, veh/h	18	26	54	12	24	26
Conflicting Peds, #/hr	10	10	0	12	12	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	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	31	65	14	29	31

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	183	94	0	0	91	0
Stage 1	84	-	-	-	-	-
Stage 2	99	-	-	-	-	-
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	806	963	-	-	1504	-
Stage 1	939	-	-	-	-	-
Stage 2	925	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	774	943	-	-	1487	-
Mov Cap-2 Maneuver	774	-	-	-	-	-
Stage 1	929	-	-	-	-	-
Stage 2	898	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.4	0	3.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	866	1487	-
HCM Lane V/C Ratio	-	-	0.061	0.019	-
HCM Control Delay (s)	-	-	9.4	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection	
Int Delay, s/veh	7.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	66	0	0	0	0	44
Future Vol, veh/h	66	0	0	0	0	44
Conflicting Peds, #/hr	10	0	0	10	10	10
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	80	0	0	0	0	53

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	11	0	-	0	181	21
Stage 1	-	-	-	-	11	-
Stage 2	-	-	-	-	170	-
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	1608	-	-	-	808	1056
Stage 1	-	-	-	-	1012	-
Stage 2	-	-	-	-	860	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1593	-	-	-	752	1036
Mov Cap-2 Maneuver	-	-	-	-	752	-
Stage 1	-	-	-	-	952	-
Stage 2	-	-	-	-	851	-

Approach	EB	WB	SB
HCM Control Delay, s	7.4	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1593	-	-	-	1036
HCM Lane V/C Ratio	0.05	-	-	-	0.051
HCM Control Delay (s)	7.4	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.2

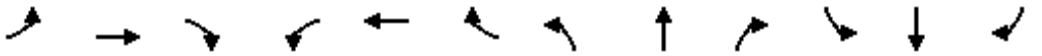
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	18	18	56	94	10
Future Vol, veh/h	6	18	18	56	94	10
Conflicting Peds, #/hr	10	10	10	0	0	10
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	70	70	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	26	26	80	134	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	293	161	158	0	-	0
Stage 1	151	-	-	-	-	-
Stage 2	142	-	-	-	-	-
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	698	884	1422	-	-	-
Stage 1	877	-	-	-	-	-
Stage 2	885	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	671	867	1408	-	-	-
Mov Cap-2 Maneuver	671	-	-	-	-	-
Stage 1	852	-	-	-	-	-
Stage 2	876	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	1.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1408	-	808	-	-
HCM Lane V/C Ratio	0.018	-	0.042	-	-
HCM Control Delay (s)	7.6	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	348	20	524	312	18	26	40	790	18	100	16
Future Volume (veh/h)	28	348	20	524	312	18	26	40	790	18	100	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	382	22	576	343	20	29	44	868	20	110	18
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	43	661	38	675	1243	72	41	670	862	31	550	90
Arrive On Green	0.02	0.19	0.19	0.20	0.37	0.37	0.02	0.36	0.36	0.02	0.35	0.35
Sat Flow, veh/h	1781	3407	195	3456	3404	197	1781	1870	1543	1781	1561	255
Grp Volume(v), veh/h	31	198	206	576	178	185	29	44	868	20	0	128
Grp Sat Flow(s),veh/h/ln	1781	1777	1826	1728	1777	1824	1781	1870	1543	1781	0	1816
Q Serve(g_s), s	1.6	9.2	9.3	14.6	6.4	6.5	1.5	1.4	32.4	1.0	0.0	4.4
Cycle Q Clear(g_c), s	1.6	9.2	9.3	14.6	6.4	6.5	1.5	1.4	32.4	1.0	0.0	4.4
Prop In Lane	1.00		0.11	1.00		0.11	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	43	344	354	675	649	666	41	670	862	31	0	640
V/C Ratio(X)	0.73	0.58	0.58	0.85	0.27	0.28	0.71	0.07	1.01	0.64	0.00	0.20
Avail Cap(c_a), veh/h	126	550	565	1360	1143	1173	79	670	862	110	0	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	43.9	33.1	33.1	35.2	20.3	20.3	43.9	19.1	20.4	44.2	0.0	20.4
Incr Delay (d2), s/veh	8.5	2.4	2.4	1.2	0.4	0.4	8.2	0.2	32.4	8.0	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	0.8	4.1	4.3	6.1	2.7	2.8	0.7	0.6	23.9	0.5	0.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.3	35.5	35.5	36.4	20.6	20.6	52.1	19.3	52.7	52.1	0.0	21.1
LnGrp LOS	D	D	D	D	C	C	D	B	F	D	A	C
Approach Vol, veh/h		435			939			941			148	
Approach Delay, s/veh		36.7			30.3			51.1			25.3	
Approach LOS		D			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.0	38.1	22.1	24.3	6.5	37.6	6.6	39.8
Change Period (Y+Rc), s	4.4	5.7	4.4	6.8	4.4	* 5.7	4.4	* 6.8
Max Green Setting (Gmax), s	5.6	29.5	35.6	28.0	4.0	* 32	6.4	* 58
Max Q Clear Time (g_c+I1), s	3.0	34.4	16.6	11.3	3.5	6.4	3.6	8.5
Green Ext Time (p_c), s	0.0	0.0	1.1	3.2	0.0	0.9	0.0	3.8

Intersection Summary	
HCM 6th Ctrl Delay	39.1
HCM 6th LOS	D

Notes

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



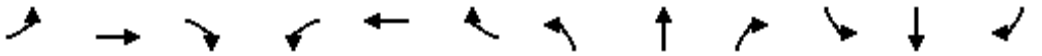
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	948	190	68	576	260	188
Future Volume (veh/h)	948	190	68	576	260	188
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	998	200	72	606	274	198
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1795	771	93	2148	926	425
Arrive On Green	0.51	0.51	0.05	0.60	0.27	0.27
Sat Flow, veh/h	3647	1526	1781	3647	3456	1585
Grp Volume(v), veh/h	998	200	72	606	274	198
Grp Sat Flow(s),veh/h/ln	1777	1526	1781	1777	1728	1585
Q Serve(g_s), s	18.0	7.0	3.7	7.6	5.9	9.7
Cycle Q Clear(g_c), s	18.0	7.0	3.7	7.6	5.9	9.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1795	771	93	2148	926	425
V/C Ratio(X)	0.56	0.26	0.78	0.28	0.30	0.47
Avail Cap(c_a), veh/h	1795	771	222	2450	926	425
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	15.9	13.1	43.7	8.8	27.1	28.5
Incr Delay (d2), s/veh	1.2	0.8	5.1	0.1	0.8	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	2.5	1.8	2.7	2.5	4.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.1	14.0	48.8	8.9	27.9	32.2
LnGrp LOS	B	B	D	A	C	C
Approach Vol, veh/h	1198			678	472	
Approach Delay, s/veh	16.6			13.2	29.7	
Approach LOS	B			B	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	9.3	54.0				63.3	30.0
Change Period (Y+Rc), s	4.4	6.9				* 6.9	5.0
Max Green Setting (Gmax), s	11.6	47.1				* 64	25.0
Max Q Clear Time (g_c+I1), s	5.7	20.0				9.6	11.7
Green Ext Time (p_c), s	0.0	13.0				9.2	1.2

Intersection Summary	
HCM 6th Ctrl Delay	18.3
HCM 6th LOS	B

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	1269	212	249	1634	2	290	26	155	3	24	45
Future Volume (veh/h)	93	1269	212	249	1634	2	290	26	155	3	24	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.95	1.00		0.88
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	104	1426	238	280	1836	2	347	0	174	3	27	51
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	125	2315	702	304	2917	3	572	0	243	9	82	68
Arrive On Green	0.07	0.45	0.45	0.17	0.55	0.55	0.16	0.00	0.16	0.05	0.05	0.05
Sat Flow, veh/h	1781	5106	1548	1781	5267	6	3563	0	1513	186	1675	1397
Grp Volume(v), veh/h	104	1426	238	280	1186	652	347	0	174	30	0	51
Grp Sat Flow(s),veh/h/ln	1781	1702	1548	1781	1702	1869	1781	0	1513	1861	0	1397
Q Serve(g_s), s	7.4	27.1	12.7	19.8	30.6	30.6	11.6	0.0	14.0	2.0	0.0	4.6
Cycle Q Clear(g_c), s	7.4	27.1	12.7	19.8	30.6	30.6	11.6	0.0	14.0	2.0	0.0	4.6
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.10		1.00
Lane Grp Cap(c), veh/h	125	2315	702	304	1885	1035	572	0	243	91	0	68
V/C Ratio(X)	0.83	0.62	0.34	0.92	0.63	0.63	0.61	0.00	0.72	0.33	0.00	0.75
Avail Cap(c_a), veh/h	125	2315	702	315	1885	1035	1030	0	437	118	0	88
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	58.7	26.5	22.6	52.2	19.6	19.6	50.0	0.0	50.9	58.8	0.0	60.1
Incr Delay (d2), s/veh	33.6	1.2	1.3	30.0	1.6	2.9	0.4	0.0	1.5	0.8	0.0	15.2
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	4.5	11.2	4.9	11.4	12.3	13.8	5.2	0.0	5.4	1.0	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	92.3	27.8	23.9	82.2	21.2	22.5	50.3	0.0	52.4	59.6	0.0	75.3
LnGrp LOS	F	C	C	F	C	C	D	A	D	E	A	E
Approach Vol, veh/h		1768			2118			521			81	
Approach Delay, s/veh		31.0			29.6			51.0			69.5	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	26.2	64.0		11.2	13.4	76.9		26.6				
Change Period (Y+Rc), s	4.4	6.0		4.9	4.4	* 6		6.0				
Max Green Setting (Gmax), s	22.6	39.0		8.1	9.0	* 53		37.0				
Max Q Clear Time (g_c+I1), s	21.8	29.1		6.6	9.4	32.6		16.0				
Green Ext Time (p_c), s	0.0	7.8		0.0	0.0	15.8		1.0				

Intersection Summary			
HCM 6th Ctrl Delay		33.4	
HCM 6th LOS		C	

Notes

User approved volume balancing among the lanes for turning movement.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	1187	137	29	1727	21	96	6	36	17	5	3
Future Volume (veh/h)	18	1187	137	29	1727	21	96	6	36	17	5	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.97	1.00		0.84
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	19	1236	143	30	1799	22	100	6	38	18	5	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	27	1733	200	38	1966	24	840	52	330	60	34	21
Arrive On Green	0.02	0.54	0.54	0.02	0.55	0.55	0.24	0.24	0.24	0.03	0.03	0.03
Sat Flow, veh/h	1781	3202	369	1781	3594	44	3456	214	1357	1781	1017	610
Grp Volume(v), veh/h	19	684	695	30	888	933	100	0	44	18	0	8
Grp Sat Flow(s),veh/h/ln	1781	1777	1794	1781	1777	1861	1728	0	1571	1781	0	1628
Q Serve(g_s), s	1.4	36.7	37.2	2.1	57.9	58.3	2.9	0.0	2.8	1.3	0.0	0.6
Cycle Q Clear(g_c), s	1.4	36.7	37.2	2.1	57.9	58.3	2.9	0.0	2.8	1.3	0.0	0.6
Prop In Lane	1.00		0.21	1.00		0.02	1.00		0.86	1.00		0.38
Lane Grp Cap(c), veh/h	27	962	971	38	972	1018	840	0	382	60	0	55
V/C Ratio(X)	0.69	0.71	0.72	0.79	0.91	0.92	0.12	0.00	0.12	0.30	0.00	0.15
Avail Cap(c_a), veh/h	58	962	971	92	972	1018	840	0	382	60	0	55
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.54	0.54	0.54	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	62.7	21.9	22.0	62.4	26.2	26.3	37.8	0.0	37.7	60.4	0.0	60.1
Incr Delay (d2), s/veh	11.1	4.5	4.5	7.3	8.6	8.6	0.3	0.0	0.6	12.4	0.0	5.6
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	0.7	16.1	16.5	1.0	25.8	27.2	1.3	0.0	1.2	0.8	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.9	26.3	26.5	69.6	34.8	34.9	38.1	0.0	38.3	72.8	0.0	65.6
LnGrp LOS	E	C	C	E	C	C	D	A	D	E	A	E
Approach Vol, veh/h		1398			1851			144			26	
Approach Delay, s/veh		27.1			35.4			38.1			70.6	
Approach LOS		C			D			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.1	75.3		9.2	6.4	76.0		36.4
Change Period (Y+Rc), s	4.4	* 6		4.9	4.4	6.0		5.3
Max Green Setting (Gmax), s	6.6	* 66		4.3	4.2	67.8		31.1
Max Q Clear Time (g_c+I1), s	4.1	39.2		3.3	3.4	60.3		4.9
Green Ext Time (p_c), s	0.0	19.8		0.0	0.0	7.1		0.3

Intersection Summary		
HCM 6th Ctrl Delay	32.4	
HCM 6th LOS	C	

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	1097	53	77	1614	222	42	27	45	161	42	63
Future Volume (veh/h)	102	1097	53	77	1614	222	42	27	45	161	42	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.96	0.99		0.96
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	110	1180	57	83	1735	239	45	29	48	173	45	68
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	134	2204	950	104	2145	924	233	123	203	264	130	197
Arrive On Green	0.07	0.62	0.62	0.06	0.60	0.60	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1781	3554	1531	1781	3554	1531	1266	617	1022	1306	656	991
Grp Volume(v), veh/h	110	1180	57	83	1735	239	45	0	77	173	0	113
Grp Sat Flow(s),veh/h/ln	1781	1777	1531	1781	1777	1531	1266	0	1639	1306	0	1646
Q Serve(g_s), s	7.8	24.2	1.9	5.9	48.4	9.4	4.1	0.0	5.1	16.4	0.0	7.6
Cycle Q Clear(g_c), s	7.8	24.2	1.9	5.9	48.4	9.4	11.6	0.0	5.1	21.5	0.0	7.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.62	1.00		0.60
Lane Grp Cap(c), veh/h	134	2204	950	104	2145	924	233	0	326	264	0	327
V/C Ratio(X)	0.82	0.54	0.06	0.79	0.81	0.26	0.19	0.00	0.24	0.66	0.00	0.35
Avail Cap(c_a), veh/h	134	2204	950	177	2145	924	275	0	380	304	0	377
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)	0.63	0.63	0.63	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.4	13.8	9.6	59.5	19.6	11.9	49.1	0.0	43.1	52.2	0.0	44.1
Incr Delay (d2), s/veh	21.1	0.6	0.1	5.1	3.4	0.7	0.1	0.0	0.1	2.7	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	9.6	0.6	2.8	20.0	3.3	1.3	0.0	2.1	5.6	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.5	14.4	9.7	64.6	23.0	12.6	49.3	0.0	43.3	54.8	0.0	44.4
LnGrp LOS	E	B	A	E	C	B	D	A	D	D	A	D
Approach Vol, veh/h		1347			2057			122			286	
Approach Delay, s/veh		19.5			23.5			45.5			50.7	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.9	85.4		30.7	14.0	83.3		30.7
Change Period (Y+Rc), s	4.4	* 6		5.3	4.4	6.0		* 5.3
Max Green Setting (Gmax), s	12.7	* 71		29.3	9.6	73.4		* 30
Max Q Clear Time (g_c+I1), s	7.9	26.2		23.5	9.8	50.4		13.6
Green Ext Time (p_c), s	0.0	24.9		0.4	0.0	21.0		0.3

Intersection Summary	
HCM 6th Ctrl Delay	24.8
HCM 6th LOS	C

Notes

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

Intersection	
Int Delay, s/veh	3.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	36	45	24	42	56
Future Vol, veh/h	21	36	45	24	42	56
Conflicting Peds, #/hr	10	10	0	10	10	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	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	43	54	29	51	67

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	258	89	0	0	93	0
Stage 1	79	-	-	-	-	-
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	731	969	-	-	1501	-
Stage 1	944	-	-	-	-	-
Stage 2	852	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	691	951	-	-	1487	-
Mov Cap-2 Maneuver	691	-	-	-	-	-
Stage 1	935	-	-	-	-	-
Stage 2	814	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.7	0	3.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	835	1487	-
HCM Lane V/C Ratio	-	-	0.082	0.034	-
HCM Control Delay (s)	-	-	9.7	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	8.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	69	0	0	0	0	77
Future Vol, veh/h	69	0	0	0	0	77
Conflicting Peds, #/hr	10	0	0	10	10	10
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	83	0	0	0	0	93

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	11	0	-	0	187	21
Stage 1	-	-	-	-	11	-
Stage 2	-	-	-	-	176	-
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	1608	-	-	-	802	1056
Stage 1	-	-	-	-	1012	-
Stage 2	-	-	-	-	855	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1593	-	-	-	745	1036
Mov Cap-2 Maneuver	-	-	-	-	745	-
Stage 1	-	-	-	-	950	-
Stage 2	-	-	-	-	846	-

Approach	EB	WB	SB
HCM Control Delay, s	7.4	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1593	-	-	-	1036
HCM Lane V/C Ratio	0.052	-	-	-	0.09
HCM Control Delay (s)	7.4	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.3

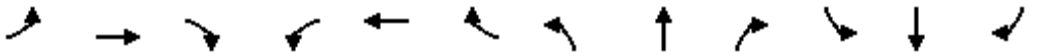
Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	29	33	114	56	18
Future Vol, veh/h	11	29	33	114	56	18
Conflicting Peds, #/hr	10	10	10	0	0	10
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	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	33	38	130	64	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	300	94	94	0	-	0
Stage 1	84	-	-	-	-	-
Stage 2	216	-	-	-	-	-
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	691	963	1500	-	-	-
Stage 1	939	-	-	-	-	-
Stage 2	820	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	659	945	1486	-	-	-
Mov Cap-2 Maneuver	659	-	-	-	-	-
Stage 1	903	-	-	-	-	-
Stage 2	812	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	1.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1486	-	844	-	-
HCM Lane V/C Ratio	0.025	-	0.054	-	-
HCM Control Delay (s)	7.5	0	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	395	27	633	309	21	42	89	773	20	39	30
Future Volume (veh/h)	57	395	27	633	309	21	42	89	773	20	39	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	61	425	29	681	332	23	45	96	831	22	42	32
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	79	685	47	778	1293	89	57	608	858	33	303	231
Arrive On Green	0.04	0.20	0.20	0.23	0.38	0.38	0.03	0.32	0.32	0.02	0.31	0.31
Sat Flow, veh/h	1781	3367	229	3456	3362	231	1781	1870	1541	1781	971	740
Grp Volume(v), veh/h	61	223	231	681	175	180	45	96	831	22	0	74
Grp Sat Flow(s),veh/h/ln	1781	1777	1819	1728	1777	1817	1781	1870	1541	1781	0	1712
Q Serve(g_s), s	3.2	10.7	10.8	17.8	6.3	6.4	2.3	3.4	30.4	1.1	0.0	2.9
Cycle Q Clear(g_c), s	3.2	10.7	10.8	17.8	6.3	6.4	2.3	3.4	30.4	1.1	0.0	2.9
Prop In Lane	1.00		0.13	1.00		0.13	1.00		1.00	1.00		0.43
Lane Grp Cap(c), veh/h	79	362	370	778	684	699	57	608	858	33	0	533
V/C Ratio(X)	0.78	0.62	0.62	0.87	0.26	0.26	0.79	0.16	0.97	0.66	0.00	0.14
Avail Cap(c_a), veh/h	185	532	544	1278	1024	1047	88	608	858	109	0	591
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.3	33.9	34.0	35.0	19.6	19.7	45.0	22.5	20.4	45.6	0.0	23.2
Incr Delay (d2), s/veh	6.0	2.7	2.7	2.2	0.3	0.3	11.1	0.1	23.3	8.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	4.8	5.0	7.5	2.6	2.7	1.2	1.5	21.3	0.6	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.3	36.7	36.7	37.2	19.9	20.0	56.1	22.6	43.8	53.8	0.0	23.3
LnGrp LOS	D	D	D	D	B	B	E	C	D	D	A	C
Approach Vol, veh/h		515			1036			972			96	
Approach Delay, s/veh		38.3			31.3			42.3			30.3	
Approach LOS		D			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.1	36.1	25.5	25.8	7.4	34.8	8.5	42.8
Change Period (Y+Rc), s	4.4	5.7	4.4	6.8	4.4	* 5.7	4.4	* 6.8
Max Green Setting (Gmax), s	5.7	30.4	34.6	28.0	4.6	* 32	9.7	* 54
Max Q Clear Time (g_c+I1), s	3.1	32.4	19.8	12.8	4.3	4.9	5.2	8.4
Green Ext Time (p_c), s	0.0	0.0	1.3	3.5	0.0	0.5	0.0	3.7

Intersection Summary	
HCM 6th Ctrl Delay	36.7
HCM 6th LOS	D

Notes

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



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	927	252	158	800	179	150
Future Volume (veh/h)	927	252	158	800	179	150
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	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	1008	274	172	870	195	163
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1624	696	207	2207	863	396
Arrive On Green	0.46	0.46	0.12	0.62	0.25	0.25
Sat Flow, veh/h	3647	1524	1781	3647	3456	1585
Grp Volume(v), veh/h	1008	274	172	870	195	163
Grp Sat Flow(s),veh/h/ln	1777	1524	1781	1777	1728	1585
Q Serve(g_s), s	19.8	11.0	8.7	11.3	4.1	7.9
Cycle Q Clear(g_c), s	19.8	11.0	8.7	11.3	4.1	7.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1624	696	207	2207	863	396
V/C Ratio(X)	0.62	0.39	0.83	0.39	0.23	0.41
Avail Cap(c_a), veh/h	1624	696	360	2558	863	396
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	19.0	16.6	39.8	8.8	27.5	28.9
Incr Delay (d2), s/veh	1.8	1.7	3.3	0.2	0.6	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	4.0	3.9	4.0	1.8	3.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.7	18.2	43.1	9.0	28.1	32.0
LnGrp LOS	C	B	D	A	C	C
Approach Vol, veh/h	1282			1042	358	
Approach Delay, s/veh	20.2			14.6	29.9	
Approach LOS	C			B	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	15.1	49.0				64.1	28.0
Change Period (Y+Rc), s	4.4	6.9				* 6.9	5.0
Max Green Setting (Gmax), s	18.6	42.1				* 66	23.0
Max Q Clear Time (g_c+I1), s	10.7	21.8				13.3	9.9
Green Ext Time (p_c), s	0.1	11.5				14.9	0.9

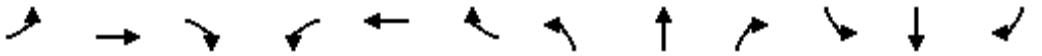
Intersection Summary	
HCM 6th Ctrl Delay	19.3
HCM 6th LOS	B

Notes

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

APPENDIX F

OPENING YEAR 2025 (WITH CONNECTION) WITHOUT PROJECT INTERSECTION ANALYSIS CALCULATION SHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	1642	196	167	1602	7	429	23	59	9	15	55
Future Volume (veh/h)	32	1642	196	167	1602	7	429	23	59	9	15	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.95	1.00		0.88
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	36	1824	218	186	1780	8	496	0	66	10	17	61
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	46	2530	768	209	3079	14	639	0	271	38	64	78
Arrive On Green	0.03	0.50	0.50	0.12	0.59	0.59	0.18	0.00	0.18	0.06	0.06	0.06
Sat Flow, veh/h	1781	5106	1550	1781	5246	24	3563	0	1513	680	1156	1401
Grp Volume(v), veh/h	36	1824	218	186	1155	633	496	0	66	27	0	61
Grp Sat Flow(s),veh/h/ln	1781	1702	1550	1781	1702	1865	1781	0	1513	1836	0	1401
Q Serve(g_s), s	2.8	39.3	11.6	14.4	29.7	29.7	18.6	0.0	5.2	2.0	0.0	6.0
Cycle Q Clear(g_c), s	2.8	39.3	11.6	14.4	29.7	29.7	18.6	0.0	5.2	2.0	0.0	6.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	0.37		1.00
Lane Grp Cap(c), veh/h	46	2530	768	209	1998	1095	639	0	271	102	0	78
V/C Ratio(X)	0.78	0.72	0.28	0.89	0.58	0.58	0.78	0.00	0.24	0.26	0.00	0.78
Avail Cap(c_a), veh/h	88	2530	768	234	1998	1095	942	0	400	132	0	101
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	67.8	27.7	20.7	60.9	18.1	18.1	54.8	0.0	49.3	63.4	0.0	65.3
Incr Delay (d2), s/veh	10.1	1.8	0.9	27.6	1.2	2.2	1.2	0.0	0.2	0.5	0.0	18.9
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	1.4	16.3	4.4	8.1	11.9	13.3	8.5	0.0	2.0	0.9	0.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.8	29.5	21.7	88.4	19.3	20.3	56.0	0.0	49.5	63.9	0.0	84.2
LnGrp LOS	E	C	C	F	B	C	E	A	D	E	A	F
Approach Vol, veh/h		2078			1974			562			88	
Approach Delay, s/veh		29.6			26.1			55.2			77.9	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.8	75.4		12.7	8.0	88.2		31.1				
Change Period (Y+Rc), s	4.4	6.0		4.9	4.4	* 6		6.0				
Max Green Setting (Gmax), s	18.4	53.2		10.1	6.9	* 65		37.0				
Max Q Clear Time (g_c+I1), s	16.4	41.3		8.0	4.8	31.7		20.6				
Green Ext Time (p_c), s	0.1	10.4		0.0	0.0	22.4		1.0				

Intersection Summary		
HCM 6th Ctrl Delay		32.1
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1602	86	3	1546	3	115	7	23	13	11	3
Future Volume (veh/h)	0	1602	86	3	1546	3	115	7	23	13	11	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.96	1.00		0.80
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	0	1780	96	3	1718	3	128	8	26	14	12	3
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	1	2052	110	6	2306	4	765	83	270	52	40	10
Arrive On Green	0.00	0.60	0.60	0.00	0.63	0.63	0.22	0.22	0.22	0.03	0.03	0.03
Sat Flow, veh/h	1781	3426	183	1781	3639	6	3456	375	1218	1781	1366	341
Grp Volume(v), veh/h	0	915	961	3	839	882	128	0	34	14	0	15
Grp Sat Flow(s),veh/h/ln	1781	1777	1832	1781	1777	1869	1728	0	1593	1781	0	1707
Q Serve(g_s), s	0.0	59.6	61.9	0.2	45.8	45.9	4.2	0.0	2.4	1.1	0.0	1.2
Cycle Q Clear(g_c), s	0.0	59.6	61.9	0.2	45.8	45.9	4.2	0.0	2.4	1.1	0.0	1.2
Prop In Lane	1.00		0.10	1.00		0.00	1.00		0.76	1.00		0.20
Lane Grp Cap(c), veh/h	1	1064	1097	6	1126	1184	765	0	353	52	0	50
V/C Ratio(X)	0.00	0.86	0.88	0.54	0.74	0.75	0.17	0.00	0.10	0.27	0.00	0.30
Avail Cap(c_a), veh/h	51	1064	1097	51	1126	1184	765	0	353	52	0	50
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)	0.00	1.00	1.00	0.68	0.68	0.68	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	23.2	23.7	69.7	17.8	17.8	44.1	0.0	43.4	66.5	0.0	66.5
Incr Delay (d2), s/veh	0.0	9.1	9.8	18.5	3.1	2.9	0.5	0.0	0.5	12.2	0.0	14.7
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	0.0	26.7	28.7	0.1	19.0	20.0	1.9	0.0	1.0	0.7	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	32.3	33.5	88.2	20.9	20.8	44.5	0.0	43.9	78.7	0.0	81.3
LnGrp LOS	A	C	C	F	C	C	D	A	D	E	A	F
Approach Vol, veh/h		1876			1724			162			29	
Approach Delay, s/veh		32.9			20.9			44.4			80.0	
Approach LOS		C			C			D			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.8	89.9		9.0	0.0	94.7		36.3				
Change Period (Y+Rc), s	4.4	* 6		4.9	4.4	6.0		5.3				
Max Green Setting (Gmax), s	4.8	* 81		4.1	4.0	80.3		31.0				
Max Q Clear Time (g_c+I1), s	2.2	63.9		3.2	0.0	47.9		6.2				
Green Ext Time (p_c), s	0.0	15.7		0.0	0.0	27.4		0.3				

Intersection Summary	
HCM 6th Ctrl Delay	28.3
HCM 6th LOS	C

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1575	30	30	1369	63	46	52	28	196	28	134
Future Volume (veh/h)	30	1575	30	30	1369	63	46	52	28	196	28	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	1831	35	35	1592	73	53	60	33	228	33	156
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	45	2235	963	45	2235	963	205	262	144	297	65	305
Arrive On Green	0.03	0.63	0.63	0.03	0.63	0.63	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1781	3554	1532	1781	3554	1532	1186	1119	615	1290	276	1305
Grp Volume(v), veh/h	35	1831	35	35	1592	73	53	0	93	228	0	189
Grp Sat Flow(s),veh/h/ln	1781	1777	1532	1781	1777	1532	1186	0	1734	1290	0	1581
Q Serve(g_s), s	2.7	55.2	1.2	2.7	42.2	2.6	5.7	0.0	6.1	24.3	0.0	14.6
Cycle Q Clear(g_c), s	2.7	55.2	1.2	2.7	42.2	2.6	20.3	0.0	6.1	30.4	0.0	14.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.35	1.00		0.83
Lane Grp Cap(c), veh/h	45	2235	963	45	2235	963	205	0	405	297	0	370
V/C Ratio(X)	0.78	0.82	0.04	0.78	0.71	0.08	0.26	0.00	0.23	0.77	0.00	0.51
Avail Cap(c_a), veh/h	88	2235	963	71	2235	963	225	0	435	315	0	392
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)	0.40	0.40	0.40	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	67.9	19.9	9.9	67.9	17.5	10.1	55.5	0.0	43.4	55.7	0.0	46.7
Incr Delay (d2), s/veh	4.4	1.4	0.0	10.4	2.0	0.2	0.2	0.0	0.1	9.0	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	22.3	0.4	1.4	17.3	0.9	1.7	0.0	2.7	8.7	0.0	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.2	21.3	9.9	78.2	19.4	10.3	55.7	0.0	43.5	64.8	0.0	47.1
LnGrp LOS	E	C	A	E	B	B	E	A	D	E	A	D
Approach Vol, veh/h		1901			1700			146			417	
Approach Delay, s/veh		22.0			20.2			48.0			56.8	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.9	94.1		38.0	7.9	94.0		38.0
Change Period (Y+Rc), s	4.4	* 6		5.3	4.4	6.0		* 5.3
Max Green Setting (Gmax), s	5.6	* 84		34.7	6.9	82.7		* 35
Max Q Clear Time (g_c+I1), s	4.7	57.2		32.4	4.7	44.2		22.3
Green Ext Time (p_c), s	0.0	24.4		0.3	0.0	30.3		0.3

Intersection Summary	
HCM 6th Ctrl Delay	25.7
HCM 6th LOS	C

Notes

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

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	18	107	3	15	48
Future Vol, veh/h	9	18	107	3	15	48
Conflicting Peds, #/hr	10	10	0	12	12	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	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	22	129	4	18	58

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	247	153	0	0	145	0
Stage 1	143	-	-	-	-	-
Stage 2	104	-	-	-	-	-
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	741	893	-	-	1437	-
Stage 1	884	-	-	-	-	-
Stage 2	920	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	716	874	-	-	1421	-
Mov Cap-2 Maneuver	716	-	-	-	-	-
Stage 1	874	-	-	-	-	-
Stage 2	900	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.6	0	1.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	814	1421	-
HCM Lane V/C Ratio	-	-	0.04	0.013	-
HCM Control Delay (s)	-	-	9.6	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	69	20	50	40	10	46
Future Vol, veh/h	69	20	50	40	10	46
Conflicting Peds, #/hr	10	0	0	10	10	10
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	83	24	60	48	12	55

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	118	0	-	0	294	104
Stage 1	-	-	-	-	94	-
Stage 2	-	-	-	-	200	-
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	1470	-	-	-	697	951
Stage 1	-	-	-	-	930	-
Stage 2	-	-	-	-	834	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1456	-	-	-	643	933
Mov Cap-2 Maneuver	-	-	-	-	643	-
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	826	-

Approach	EB	WB	SB
HCM Control Delay, s	5.9	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1456	-	-	-	863
HCM Lane V/C Ratio	0.057	-	-	-	0.078
HCM Control Delay (s)	7.6	0	-	-	9.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.3

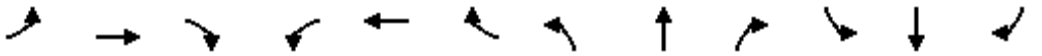
Intersection	
Int Delay, s/veh	4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	49	49	49	78	21
Future Vol, veh/h	17	49	49	49	78	21
Conflicting Peds, #/hr	10	10	10	0	0	10
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	70	70	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	70	70	70	111	30

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	356	146	151	0	-	0
Stage 1	136	-	-	-	-	-
Stage 2	220	-	-	-	-	-
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	642	901	1430	-	-	-
Stage 1	890	-	-	-	-	-
Stage 2	817	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	597	884	1416	-	-	-
Mov Cap-2 Maneuver	597	-	-	-	-	-
Stage 1	837	-	-	-	-	-
Stage 2	809	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.2	3.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1416	-	787	-	-
HCM Lane V/C Ratio	0.049	-	0.12	-	-
HCM Control Delay (s)	7.7	0	10.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.4	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	372	21	565	335	19	28	52	862	19	124	17
Future Volume (veh/h)	40	372	21	565	335	19	28	52	862	19	124	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	44	409	23	621	368	21	31	57	947	21	136	19
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	56	676	38	718	1277	73	42	650	866	32	547	76
Arrive On Green	0.03	0.20	0.20	0.21	0.37	0.37	0.02	0.35	0.35	0.02	0.34	0.34
Sat Flow, veh/h	1781	3413	191	3456	3408	194	1781	1870	1543	1781	1599	223
Grp Volume(v), veh/h	44	212	220	621	191	198	31	57	947	21	0	155
Grp Sat Flow(s),veh/h/ln	1781	1777	1827	1728	1777	1825	1781	1870	1543	1781	0	1823
Q Serve(g_s), s	2.3	10.1	10.2	16.2	7.0	7.1	1.6	1.9	32.4	1.1	0.0	5.7
Cycle Q Clear(g_c), s	2.3	10.1	10.2	16.2	7.0	7.1	1.6	1.9	32.4	1.1	0.0	5.7
Prop In Lane	1.00		0.10	1.00		0.11	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	56	352	362	718	666	684	42	650	866	32	0	623
V/C Ratio(X)	0.79	0.60	0.61	0.87	0.29	0.29	0.74	0.09	1.09	0.66	0.00	0.25
Avail Cap(c_a), veh/h	122	533	549	1319	1109	1139	76	650	866	107	0	623
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.9	34.0	34.1	35.7	20.4	20.5	45.2	20.5	20.9	45.5	0.0	22.1
Incr Delay (d2), s/veh	8.9	2.6	2.6	1.3	0.4	0.4	8.8	0.3	59.5	8.1	0.0	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	1.1	4.6	4.7	6.8	2.9	3.0	0.8	0.9	31.2	0.6	0.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.7	36.7	36.7	36.9	20.8	20.8	54.1	20.7	80.4	53.6	0.0	23.0
LnGrp LOS	D	D	D	D	C	C	D	C	F	D	A	C
Approach Vol, veh/h		476			1010			1035			176	
Approach Delay, s/veh		38.2			30.7			76.3			26.7	
Approach LOS		D			C			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.1	38.1	23.8	25.3	6.6	37.6	7.3	41.7
Change Period (Y+Rc), s	4.4	5.7	4.4	6.8	4.4	* 5.7	4.4	* 6.8
Max Green Setting (Gmax), s	5.6	29.5	35.6	28.0	4.0	* 32	6.4	* 58
Max Q Clear Time (g_c+I1), s	3.1	34.4	18.2	12.2	3.6	7.7	4.3	9.1
Green Ext Time (p_c), s	0.0	0.0	1.2	3.4	0.0	1.1	0.0	4.1

Intersection Summary	
HCM 6th Ctrl Delay	49.3
HCM 6th LOS	D

Notes

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



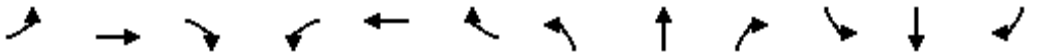
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1026	198	71	630	271	196
Future Volume (veh/h)	1026	198	71	630	271	196
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1080	208	75	663	285	206
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1791	769	97	2151	924	424
Arrive On Green	0.50	0.50	0.05	0.61	0.27	0.27
Sat Flow, veh/h	3647	1526	1781	3647	3456	1585
Grp Volume(v), veh/h	1080	208	75	663	285	206
Grp Sat Flow(s),veh/h/ln	1777	1526	1781	1777	1728	1585
Q Serve(g_s), s	20.2	7.3	3.9	8.5	6.2	10.2
Cycle Q Clear(g_c), s	20.2	7.3	3.9	8.5	6.2	10.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1791	769	97	2151	924	424
V/C Ratio(X)	0.60	0.27	0.78	0.31	0.31	0.49
Avail Cap(c_a), veh/h	1791	769	221	2445	924	424
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	16.5	13.3	43.6	9.0	27.3	28.8
Incr Delay (d2), s/veh	1.5	0.9	4.9	0.2	0.9	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	2.6	1.8	3.0	2.6	4.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.0	14.2	48.6	9.1	28.2	32.8
LnGrp LOS	B	B	D	A	C	C
Approach Vol, veh/h	1288			738	491	
Approach Delay, s/veh	17.4			13.1	30.1	
Approach LOS	B			B	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	9.5	54.0				63.5	30.0
Change Period (Y+Rc), s	4.4	6.9				* 6.9	5.0
Max Green Setting (Gmax), s	11.6	47.1				* 64	25.0
Max Q Clear Time (g_c+I1), s	5.9	22.2				10.5	12.2
Green Ext Time (p_c), s	0.0	13.5				10.3	1.2

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.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	1320	221	259	1700	3	302	28	162	4	25	47
Future Volume (veh/h)	97	1320	221	259	1700	3	302	28	162	4	25	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.96	1.00		0.88
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	109	1483	248	291	1910	3	361	0	182	4	28	53
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	125	2255	684	314	2884	5	588	0	250	12	82	71
Arrive On Green	0.07	0.44	0.44	0.18	0.55	0.55	0.17	0.00	0.17	0.05	0.05	0.05
Sat Flow, veh/h	1781	5106	1548	1781	5264	8	3563	0	1514	232	1626	1402
Grp Volume(v), veh/h	109	1483	248	291	1235	678	361	0	182	32	0	53
Grp Sat Flow(s),veh/h/ln	1781	1702	1548	1781	1702	1869	1781	0	1514	1859	0	1402
Q Serve(g_s), s	7.8	29.3	13.6	20.6	33.0	33.0	12.1	0.0	14.6	2.1	0.0	4.8
Cycle Q Clear(g_c), s	7.8	29.3	13.6	20.6	33.0	33.0	12.1	0.0	14.6	2.1	0.0	4.8
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.12		1.00
Lane Grp Cap(c), veh/h	125	2255	684	314	1865	1024	588	0	250	94	0	71
V/C Ratio(X)	0.87	0.66	0.36	0.93	0.66	0.66	0.61	0.00	0.73	0.34	0.00	0.75
Avail Cap(c_a), veh/h	125	2255	684	315	1865	1024	1030	0	438	118	0	89
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	58.9	28.1	23.8	51.9	20.5	20.5	49.7	0.0	50.7	58.7	0.0	60.0
Incr Delay (d2), s/veh	42.5	1.5	1.5	31.7	1.9	3.4	0.4	0.0	1.5	0.8	0.0	17.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	12.1	5.3	11.9	13.3	15.0	5.4	0.0	5.6	1.0	0.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	101.4	29.6	25.2	83.5	22.4	23.9	50.0	0.0	52.2	59.5	0.0	77.0
LnGrp LOS	F	C	C	F	C	C	D	A	D	E	A	E
Approach Vol, veh/h		1840			2204			543			85	
Approach Delay, s/veh		33.3			30.9			50.8			70.4	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	27.0	62.5		11.4	13.4	76.1		27.1				
Change Period (Y+Rc), s	4.4	6.0		4.9	4.4	* 6		6.0				
Max Green Setting (Gmax), s	22.6	39.0		8.1	9.0	* 53		37.0				
Max Q Clear Time (g_c+I1), s	22.6	31.3		6.8	9.8	35.0		16.6				
Green Ext Time (p_c), s	0.0	6.4		0.0	0.0	14.6		1.0				

Intersection Summary		
HCM 6th Ctrl Delay		34.9
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	1235	143	31	1797	22	100	7	38	18	6	4
Future Volume (veh/h)	19	1235	143	31	1797	22	100	7	38	18	6	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.97	1.00		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	1286	149	32	1872	23	104	7	40	19	6	4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	28	1728	199	41	1964	24	840	57	326	60	33	22
Arrive On Green	0.02	0.54	0.54	0.02	0.55	0.55	0.24	0.24	0.24	0.03	0.03	0.03
Sat Flow, veh/h	1781	3202	369	1781	3593	44	3456	235	1340	1781	968	645
Grp Volume(v), veh/h	20	711	724	32	923	972	104	0	47	19	0	10
Grp Sat Flow(s),veh/h/ln	1781	1777	1794	1781	1777	1861	1728	0	1575	1781	0	1614
Q Serve(g_s), s	1.4	39.3	39.9	2.3	62.8	63.4	3.0	0.0	3.0	1.3	0.0	0.8
Cycle Q Clear(g_c), s	1.4	39.3	39.9	2.3	62.8	63.4	3.0	0.0	3.0	1.3	0.0	0.8
Prop In Lane	1.00		0.21	1.00		0.02	1.00		0.85	1.00		0.40
Lane Grp Cap(c), veh/h	28	959	968	41	971	1017	840	0	383	60	0	54
V/C Ratio(X)	0.71	0.74	0.75	0.79	0.95	0.96	0.12	0.00	0.12	0.32	0.00	0.18
Avail Cap(c_a), veh/h	58	959	968	92	971	1017	840	0	383	60	0	54
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.45	0.45	0.45	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	62.7	22.6	22.7	62.2	27.4	27.5	37.8	0.0	37.8	60.4	0.0	60.1
Incr Delay (d2), s/veh	11.3	5.1	5.3	5.6	10.8	11.0	0.3	0.0	0.7	13.4	0.0	7.4
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	0.7	17.3	17.8	1.1	28.4	30.0	1.3	0.0	1.2	0.8	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.0	27.7	28.0	67.9	38.2	38.5	38.1	0.0	38.5	73.8	0.0	67.5
LnGrp LOS	E	C	C	E	D	D	D	A	D	E	A	E
Approach Vol, veh/h		1455			1927			151			29	
Approach Delay, s/veh		28.5			38.9			38.2			71.6	
Approach LOS		C			D			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.3	75.1		9.2	6.4	76.0		36.4
Change Period (Y+Rc), s	4.4	* 6		4.9	4.4	6.0		5.3
Max Green Setting (Gmax), s	6.6	* 66		4.3	4.2	67.8		31.1
Max Q Clear Time (g_c+I1), s	4.3	41.9		3.3	3.4	65.4		5.0
Green Ext Time (p_c), s	0.0	18.7		0.0	0.0	2.3		0.3

Intersection Summary		
HCM 6th Ctrl Delay	34.9	
HCM 6th LOS	C	

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	1141	56	91	1679	241	44	29	47	168	44	66
Future Volume (veh/h)	117	1141	56	91	1679	241	44	29	47	168	44	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.96	0.99		0.96
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	126	1227	60	98	1805	259	47	31	51	181	47	71
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	134	2148	925	121	2123	915	237	127	209	268	134	203
Arrive On Green	0.08	0.60	0.60	0.07	0.60	0.60	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1781	3554	1531	1781	3554	1531	1260	620	1020	1301	656	991
Grp Volume(v), veh/h	126	1227	60	98	1805	259	47	0	82	181	0	118
Grp Sat Flow(s),veh/h/ln	1781	1777	1531	1781	1777	1531	1260	0	1641	1301	0	1647
Q Serve(g_s), s	9.0	26.7	2.1	6.9	53.2	10.5	4.2	0.0	5.4	17.3	0.0	7.9
Cycle Q Clear(g_c), s	9.0	26.7	2.1	6.9	53.2	10.5	12.1	0.0	5.4	22.7	0.0	7.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.62	1.00		0.60
Lane Grp Cap(c), veh/h	134	2148	925	121	2123	915	237	0	336	268	0	337
V/C Ratio(X)	0.94	0.57	0.06	0.81	0.85	0.28	0.20	0.00	0.24	0.67	0.00	0.35
Avail Cap(c_a), veh/h	134	2148	925	177	2123	915	271	0	381	300	0	377
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)	0.58	0.58	0.58	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.9	15.3	10.4	58.8	21.1	12.5	48.8	0.0	42.6	52.1	0.0	43.6
Incr Delay (d2), s/veh	43.2	0.6	0.1	10.2	4.5	0.8	0.2	0.0	0.1	3.7	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	10.7	0.7	3.5	22.3	3.8	1.4	0.0	2.2	5.9	0.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	102.1	15.9	10.5	69.0	25.6	13.3	48.9	0.0	42.7	55.8	0.0	43.8
LnGrp LOS	F	B	B	E	C	B	D	A	D	E	A	D
Approach Vol, veh/h		1413			2162			129			299	
Approach Delay, s/veh		23.4			26.1			45.0			51.1	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.1	83.4		31.5	14.0	82.5		31.5
Change Period (Y+Rc), s	4.4	* 6		5.3	4.4	6.0		* 5.3
Max Green Setting (Gmax), s	12.7	* 71		29.3	9.6	73.4		* 30
Max Q Clear Time (g_c+I1), s	8.9	28.7		24.7	11.0	55.2		14.1
Green Ext Time (p_c), s	0.0	25.2		0.3	0.0	17.1		0.3

Intersection Summary	
HCM 6th Ctrl Delay	27.6
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	12	28	77	15	24	119
Future Vol, veh/h	12	28	77	15	24	119
Conflicting Peds, #/hr	10	10	0	10	10	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	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	34	93	18	29	143

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	323	122	0	0	121	0
Stage 1	112	-	-	-	-	-
Stage 2	211	-	-	-	-	-
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	929	-	-	1467	-
Stage 1	913	-	-	-	-	-
Stage 2	824	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	643	911	-	-	1453	-
Mov Cap-2 Maneuver	643	-	-	-	-	-
Stage 1	904	-	-	-	-	-
Stage 2	798	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.7	0	1.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	810	1453	-
HCM Lane V/C Ratio	-	-	0.059	0.02	-
HCM Control Delay (s)	-	-	9.7	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	72	50	30	20	50	81
Future Vol, veh/h	72	50	30	20	50	81
Conflicting Peds, #/hr	10	0	0	10	10	10
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	87	60	36	24	60	98

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	70	0	-	0	302	68
Stage 1	-	-	-	-	58	-
Stage 2	-	-	-	-	244	-
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	1531	-	-	-	690	995
Stage 1	-	-	-	-	965	-
Stage 2	-	-	-	-	797	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1516	-	-	-	636	976
Mov Cap-2 Maneuver	-	-	-	-	636	-
Stage 1	-	-	-	-	899	-
Stage 2	-	-	-	-	789	-

Approach	EB	WB	SB
HCM Control Delay, s	4.4	0	10.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1516	-	-	-	811
HCM Lane V/C Ratio	0.057	-	-	-	0.195
HCM Control Delay (s)	7.5	0	-	-	10.5
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.7

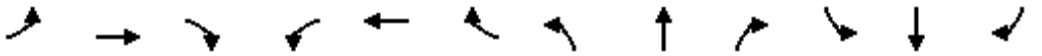
Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	81	75	99	49	59
Future Vol, veh/h	22	81	75	99	49	59
Conflicting Peds, #/hr	10	10	10	0	0	10
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	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	92	85	113	56	67

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	393	110	133	0	-	0
Stage 1	100	-	-	-	-	-
Stage 2	293	-	-	-	-	-
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	611	943	1452	-	-	-
Stage 1	924	-	-	-	-	-
Stage 2	757	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	561	925	1438	-	-	-
Mov Cap-2 Maneuver	561	-	-	-	-	-
Stage 1	857	-	-	-	-	-
Stage 2	749	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.2	3.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1438	-	812	-	-
HCM Lane V/C Ratio	0.059	-	0.144	-	-
HCM Control Delay (s)	7.7	0	10.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.5	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	421	29	699	322	32	44	113	844	31	51	42
Future Volume (veh/h)	70	421	29	699	322	32	44	113	844	31	51	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	75	453	31	752	346	34	47	122	908	33	55	45
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	96	693	47	845	1290	126	60	578	863	43	281	230
Arrive On Green	0.05	0.21	0.21	0.24	0.40	0.40	0.03	0.31	0.31	0.02	0.30	0.30
Sat Flow, veh/h	1781	3366	229	3456	3256	317	1781	1870	1540	1781	938	767
Grp Volume(v), veh/h	75	238	246	752	188	192	47	122	908	33	0	100
Grp Sat Flow(s),veh/h/ln	1781	1777	1819	1728	1777	1797	1781	1870	1540	1781	0	1705
Q Serve(g_s), s	4.1	12.1	12.2	20.7	7.0	7.1	2.6	4.7	30.4	1.8	0.0	4.3
Cycle Q Clear(g_c), s	4.1	12.1	12.2	20.7	7.0	7.1	2.6	4.7	30.4	1.8	0.0	4.3
Prop In Lane	1.00		0.13	1.00		0.18	1.00		1.00	1.00		0.45
Lane Grp Cap(c), veh/h	96	366	375	845	704	712	60	578	863	43	0	511
V/C Ratio(X)	0.78	0.65	0.66	0.89	0.27	0.27	0.78	0.21	1.05	0.77	0.00	0.20
Avail Cap(c_a), veh/h	176	506	518	1215	973	984	83	578	863	103	0	560
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.9	35.8	35.9	35.9	20.0	20.1	47.2	25.1	22.2	47.7	0.0	25.6
Incr Delay (d2), s/veh	5.0	3.1	3.1	4.7	0.3	0.3	18.3	0.2	45.2	10.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	5.5	5.7	9.1	2.9	3.0	1.4	2.1	29.0	0.9	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.9	38.9	38.9	40.6	20.4	20.4	65.4	25.3	67.4	57.8	0.0	25.9
LnGrp LOS	D	D	D	D	C	C	E	C	F	E	A	C
Approach Vol, veh/h		559			1132			1077			133	
Approach Delay, s/veh		40.5			33.8			62.5			33.8	
Approach LOS		D			C			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	36.1	28.4	27.1	7.7	35.2	9.7	45.8
Change Period (Y+Rc), s	4.4	5.7	4.4	6.8	4.4	* 5.7	4.4	* 6.8
Max Green Setting (Gmax), s	5.7	30.4	34.6	28.0	4.6	* 32	9.7	* 54
Max Q Clear Time (g_c+I1), s	3.8	32.4	22.7	14.2	4.6	6.3	6.1	9.1
Green Ext Time (p_c), s	0.0	0.0	1.4	3.6	0.0	0.7	0.0	4.0

Intersection Summary	
HCM 6th Ctrl Delay	45.8
HCM 6th LOS	D

Notes

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



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	995	263	165	862	187	156
Future Volume (veh/h)	995	263	165	862	187	156
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	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	1082	286	179	937	203	170
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1617	693	214	2213	859	394
Arrive On Green	0.46	0.46	0.12	0.62	0.25	0.25
Sat Flow, veh/h	3647	1524	1781	3647	3456	1585
Grp Volume(v), veh/h	1082	286	179	937	203	170
Grp Sat Flow(s),veh/h/ln	1777	1524	1781	1777	1728	1585
Q Serve(g_s), s	22.1	11.7	9.1	12.5	4.3	8.4
Cycle Q Clear(g_c), s	22.1	11.7	9.1	12.5	4.3	8.4
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1617	693	214	2213	859	394
V/C Ratio(X)	0.67	0.41	0.84	0.42	0.24	0.43
Avail Cap(c_a), veh/h	1617	693	358	2546	859	394
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	19.8	16.9	39.8	8.9	27.8	29.3
Incr Delay (d2), s/veh	2.2	1.8	3.3	0.3	0.6	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	4.3	4.1	4.4	1.8	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.0	18.7	43.1	9.2	28.4	32.7
LnGrp LOS	C	B	D	A	C	C
Approach Vol, veh/h	1368			1116	373	
Approach Delay, s/veh	21.3			14.6	30.3	
Approach LOS	C			B	C	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	15.5	49.0			64.5	28.0
Change Period (Y+Rc), s	4.4	6.9			* 6.9	5.0
Max Green Setting (Gmax), s	18.6	42.1			* 66	23.0
Max Q Clear Time (g_c+I1), s	11.1	24.1			14.5	10.4
Green Ext Time (p_c), s	0.1	11.4			16.5	0.9

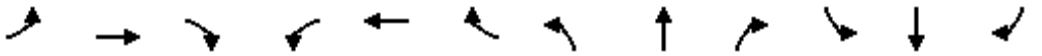
Intersection Summary		
HCM 6th Ctrl Delay	19.9	
HCM 6th LOS	B	

Notes

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

APPENDIX G

OPENING YEAR 2025 (WITH CONNECTION) WITH PROJECT INTERSECTION ANALYSIS CALCULATION SHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	1644	196	167	1610	7	429	23	59	9	15	55
Future Volume (veh/h)	32	1644	196	167	1610	7	429	23	59	9	15	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.95	1.00		0.88
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	36	1827	218	186	1789	8	496	0	66	10	17	61
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	46	2531	768	209	3080	14	639	0	271	38	64	78
Arrive On Green	0.03	0.50	0.50	0.12	0.59	0.59	0.18	0.00	0.18	0.06	0.06	0.06
Sat Flow, veh/h	1781	5106	1550	1781	5246	23	3563	0	1513	680	1156	1401
Grp Volume(v), veh/h	36	1827	218	186	1161	636	496	0	66	27	0	61
Grp Sat Flow(s),veh/h/ln	1781	1702	1550	1781	1702	1865	1781	0	1513	1836	0	1401
Q Serve(g_s), s	2.8	39.3	11.6	14.4	29.9	29.9	18.6	0.0	5.2	2.0	0.0	6.0
Cycle Q Clear(g_c), s	2.8	39.3	11.6	14.4	29.9	29.9	18.6	0.0	5.2	2.0	0.0	6.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	0.37		1.00
Lane Grp Cap(c), veh/h	46	2531	768	209	1999	1095	639	0	271	102	0	78
V/C Ratio(X)	0.78	0.72	0.28	0.89	0.58	0.58	0.78	0.00	0.24	0.27	0.00	0.79
Avail Cap(c_a), veh/h	90	2531	768	224	1999	1095	942	0	400	106	0	81
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	67.8	27.7	20.7	60.9	18.1	18.1	54.8	0.0	49.3	63.4	0.0	65.3
Incr Delay (d2), s/veh	10.0	1.8	0.9	29.9	1.2	2.3	1.2	0.0	0.2	0.5	0.0	34.2
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	1.4	16.3	4.4	8.3	12.0	13.4	8.5	0.0	2.0	0.9	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.8	29.5	21.6	90.8	19.3	20.4	56.0	0.0	49.5	63.9	0.0	99.5
LnGrp LOS	E	C	C	F	B	C	E	A	D	E	A	F
Approach Vol, veh/h		2081			1983			562			88	
Approach Delay, s/veh		29.5			26.4			55.2			88.6	
Approach LOS		C			C			E			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.8	75.4		12.7	8.0	88.2		31.1				
Change Period (Y+Rc), s	4.4	6.0		4.9	4.4	* 6		6.0				
Max Green Setting (Gmax), s	17.6	56.0		8.1	7.1	* 67		37.0				
Max Q Clear Time (g_c+I1), s	16.4	41.3		8.0	4.8	31.9		20.6				
Green Ext Time (p_c), s	0.0	12.5		0.0	0.0	23.2		1.0				

Intersection Summary			
HCM 6th Ctrl Delay		32.4	
HCM 6th LOS		C	

Notes

User approved volume balancing among the lanes for turning movement.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1602	88	3	1546	3	123	7	23	13	11	3
Future Volume (veh/h)	0	1602	88	3	1546	3	123	7	23	13	11	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.96	1.00		0.80
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	0	1780	98	3	1718	3	137	8	26	14	12	3
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	1	2049	112	6	2306	4	765	83	270	52	40	10
Arrive On Green	0.00	0.60	0.60	0.00	0.63	0.63	0.22	0.22	0.22	0.03	0.03	0.03
Sat Flow, veh/h	1781	3421	187	1781	3639	6	3456	375	1218	1781	1366	341
Grp Volume(v), veh/h	0	916	962	3	839	882	137	0	34	14	0	15
Grp Sat Flow(s),veh/h/ln	1781	1777	1831	1781	1777	1869	1728	0	1593	1781	0	1707
Q Serve(g_s), s	0.0	59.8	62.1	0.2	45.8	45.9	4.5	0.0	2.4	1.1	0.0	1.2
Cycle Q Clear(g_c), s	0.0	59.8	62.1	0.2	45.8	45.9	4.5	0.0	2.4	1.1	0.0	1.2
Prop In Lane	1.00		0.10	1.00		0.00	1.00		0.76	1.00		0.20
Lane Grp Cap(c), veh/h	1	1064	1097	6	1126	1184	765	0	353	52	0	50
V/C Ratio(X)	0.00	0.86	0.88	0.54	0.74	0.75	0.18	0.00	0.10	0.27	0.00	0.30
Avail Cap(c_a), veh/h	51	1064	1097	51	1126	1184	765	0	353	52	0	50
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)	0.00	1.00	1.00	0.66	0.66	0.66	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	23.2	23.7	69.7	17.8	17.8	44.2	0.0	43.4	66.5	0.0	66.5
Incr Delay (d2), s/veh	0.0	9.1	9.9	18.0	3.0	2.9	0.5	0.0	0.5	12.2	0.0	14.7
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	0.0	26.8	28.8	0.1	19.0	20.0	2.0	0.0	1.0	0.7	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	32.4	33.6	87.7	20.8	20.7	44.7	0.0	43.9	78.7	0.0	81.3
LnGrp LOS	A	C	C	F	C	C	D	A	D	E	A	F
Approach Vol, veh/h		1878			1724			171			29	
Approach Delay, s/veh		33.0			20.9			44.5			80.0	
Approach LOS		C			C			D			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.8	89.9		9.0	0.0	94.7		36.3				
Change Period (Y+Rc), s	4.4	* 6		4.9	4.4	6.0		5.3				
Max Green Setting (Gmax), s	4.3	* 81		4.1	4.0	80.3		31.0				
Max Q Clear Time (g_c+I1), s	2.2	64.1		3.2	0.0	47.9		6.5				
Green Ext Time (p_c), s	0.0	15.6		0.0	0.0	27.4		0.4				

Intersection Summary	
HCM 6th Ctrl Delay	28.4
HCM 6th LOS	C

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1575	30	33	1369	63	46	64	41	196	31	134
Future Volume (veh/h)	30	1575	30	33	1369	63	46	64	41	196	31	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	1831	35	38	1592	73	53	74	48	228	36	156
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	45	2167	934	49	2175	937	226	262	170	295	75	323
Arrive On Green	0.03	0.61	0.61	0.03	0.61	0.61	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1781	3554	1531	1781	3554	1531	1184	1044	677	1259	298	1290
Grp Volume(v), veh/h	35	1831	35	38	1592	73	53	0	122	228	0	192
Grp Sat Flow(s),veh/h/ln	1781	1777	1531	1781	1777	1531	1184	0	1722	1259	0	1587
Q Serve(g_s), s	2.7	58.1	1.3	3.0	44.1	2.7	5.6	0.0	8.0	25.0	0.0	14.4
Cycle Q Clear(g_c), s	2.7	58.1	1.3	3.0	44.1	2.7	20.0	0.0	8.0	33.0	0.0	14.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.39	1.00		0.81
Lane Grp Cap(c), veh/h	45	2167	934	49	2175	937	226	0	432	295	0	398
V/C Ratio(X)	0.78	0.84	0.04	0.78	0.73	0.08	0.23	0.00	0.28	0.77	0.00	0.48
Avail Cap(c_a), veh/h	89	2167	934	71	2175	937	235	0	444	301	0	405
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)	0.40	0.40	0.40	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	67.9	22.0	10.9	67.7	19.1	11.1	53.3	0.0	42.3	55.6	0.0	44.7
Incr Delay (d2), s/veh	4.4	1.8	0.0	15.8	2.2	0.2	0.2	0.0	0.1	10.5	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	23.7	0.4	1.6	18.3	1.0	1.7	0.0	3.5	8.8	0.0	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.2	23.7	10.9	83.5	21.3	11.2	53.5	0.0	42.4	66.1	0.0	45.1
LnGrp LOS	E	C	B	F	C	B	D	A	D	E	A	D
Approach Vol, veh/h		1901			1703			175			420	
Approach Delay, s/veh		24.4			22.3			45.8			56.5	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.2	91.4		40.4	7.9	91.7		40.4
Change Period (Y+Rc), s	4.4	* 6		5.3	4.4	6.0		* 5.3
Max Green Setting (Gmax), s	5.6	* 83		35.7	7.0	81.6		* 36
Max Q Clear Time (g_c+I1), s	5.0	60.1		35.0	4.7	46.1		22.0
Green Ext Time (p_c), s	0.0	21.2		0.1	0.0	28.4		0.4

Intersection Summary	
HCM 6th Ctrl Delay	27.6
HCM 6th LOS	C

Notes

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

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	18	132	3	15	54
Future Vol, veh/h	9	18	132	3	15	54
Conflicting Peds, #/hr	10	10	0	12	12	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	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	22	159	4	18	65

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	284	183	0	0	175	0
Stage 1	173	-	-	-	-	-
Stage 2	111	-	-	-	-	-
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	706	859	-	-	1401	-
Stage 1	857	-	-	-	-	-
Stage 2	914	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	682	841	-	-	1385	-
Mov Cap-2 Maneuver	682	-	-	-	-	-
Stage 1	848	-	-	-	-	-
Stage 2	894	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	1.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	780	1385	-
HCM Lane V/C Ratio	-	-	0.042	0.013	-
HCM Control Delay (s)	-	-	9.8	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	69	26	74	65	16	46
Future Vol, veh/h	69	26	74	65	16	46
Conflicting Peds, #/hr	10	0	0	10	10	10
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	83	31	89	78	19	55

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	177	0	-	0	345	148
Stage 1	-	-	-	-	138	-
Stage 2	-	-	-	-	207	-
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	1399	-	-	-	652	899
Stage 1	-	-	-	-	889	-
Stage 2	-	-	-	-	828	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1386	-	-	-	600	882
Mov Cap-2 Maneuver	-	-	-	-	600	-
Stage 1	-	-	-	-	827	-
Stage 2	-	-	-	-	820	-

Approach	EB	WB	SB
HCM Control Delay, s	5.6	0	10.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1386	-	-	-	787
HCM Lane V/C Ratio	0.06	-	-	-	0.095
HCM Control Delay (s)	7.8	0	-	-	10.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.3

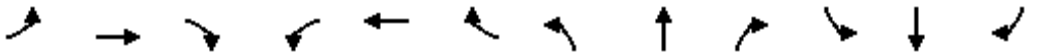
Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	70	54	49	78	21
Future Vol, veh/h	17	70	54	49	78	21
Conflicting Peds, #/hr	10	10	10	0	0	10
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	70	70	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	100	77	70	111	30

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	370	146	151	0	-	0
Stage 1	136	-	-	-	-	-
Stage 2	234	-	-	-	-	-
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	630	901	1430	-	-	-
Stage 1	890	-	-	-	-	-
Stage 2	805	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	582	884	1416	-	-	-
Mov Cap-2 Maneuver	582	-	-	-	-	-
Stage 1	831	-	-	-	-	-
Stage 2	797	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.3	4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1416	-	803	-	-
HCM Lane V/C Ratio	0.054	-	0.155	-	-
HCM Control Delay (s)	7.7	0	10.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.5	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	372	21	565	335	20	28	56	862	23	140	18
Future Volume (veh/h)	40	372	21	565	335	20	28	56	862	23	140	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	44	409	23	621	368	22	31	62	947	25	154	20
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	56	676	38	718	1273	76	42	646	862	36	553	72
Arrive On Green	0.03	0.20	0.20	0.21	0.37	0.37	0.02	0.35	0.35	0.02	0.34	0.34
Sat Flow, veh/h	1781	3413	191	3456	3398	202	1781	1870	1542	1781	1616	210
Grp Volume(v), veh/h	44	212	220	621	192	198	31	62	947	25	0	174
Grp Sat Flow(s),veh/h/ln	1781	1777	1827	1728	1777	1823	1781	1870	1542	1781	0	1826
Q Serve(g_s), s	2.3	10.1	10.2	16.2	7.1	7.1	1.6	2.1	32.2	1.3	0.0	6.5
Cycle Q Clear(g_c), s	2.3	10.1	10.2	16.2	7.1	7.1	1.6	2.1	32.2	1.3	0.0	6.5
Prop In Lane	1.00		0.10	1.00		0.11	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	56	352	362	718	666	683	42	646	862	36	0	624
V/C Ratio(X)	0.79	0.60	0.61	0.87	0.29	0.29	0.74	0.10	1.10	0.69	0.00	0.28
Avail Cap(c_a), veh/h	138	533	549	1319	1094	1122	76	646	862	113	0	624
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.9	34.0	34.1	35.7	20.4	20.5	45.2	20.7	21.0	45.4	0.0	22.3
Incr Delay (d2), s/veh	8.8	2.6	2.6	1.3	0.4	0.4	8.8	0.3	61.3	8.2	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	4.6	4.7	6.8	2.9	3.0	0.8	1.0	31.5	0.7	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.7	36.7	36.7	36.9	20.8	20.8	54.1	21.0	82.3	53.6	0.0	23.4
LnGrp LOS	D	D	D	D	C	C	D	C	F	D	A	C
Approach Vol, veh/h		476			1011			1040			199	
Approach Delay, s/veh		38.2			30.7			77.8			27.2	
Approach LOS		D			C			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.3	37.9	23.8	25.3	6.6	37.6	7.3	41.7
Change Period (Y+Rc), s	4.4	5.7	4.4	6.8	4.4	* 5.7	4.4	* 6.8
Max Green Setting (Gmax), s	5.9	29.2	35.6	28.0	4.0	* 32	7.2	* 57
Max Q Clear Time (g_c+I1), s	3.3	34.2	18.2	12.2	3.6	8.5	4.3	9.1
Green Ext Time (p_c), s	0.0	0.0	1.2	3.4	0.0	1.2	0.0	4.2

Intersection Summary	
HCM 6th Ctrl Delay	49.8
HCM 6th LOS	D

Notes

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



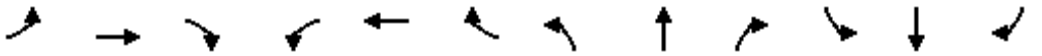
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1029	199	71	631	271	196
Future Volume (veh/h)	1029	199	71	631	271	196
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1083	209	75	664	285	206
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1808	777	97	2166	914	419
Arrive On Green	0.51	0.51	0.05	0.61	0.26	0.26
Sat Flow, veh/h	3647	1527	1781	3647	3456	1585
Grp Volume(v), veh/h	1083	209	75	664	285	206
Grp Sat Flow(s),veh/h/ln	1777	1527	1781	1777	1728	1585
Q Serve(g_s), s	20.4	7.4	3.9	8.5	6.2	10.4
Cycle Q Clear(g_c), s	20.4	7.4	3.9	8.5	6.2	10.4
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1808	777	97	2166	914	419
V/C Ratio(X)	0.60	0.27	0.78	0.31	0.31	0.49
Avail Cap(c_a), veh/h	1808	777	200	2417	914	419
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	13.2	44.1	8.9	27.9	29.4
Incr Delay (d2), s/veh	1.5	0.9	5.0	0.2	0.9	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	2.6	1.8	3.0	2.7	4.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.9	14.1	49.1	9.0	28.8	33.5
LnGrp LOS	B	B	D	A	C	C
Approach Vol, veh/h	1292			739	491	
Approach Delay, s/veh	17.3			13.1	30.7	
Approach LOS	B			B	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	9.5	55.0				64.5	30.0
Change Period (Y+Rc), s	4.4	6.9				* 6.9	5.0
Max Green Setting (Gmax), s	10.6	48.1				* 64	25.0
Max Q Clear Time (g_c+I1), s	5.9	22.4				10.5	12.4
Green Ext Time (p_c), s	0.0	13.8				10.3	1.2

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.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	1329	221	259	1704	3	302	28	162	4	25	47
Future Volume (veh/h)	97	1329	221	259	1704	3	302	28	162	4	25	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.96	1.00		0.88
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	109	1493	248	291	1915	3	361	0	182	4	28	53
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	128	2256	684	314	2876	5	588	0	250	12	82	71
Arrive On Green	0.07	0.44	0.44	0.18	0.55	0.55	0.17	0.00	0.17	0.05	0.05	0.05
Sat Flow, veh/h	1781	5106	1548	1781	5264	8	3563	0	1514	232	1626	1402
Grp Volume(v), veh/h	109	1493	248	291	1238	680	361	0	182	32	0	53
Grp Sat Flow(s),veh/h/ln	1781	1702	1548	1781	1702	1869	1781	0	1514	1859	0	1402
Q Serve(g_s), s	7.7	29.5	13.6	20.6	33.2	33.2	12.1	0.0	14.6	2.1	0.0	4.8
Cycle Q Clear(g_c), s	7.7	29.5	13.6	20.6	33.2	33.2	12.1	0.0	14.6	2.1	0.0	4.8
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.12		1.00
Lane Grp Cap(c), veh/h	128	2256	684	314	1860	1021	588	0	250	94	0	71
V/C Ratio(X)	0.85	0.66	0.36	0.93	0.67	0.67	0.61	0.00	0.73	0.34	0.00	0.75
Avail Cap(c_a), veh/h	128	2256	684	315	1860	1021	1030	0	438	103	0	78
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	58.7	28.2	23.7	51.9	20.7	20.7	49.7	0.0	50.7	58.7	0.0	60.0
Incr Delay (d2), s/veh	37.5	1.5	1.5	31.7	1.9	3.4	0.4	0.0	1.5	0.8	0.0	25.8
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	4.8	12.3	5.3	11.9	13.4	15.1	5.4	0.0	5.6	1.0	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	96.2	29.7	25.2	83.5	22.6	24.1	50.0	0.0	52.2	59.5	0.0	85.8
LnGrp LOS	F	C	C	F	C	C	D	A	D	E	A	F
Approach Vol, veh/h		1850			2209			543			85	
Approach Delay, s/veh		33.0			31.1			50.8			75.9	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	27.0	62.5		11.3	13.6	75.9		27.1				
Change Period (Y+Rc), s	4.4	6.0		4.9	4.4	* 6		6.0				
Max Green Setting (Gmax), s	22.6	40.0		7.1	9.2	* 54		37.0				
Max Q Clear Time (g_c+I1), s	22.6	31.5		6.8	9.7	35.2		16.6				
Green Ext Time (p_c), s	0.0	7.0		0.0	0.0	15.1		1.0				

Intersection Summary		
HCM 6th Ctrl Delay		35.0
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	1235	152	31	1797	22	104	7	38	18	6	4
Future Volume (veh/h)	19	1235	152	31	1797	22	104	7	38	18	6	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.97	1.00		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	1286	158	32	1872	23	108	7	40	19	6	4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	28	1716	210	41	1964	24	840	57	326	60	33	22
Arrive On Green	0.02	0.54	0.54	0.02	0.55	0.55	0.24	0.24	0.24	0.03	0.03	0.03
Sat Flow, veh/h	1781	3179	388	1781	3593	44	3456	235	1340	1781	968	645
Grp Volume(v), veh/h	20	716	728	32	923	972	108	0	47	19	0	10
Grp Sat Flow(s),veh/h/ln	1781	1777	1790	1781	1777	1861	1728	0	1575	1781	0	1614
Q Serve(g_s), s	1.4	39.7	40.4	2.3	62.8	63.4	3.1	0.0	3.0	1.3	0.0	0.8
Cycle Q Clear(g_c), s	1.4	39.7	40.4	2.3	62.8	63.4	3.1	0.0	3.0	1.3	0.0	0.8
Prop In Lane	1.00		0.22	1.00		0.02	1.00		0.85	1.00		0.40
Lane Grp Cap(c), veh/h	28	959	966	41	971	1017	840	0	383	60	0	54
V/C Ratio(X)	0.71	0.75	0.75	0.79	0.95	0.96	0.13	0.00	0.12	0.32	0.00	0.18
Avail Cap(c_a), veh/h	58	959	966	67	971	1017	840	0	383	60	0	54
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.46	0.46	0.46	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	62.7	22.7	22.9	62.2	27.4	27.5	37.9	0.0	37.8	60.4	0.0	60.1
Incr Delay (d2), s/veh	11.3	5.3	5.4	5.8	11.0	11.2	0.3	0.0	0.7	13.4	0.0	7.4
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	0.7	17.6	18.0	1.1	28.4	30.1	1.4	0.0	1.2	0.8	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.0	28.0	28.3	68.0	38.4	38.7	38.2	0.0	38.5	73.8	0.0	67.5
LnGrp LOS	E	C	C	E	D	D	D	A	D	E	A	E
Approach Vol, veh/h		1464			1927			155			29	
Approach Delay, s/veh		28.8			39.1			38.3			71.6	
Approach LOS		C			D			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.3	75.1		9.2	6.4	76.0		36.4
Change Period (Y+Rc), s	4.4	* 6		4.9	4.4	6.0		5.3
Max Green Setting (Gmax), s	4.8	* 68		4.3	4.2	67.8		31.1
Max Q Clear Time (g_c+I1), s	4.3	42.4		3.3	3.4	65.4		5.1
Green Ext Time (p_c), s	0.0	19.6		0.0	0.0	2.3		0.4

Intersection Summary	
HCM 6th Ctrl Delay	35.1
HCM 6th LOS	D

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	1141	56	106	1679	241	44	35	53	168	57	66
Future Volume (veh/h)	117	1141	56	106	1679	241	44	35	53	168	57	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.96	0.99		0.96
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	126	1227	60	114	1805	259	47	38	57	181	61	71
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	150	2094	902	139	2070	891	234	139	208	265	162	189
Arrive On Green	0.08	0.59	0.59	0.08	0.58	0.58	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1781	3554	1530	1781	3554	1530	1245	659	989	1286	771	898
Grp Volume(v), veh/h	126	1227	60	114	1805	259	47	0	95	181	0	132
Grp Sat Flow(s),veh/h/ln	1781	1777	1530	1781	1777	1530	1245	0	1648	1286	0	1669
Q Serve(g_s), s	8.9	27.7	2.1	8.1	55.2	10.9	4.3	0.0	6.2	17.6	0.0	8.7
Cycle Q Clear(g_c), s	8.9	27.7	2.1	8.1	55.2	10.9	13.0	0.0	6.2	23.7	0.0	8.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.60	1.00		0.54
Lane Grp Cap(c), veh/h	150	2094	902	139	2070	891	234	0	347	265	0	351
V/C Ratio(X)	0.84	0.59	0.07	0.82	0.87	0.29	0.20	0.00	0.27	0.68	0.00	0.38
Avail Cap(c_a), veh/h	161	2094	902	220	2070	891	258	0	379	286	0	378
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)	0.59	0.59	0.59	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.7	16.5	11.2	58.2	22.7	13.4	48.9	0.0	42.3	52.3	0.0	43.3
Incr Delay (d2), s/veh	17.5	0.7	0.1	6.4	5.4	0.8	0.2	0.0	0.2	4.6	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	11.2	0.8	3.9	23.5	3.9	1.4	0.0	2.6	6.0	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.3	17.2	11.3	64.5	28.1	14.3	49.1	0.0	42.5	56.9	0.0	43.6
LnGrp LOS	E	B	B	E	C	B	D	A	D	E	A	D
Approach Vol, veh/h		1413			2178			142			313	
Approach Delay, s/veh		22.1			28.3			44.7			51.3	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.4	81.4		32.2	15.2	80.6		32.2				
Change Period (Y+Rc), s	4.4	* 6		5.3	4.4	6.0		* 5.3				
Max Green Setting (Gmax), s	15.8	* 68		29.0	11.6	71.7		* 29				
Max Q Clear Time (g_c+I1), s	10.1	29.7		25.7	10.9	57.2		15.0				
Green Ext Time (p_c), s	0.1	23.7		0.3	0.0	13.8		0.3				

Intersection Summary	
HCM 6th Ctrl Delay	28.5
HCM 6th LOS	C

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	12	28	89	15	24	147
Future Vol, veh/h	12	28	89	15	24	147
Conflicting Peds, #/hr	10	10	0	10	10	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	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	34	107	18	29	177

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	371	136	0	0	135	0
Stage 1	126	-	-	-	-	-
Stage 2	245	-	-	-	-	-
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	630	913	-	-	1449	-
Stage 1	900	-	-	-	-	-
Stage 2	796	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	604	896	-	-	1435	-
Mov Cap-2 Maneuver	604	-	-	-	-	-
Stage 1	891	-	-	-	-	-
Stage 2	771	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	1.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	783	1435	-
HCM Lane V/C Ratio	-	-	0.062	0.02	-
HCM Control Delay (s)	-	-	9.9	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	72	76	41	32	78	81
Future Vol, veh/h	72	76	41	32	78	81
Conflicting Peds, #/hr	10	0	0	10	10	10
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	87	92	49	39	94	98

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	98	0	-	0	355	89
Stage 1	-	-	-	-	79	-
Stage 2	-	-	-	-	276	-
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	1495	-	-	-	643	969
Stage 1	-	-	-	-	944	-
Stage 2	-	-	-	-	771	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1481	-	-	-	591	951
Mov Cap-2 Maneuver	-	-	-	-	591	-
Stage 1	-	-	-	-	877	-
Stage 2	-	-	-	-	763	-

Approach	EB	WB	SB
HCM Control Delay, s	3.7	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1481	-	-	-	732
HCM Lane V/C Ratio	0.059	-	-	-	0.262
HCM Control Delay (s)	7.6	0	-	-	11.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	1

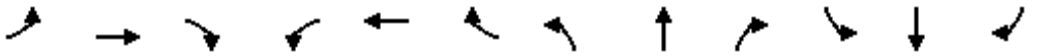
Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	92	99	99	49	59
Future Vol, veh/h	22	92	99	99	49	59
Conflicting Peds, #/hr	10	10	10	0	0	10
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	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	105	113	113	56	67

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	449	110	133	0	-	0
Stage 1	100	-	-	-	-	-
Stage 2	349	-	-	-	-	-
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	568	943	1452	-	-	-
Stage 1	924	-	-	-	-	-
Stage 2	714	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	510	925	1438	-	-	-
Mov Cap-2 Maneuver	510	-	-	-	-	-
Stage 1	838	-	-	-	-	-
Stage 2	707	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	3.9	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1438	-	799	-	-
HCM Lane V/C Ratio	0.078	-	0.162	-	-
HCM Control Delay (s)	7.7	0	10.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.6	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	421	29	699	322	36	44	131	844	33	59	43
Future Volume (veh/h)	72	421	29	699	322	36	44	131	844	33	59	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	77	453	31	752	346	39	47	141	908	35	63	46
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	699	48	848	1274	142	60	563	852	45	290	212
Arrive On Green	0.06	0.21	0.21	0.25	0.40	0.40	0.03	0.30	0.30	0.03	0.29	0.29
Sat Flow, veh/h	1781	3366	230	3456	3206	358	1781	1870	1539	1781	991	723
Grp Volume(v), veh/h	77	238	246	752	190	195	47	141	908	35	0	109
Grp Sat Flow(s),veh/h/ln	1781	1777	1819	1728	1777	1788	1781	1870	1539	1781	0	1714
Q Serve(g_s), s	4.1	11.9	12.0	20.3	7.0	7.1	2.5	5.5	29.1	1.9	0.0	4.6
Cycle Q Clear(g_c), s	4.1	11.9	12.0	20.3	7.0	7.1	2.5	5.5	29.1	1.9	0.0	4.6
Prop In Lane	1.00		0.13	1.00		0.20	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	99	369	378	848	706	710	60	563	852	45	0	502
V/C Ratio(X)	0.78	0.65	0.65	0.89	0.27	0.27	0.79	0.25	1.07	0.78	0.00	0.22
Avail Cap(c_a), veh/h	218	515	527	1281	975	981	77	563	852	107	0	559
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.0	35.0	35.1	35.2	19.6	19.7	46.3	25.5	22.1	46.8	0.0	25.8
Incr Delay (d2), s/veh	4.8	3.0	3.0	3.7	0.3	0.3	24.3	0.3	49.7	10.3	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	5.4	5.5	8.8	2.9	3.0	1.5	2.5	29.3	1.0	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.9	38.0	38.0	38.9	20.0	20.0	70.6	25.8	71.8	57.1	0.0	26.1
LnGrp LOS	D	D	D	D	B	C	E	C	F	E	A	C
Approach Vol, veh/h		561			1137			1096			144	
Approach Delay, s/veh		39.6			32.5			65.8			33.6	
Approach LOS		D			C			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	34.8	28.1	26.9	7.6	34.0	9.8	45.2
Change Period (Y+Rc), s	4.4	5.7	4.4	6.8	4.4	* 5.7	4.4	* 6.8
Max Green Setting (Gmax), s	5.8	29.1	35.8	28.0	4.2	* 32	11.8	* 53
Max Q Clear Time (g_c+I1), s	3.9	31.1	22.3	14.0	4.5	6.6	6.1	9.1
Green Ext Time (p_c), s	0.0	0.0	1.4	3.6	0.0	0.7	0.0	4.1

Intersection Summary	
HCM 6th Ctrl Delay	46.3
HCM 6th LOS	D

Notes

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



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	996	264	165	865	188	156
Future Volume (veh/h)	996	264	165	865	188	156
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	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	1083	287	179	940	204	170
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1617	693	214	2213	859	394
Arrive On Green	0.46	0.46	0.12	0.62	0.25	0.25
Sat Flow, veh/h	3647	1524	1781	3647	3456	1585
Grp Volume(v), veh/h	1083	287	179	940	204	170
Grp Sat Flow(s),veh/h/ln	1777	1524	1781	1777	1728	1585
Q Serve(g_s), s	22.1	11.7	9.1	12.6	4.4	8.4
Cycle Q Clear(g_c), s	22.1	11.7	9.1	12.6	4.4	8.4
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1617	693	214	2213	859	394
V/C Ratio(X)	0.67	0.41	0.84	0.42	0.24	0.43
Avail Cap(c_a), veh/h	1617	693	358	2546	859	394
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	19.8	16.9	39.8	8.9	27.8	29.3
Incr Delay (d2), s/veh	2.2	1.8	3.3	0.3	0.7	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	4.3	4.1	4.4	1.9	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.0	18.8	43.1	9.2	28.4	32.7
LnGrp LOS	C	B	D	A	C	C
Approach Vol, veh/h	1370			1119	374	
Approach Delay, s/veh	21.3			14.6	30.4	
Approach LOS	C			B	C	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	15.5	49.0			64.5	28.0
Change Period (Y+Rc), s	4.4	6.9			* 6.9	5.0
Max Green Setting (Gmax), s	18.6	42.1			* 66	23.0
Max Q Clear Time (g_c+I1), s	11.1	24.1			14.6	10.4
Green Ext Time (p_c), s	0.1	11.4			16.5	0.9

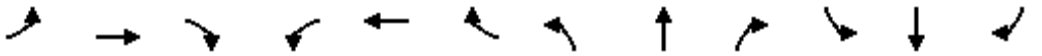
Intersection Summary		
HCM 6th Ctrl Delay	19.9	
HCM 6th LOS	B	

Notes

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

APPENDIX H

OPENING YEAR 2025 (NO CONNECTION) WITHOUT PROJECT INTERSECTION ANALYSIS CALCULATION SHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	1642	196	167	1602	7	429	23	59	9	15	55
Future Volume (veh/h)	32	1642	196	167	1602	7	429	23	59	9	15	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.95	1.00		0.88
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	36	1824	218	186	1780	8	496	0	66	10	17	61
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	46	2530	768	209	3079	14	639	0	271	38	64	78
Arrive On Green	0.03	0.50	0.50	0.12	0.59	0.59	0.18	0.00	0.18	0.06	0.06	0.06
Sat Flow, veh/h	1781	5106	1550	1781	5246	24	3563	0	1513	680	1156	1401
Grp Volume(v), veh/h	36	1824	218	186	1155	633	496	0	66	27	0	61
Grp Sat Flow(s),veh/h/ln	1781	1702	1550	1781	1702	1865	1781	0	1513	1836	0	1401
Q Serve(g_s), s	2.8	39.3	11.6	14.4	29.7	29.7	18.6	0.0	5.2	2.0	0.0	6.0
Cycle Q Clear(g_c), s	2.8	39.3	11.6	14.4	29.7	29.7	18.6	0.0	5.2	2.0	0.0	6.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	0.37		1.00
Lane Grp Cap(c), veh/h	46	2530	768	209	1998	1095	639	0	271	102	0	78
V/C Ratio(X)	0.78	0.72	0.28	0.89	0.58	0.58	0.78	0.00	0.24	0.26	0.00	0.78
Avail Cap(c_a), veh/h	88	2530	768	234	1998	1095	942	0	400	132	0	101
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	67.8	27.7	20.7	60.9	18.1	18.1	54.8	0.0	49.3	63.4	0.0	65.3
Incr Delay (d2), s/veh	10.1	1.8	0.9	27.6	1.2	2.2	1.2	0.0	0.2	0.5	0.0	18.9
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	1.4	16.3	4.4	8.1	11.9	13.3	8.5	0.0	2.0	0.9	0.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.8	29.5	21.7	88.4	19.3	20.3	56.0	0.0	49.5	63.9	0.0	84.2
LnGrp LOS	E	C	C	F	B	C	E	A	D	E	A	F
Approach Vol, veh/h		2078			1974			562			88	
Approach Delay, s/veh		29.6			26.1			55.2			77.9	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.8	75.4		12.7	8.0	88.2		31.1				
Change Period (Y+Rc), s	4.4	6.0		4.9	4.4	* 6		6.0				
Max Green Setting (Gmax), s	18.4	53.2		10.1	6.9	* 65		37.0				
Max Q Clear Time (g_c+I1), s	16.4	41.3		8.0	4.8	31.7		20.6				
Green Ext Time (p_c), s	0.1	10.4		0.0	0.0	22.4		1.0				

Intersection Summary		
HCM 6th Ctrl Delay		32.1
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1602	86	3	1546	3	125	7	23	13	11	3
Future Volume (veh/h)	0	1602	86	3	1546	3	125	7	23	13	11	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.96	1.00		0.80
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	0	1780	96	3	1718	3	139	8	26	14	12	3
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	1	2052	110	6	2306	4	765	83	270	52	40	10
Arrive On Green	0.00	0.60	0.60	0.00	0.63	0.63	0.22	0.22	0.22	0.03	0.03	0.03
Sat Flow, veh/h	1781	3426	183	1781	3639	6	3456	375	1218	1781	1366	341
Grp Volume(v), veh/h	0	915	961	3	839	882	139	0	34	14	0	15
Grp Sat Flow(s),veh/h/ln	1781	1777	1832	1781	1777	1869	1728	0	1593	1781	0	1707
Q Serve(g_s), s	0.0	59.6	61.9	0.2	45.8	45.9	4.6	0.0	2.4	1.1	0.0	1.2
Cycle Q Clear(g_c), s	0.0	59.6	61.9	0.2	45.8	45.9	4.6	0.0	2.4	1.1	0.0	1.2
Prop In Lane	1.00		0.10	1.00		0.00	1.00		0.76	1.00		0.20
Lane Grp Cap(c), veh/h	1	1064	1097	6	1126	1184	765	0	353	52	0	50
V/C Ratio(X)	0.00	0.86	0.88	0.54	0.74	0.75	0.18	0.00	0.10	0.27	0.00	0.30
Avail Cap(c_a), veh/h	51	1064	1097	51	1126	1184	765	0	353	52	0	50
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)	0.00	1.00	1.00	0.68	0.68	0.68	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	23.2	23.7	69.7	17.8	17.8	44.2	0.0	43.4	66.5	0.0	66.5
Incr Delay (d2), s/veh	0.0	9.1	9.8	18.5	3.1	2.9	0.5	0.0	0.5	12.2	0.0	14.7
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	0.0	26.7	28.7	0.1	19.0	20.0	2.0	0.0	1.0	0.7	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	32.3	33.5	88.2	20.9	20.8	44.7	0.0	43.9	78.7	0.0	81.3
LnGrp LOS	A	C	C	F	C	C	D	A	D	E	A	F
Approach Vol, veh/h		1876			1724			173			29	
Approach Delay, s/veh		32.9			20.9			44.6			80.0	
Approach LOS		C			C			D			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.8	89.9		9.0	0.0	94.7		36.3				
Change Period (Y+Rc), s	4.4	* 6		4.9	4.4	6.0		5.3				
Max Green Setting (Gmax), s	4.8	* 81		4.1	4.0	80.3		31.0				
Max Q Clear Time (g_c+I1), s	2.2	63.9		3.2	0.0	47.9		6.6				
Green Ext Time (p_c), s	0.0	15.7		0.0	0.0	27.4		0.4				

Intersection Summary	
HCM 6th Ctrl Delay	28.4
HCM 6th LOS	C

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1575	30	30	1369	63	46	42	28	196	28	134
Future Volume (veh/h)	30	1575	30	30	1369	63	46	42	28	196	28	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	1831	35	35	1592	73	53	49	33	228	33	156
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	45	2255	972	45	2255	972	198	234	158	298	63	298
Arrive On Green	0.03	0.63	0.63	0.03	0.63	0.63	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1781	3554	1532	1781	3554	1532	1186	1026	691	1302	276	1305
Grp Volume(v), veh/h	35	1831	35	35	1592	73	53	0	82	228	0	189
Grp Sat Flow(s),veh/h/ln	1781	1777	1532	1781	1777	1532	1186	0	1717	1302	0	1581
Q Serve(g_s), s	2.7	54.4	1.2	2.7	41.5	2.6	5.7	0.0	5.4	24.1	0.0	14.7
Cycle Q Clear(g_c), s	2.7	54.4	1.2	2.7	41.5	2.6	20.4	0.0	5.4	29.5	0.0	14.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.40	1.00		0.83
Lane Grp Cap(c), veh/h	45	2255	972	45	2255	972	198	0	392	298	0	360
V/C Ratio(X)	0.78	0.81	0.04	0.78	0.71	0.08	0.27	0.00	0.21	0.77	0.00	0.52
Avail Cap(c_a), veh/h	88	2255	972	71	2255	972	224	0	430	324	0	392
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)	0.40	0.40	0.40	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	67.9	19.3	9.6	67.9	16.9	9.8	56.3	0.0	43.8	55.8	0.0	47.4
Incr Delay (d2), s/veh	4.4	1.4	0.0	10.4	1.9	0.2	0.3	0.0	0.1	8.3	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	21.8	0.4	1.4	16.9	0.9	1.7	0.0	2.3	8.6	0.0	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.2	20.6	9.6	78.2	18.8	10.0	56.6	0.0	43.9	64.1	0.0	47.8
LnGrp LOS	E	C	A	E	B	A	E	A	D	E	A	D
Approach Vol, veh/h		1901			1700			135			417	
Approach Delay, s/veh		21.4			19.7			48.9			56.7	
Approach LOS		C			B			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.9	94.9		37.2	7.9	94.9		37.2
Change Period (Y+Rc), s	4.4	* 6		5.3	4.4	6.0		* 5.3
Max Green Setting (Gmax), s	5.6	* 84		34.7	6.9	82.7		* 35
Max Q Clear Time (g_c+I1), s	4.7	56.4		31.5	4.7	43.5		22.4
Green Ext Time (p_c), s	0.0	25.1		0.4	0.0	30.8		0.3

Intersection Summary	
HCM 6th Ctrl Delay	25.1
HCM 6th LOS	C

Notes

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

Intersection	
Int Delay, s/veh	3.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	19	28	57	13	25	28
Future Vol, veh/h	19	28	57	13	25	28
Conflicting Peds, #/hr	10	10	0	12	12	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	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	34	69	16	30	34

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	193	99	0	0	97	0
Stage 1	89	-	-	-	-	-
Stage 2	104	-	-	-	-	-
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	796	957	-	-	1496	-
Stage 1	934	-	-	-	-	-
Stage 2	920	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	763	937	-	-	1479	-
Mov Cap-2 Maneuver	763	-	-	-	-	-
Stage 1	924	-	-	-	-	-
Stage 2	892	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	3.5
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	858	1479	-
HCM Lane V/C Ratio	-	-	0.066	0.02	-
HCM Control Delay (s)	-	-	9.5	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	69	0	0	0	0	46
Future Vol, veh/h	69	0	0	0	0	46
Conflicting Peds, #/hr	10	0	0	10	10	10
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	83	0	0	0	0	55

Major/Minor	Major1			Major2		
Conflicting Flow All	11	0	-	0	187	21
Stage 1	-	-	-	-	11	-
Stage 2	-	-	-	-	176	-
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	1608	-	-	-	802	1056
Stage 1	-	-	-	-	1012	-
Stage 2	-	-	-	-	855	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1593	-	-	-	745	1036
Mov Cap-2 Maneuver	-	-	-	-	745	-
Stage 1	-	-	-	-	950	-
Stage 2	-	-	-	-	846	-

Approach	EB	WB	SB
HCM Control Delay, s	7.4	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1593	-	-	-	1036
HCM Lane V/C Ratio	0.052	-	-	-	0.053
HCM Control Delay (s)	7.4	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.2

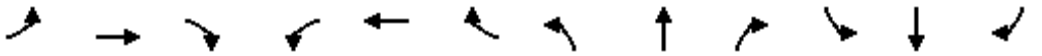
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	19	19	59	98	11
Future Vol, veh/h	7	19	19	59	98	11
Conflicting Peds, #/hr	10	10	10	0	0	10
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	70	70	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	27	27	84	140	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	306	168	166	0	-	0
Stage 1	158	-	-	-	-	-
Stage 2	148	-	-	-	-	-
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	686	876	1412	-	-	-
Stage 1	871	-	-	-	-	-
Stage 2	880	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	659	859	1399	-	-	-
Mov Cap-2 Maneuver	659	-	-	-	-	-
Stage 1	845	-	-	-	-	-
Stage 2	871	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.8	1.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1399	-	794	-	-
HCM Lane V/C Ratio	0.019	-	0.047	-	-
HCM Control Delay (s)	7.6	0	9.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	362	21	545	325	19	28	42	822	19	104	17
Future Volume (veh/h)	30	362	21	545	325	19	28	42	822	19	104	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	398	23	599	357	21	31	46	903	21	114	19
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	44	670	39	697	1270	74	42	659	863	32	539	90
Arrive On Green	0.02	0.20	0.20	0.20	0.37	0.37	0.02	0.35	0.35	0.02	0.35	0.35
Sat Flow, veh/h	1781	3407	196	3456	3402	199	1781	1870	1543	1781	1556	259
Grp Volume(v), veh/h	33	207	214	599	186	192	31	46	903	21	0	133
Grp Sat Flow(s),veh/h/ln	1781	1777	1826	1728	1777	1824	1781	1870	1543	1781	0	1815
Q Serve(g_s), s	1.7	9.7	9.8	15.4	6.7	6.8	1.6	1.5	32.4	1.1	0.0	4.8
Cycle Q Clear(g_c), s	1.7	9.7	9.8	15.4	6.7	6.8	1.6	1.5	32.4	1.1	0.0	4.8
Prop In Lane	1.00		0.11	1.00		0.11	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	44	349	359	697	664	681	42	659	863	32	0	629
V/C Ratio(X)	0.75	0.59	0.60	0.86	0.28	0.28	0.73	0.07	1.05	0.65	0.00	0.21
Avail Cap(c_a), veh/h	124	540	555	1337	1123	1153	77	659	863	108	0	629
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.6	33.6	33.6	35.5	20.2	20.2	44.6	19.8	20.7	44.9	0.0	21.2
Incr Delay (d2), s/veh	9.0	2.5	2.5	1.2	0.4	0.4	8.7	0.2	43.4	8.0	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	4.4	4.5	6.5	2.8	2.9	0.8	0.7	27.0	0.5	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.6	36.1	36.2	36.7	20.5	20.6	53.3	20.0	64.1	52.9	0.0	22.0
LnGrp LOS	D	D	D	D	C	C	D	C	F	D	A	C
Approach Vol, veh/h		454			977			980			154	
Approach Delay, s/veh		37.4			30.5			61.7			26.2	
Approach LOS		D			C			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.1	38.1	23.0	24.9	6.6	37.6	6.7	41.2
Change Period (Y+Rc), s	4.4	5.7	4.4	6.8	4.4	* 5.7	4.4	* 6.8
Max Green Setting (Gmax), s	5.6	29.5	35.6	28.0	4.0	* 32	6.4	* 58
Max Q Clear Time (g_c+I1), s	3.1	34.4	17.4	11.8	3.6	6.8	3.7	8.8
Green Ext Time (p_c), s	0.0	0.0	1.1	3.3	0.0	0.9	0.0	4.0

Intersection Summary	
HCM 6th Ctrl Delay	43.4
HCM 6th LOS	D

Notes

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



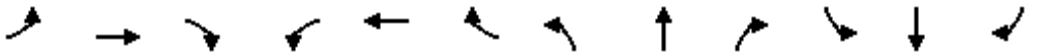
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	986	198	71	600	271	196
Future Volume (veh/h)	986	198	71	600	271	196
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1038	208	75	632	285	206
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1791	769	97	2151	924	424
Arrive On Green	0.50	0.50	0.05	0.61	0.27	0.27
Sat Flow, veh/h	3647	1526	1781	3647	3456	1585
Grp Volume(v), veh/h	1038	208	75	632	285	206
Grp Sat Flow(s),veh/h/ln	1777	1526	1781	1777	1728	1585
Q Serve(g_s), s	19.1	7.3	3.9	8.0	6.2	10.2
Cycle Q Clear(g_c), s	19.1	7.3	3.9	8.0	6.2	10.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1791	769	97	2151	924	424
V/C Ratio(X)	0.58	0.27	0.78	0.29	0.31	0.49
Avail Cap(c_a), veh/h	1791	769	221	2445	924	424
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	16.2	13.3	43.6	8.9	27.3	28.8
Incr Delay (d2), s/veh	1.4	0.9	4.9	0.1	0.9	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	2.6	1.8	2.9	2.6	4.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.6	14.2	48.6	9.0	28.2	32.8
LnGrp LOS	B	B	D	A	C	C
Approach Vol, veh/h	1246			707	491	
Approach Delay, s/veh	17.1			13.2	30.1	
Approach LOS	B			B	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	9.5	54.0				63.5	30.0
Change Period (Y+Rc), s	4.4	6.9				* 6.9	5.0
Max Green Setting (Gmax), s	11.6	47.1				* 64	25.0
Max Q Clear Time (g_c+I1), s	5.9	21.1				10.0	12.2
Green Ext Time (p_c), s	0.0	13.3				9.7	1.2

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.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	1320	221	259	1700	3	302	28	162	4	25	47
Future Volume (veh/h)	97	1320	221	259	1700	3	302	28	162	4	25	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.96	1.00		0.88
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	109	1483	248	291	1910	3	361	0	182	4	28	53
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	125	2255	684	314	2884	5	588	0	250	12	82	71
Arrive On Green	0.07	0.44	0.44	0.18	0.55	0.55	0.17	0.00	0.17	0.05	0.05	0.05
Sat Flow, veh/h	1781	5106	1548	1781	5264	8	3563	0	1514	232	1626	1402
Grp Volume(v), veh/h	109	1483	248	291	1235	678	361	0	182	32	0	53
Grp Sat Flow(s),veh/h/ln	1781	1702	1548	1781	1702	1869	1781	0	1514	1859	0	1402
Q Serve(g_s), s	7.8	29.3	13.6	20.6	33.0	33.0	12.1	0.0	14.6	2.1	0.0	4.8
Cycle Q Clear(g_c), s	7.8	29.3	13.6	20.6	33.0	33.0	12.1	0.0	14.6	2.1	0.0	4.8
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.12		1.00
Lane Grp Cap(c), veh/h	125	2255	684	314	1865	1024	588	0	250	94	0	71
V/C Ratio(X)	0.87	0.66	0.36	0.93	0.66	0.66	0.61	0.00	0.73	0.34	0.00	0.75
Avail Cap(c_a), veh/h	125	2255	684	315	1865	1024	1030	0	438	118	0	89
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	58.9	28.1	23.8	51.9	20.5	20.5	49.7	0.0	50.7	58.7	0.0	60.0
Incr Delay (d2), s/veh	42.5	1.5	1.5	31.7	1.9	3.4	0.4	0.0	1.5	0.8	0.0	17.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	12.1	5.3	11.9	13.3	15.0	5.4	0.0	5.6	1.0	0.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	101.4	29.6	25.2	83.5	22.4	23.9	50.0	0.0	52.2	59.5	0.0	77.0
LnGrp LOS	F	C	C	F	C	C	D	A	D	E	A	E
Approach Vol, veh/h		1840			2204			543			85	
Approach Delay, s/veh		33.3			30.9			50.8			70.4	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	27.0	62.5		11.4	13.4	76.1		27.1				
Change Period (Y+Rc), s	4.4	6.0		4.9	4.4	* 6		6.0				
Max Green Setting (Gmax), s	22.6	39.0		8.1	9.0	* 53		37.0				
Max Q Clear Time (g_c+I1), s	22.6	31.3		6.8	9.8	35.0		16.6				
Green Ext Time (p_c), s	0.0	6.4		0.0	0.0	14.6		1.0				

Intersection Summary		
HCM 6th Ctrl Delay		34.9
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	1235	143	31	1797	22	100	7	38	18	6	4
Future Volume (veh/h)	19	1235	143	31	1797	22	100	7	38	18	6	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.97	1.00		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	1286	149	32	1872	23	104	7	40	19	6	4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	28	1728	199	41	1964	24	840	57	326	60	33	22
Arrive On Green	0.02	0.54	0.54	0.02	0.55	0.55	0.24	0.24	0.24	0.03	0.03	0.03
Sat Flow, veh/h	1781	3202	369	1781	3593	44	3456	235	1340	1781	968	645
Grp Volume(v), veh/h	20	711	724	32	923	972	104	0	47	19	0	10
Grp Sat Flow(s),veh/h/ln	1781	1777	1794	1781	1777	1861	1728	0	1575	1781	0	1614
Q Serve(g_s), s	1.4	39.3	39.9	2.3	62.8	63.4	3.0	0.0	3.0	1.3	0.0	0.8
Cycle Q Clear(g_c), s	1.4	39.3	39.9	2.3	62.8	63.4	3.0	0.0	3.0	1.3	0.0	0.8
Prop In Lane	1.00		0.21	1.00		0.02	1.00		0.85	1.00		0.40
Lane Grp Cap(c), veh/h	28	959	968	41	971	1017	840	0	383	60	0	54
V/C Ratio(X)	0.71	0.74	0.75	0.79	0.95	0.96	0.12	0.00	0.12	0.32	0.00	0.18
Avail Cap(c_a), veh/h	58	959	968	92	971	1017	840	0	383	60	0	54
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.47	0.47	0.47	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	62.7	22.6	22.7	62.2	27.4	27.5	37.8	0.0	37.8	60.4	0.0	60.1
Incr Delay (d2), s/veh	11.3	5.1	5.3	5.9	11.2	11.4	0.3	0.0	0.7	13.4	0.0	7.4
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	0.7	17.3	17.8	1.1	28.5	30.1	1.3	0.0	1.2	0.8	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.0	27.7	28.0	68.1	38.6	38.9	38.1	0.0	38.5	73.8	0.0	67.5
LnGrp LOS	E	C	C	E	D	D	D	A	D	E	A	E
Approach Vol, veh/h		1455			1927			151			29	
Approach Delay, s/veh		28.5			39.2			38.2			71.6	
Approach LOS		C			D			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.3	75.1		9.2	6.4	76.0		36.4
Change Period (Y+Rc), s	4.4	* 6		4.9	4.4	6.0		5.3
Max Green Setting (Gmax), s	6.6	* 66		4.3	4.2	67.8		31.1
Max Q Clear Time (g_c+I1), s	4.3	41.9		3.3	3.4	65.4		5.0
Green Ext Time (p_c), s	0.0	18.7		0.0	0.0	2.3		0.3

Intersection Summary		
HCM 6th Ctrl Delay	35.1	
HCM 6th LOS	D	

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	1141	56	81	1679	231	44	29	47	168	44	66
Future Volume (veh/h)	107	1141	56	81	1679	231	44	29	47	168	44	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.96	0.99		0.96
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	115	1227	60	87	1805	248	47	31	51	181	47	71
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	134	2172	936	109	2123	915	237	127	209	268	134	203
Arrive On Green	0.08	0.61	0.61	0.06	0.60	0.60	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1781	3554	1531	1781	3554	1531	1260	620	1020	1301	656	991
Grp Volume(v), veh/h	115	1227	60	87	1805	248	47	0	82	181	0	118
Grp Sat Flow(s),veh/h/ln	1781	1777	1531	1781	1777	1531	1260	0	1641	1301	0	1647
Q Serve(g_s), s	8.2	26.2	2.0	6.2	53.2	10.0	4.2	0.0	5.4	17.3	0.0	7.9
Cycle Q Clear(g_c), s	8.2	26.2	2.0	6.2	53.2	10.0	12.1	0.0	5.4	22.7	0.0	7.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.62	1.00		0.60
Lane Grp Cap(c), veh/h	134	2172	936	109	2123	915	237	0	336	268	0	337
V/C Ratio(X)	0.86	0.56	0.06	0.80	0.85	0.27	0.20	0.00	0.24	0.67	0.00	0.35
Avail Cap(c_a), veh/h	134	2172	936	177	2123	915	271	0	381	300	0	377
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)	0.58	0.58	0.58	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.5	14.8	10.1	59.3	21.1	12.4	48.8	0.0	42.6	52.1	0.0	43.6
Incr Delay (d2), s/veh	25.5	0.6	0.1	5.0	4.5	0.7	0.2	0.0	0.1	3.7	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	10.4	0.7	2.9	22.3	3.6	1.4	0.0	2.2	5.9	0.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	84.1	15.4	10.1	64.3	25.6	13.1	48.9	0.0	42.7	55.8	0.0	43.8
LnGrp LOS	F	B	B	E	C	B	D	A	D	E	A	D
Approach Vol, veh/h		1402			2140			129			299	
Approach Delay, s/veh		20.8			25.7			45.0			51.1	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.2	84.2		31.5	14.0	82.5		31.5
Change Period (Y+Rc), s	4.4	* 6		5.3	4.4	6.0		* 5.3
Max Green Setting (Gmax), s	12.7	* 71		29.3	9.6	73.4		* 30
Max Q Clear Time (g_c+I1), s	10.2	28.2		24.7	10.2	55.2		14.1
Green Ext Time (p_c), s	0.0	25.4		0.3	0.0	17.1		0.3

Intersection Summary	
HCM 6th Ctrl Delay	26.5
HCM 6th LOS	C

Notes

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

Intersection	
Int Delay, s/veh	3.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	22	38	47	25	44	59
Future Vol, veh/h	22	38	47	25	44	59
Conflicting Peds, #/hr	10	10	0	10	10	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	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	46	57	30	53	71

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	269	92	0	0	97	0
Stage 1	82	-	-	-	-	-
Stage 2	187	-	-	-	-	-
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	720	965	-	-	1496	-
Stage 1	941	-	-	-	-	-
Stage 2	845	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	680	947	-	-	1482	-
Mov Cap-2 Maneuver	680	-	-	-	-	-
Stage 1	932	-	-	-	-	-
Stage 2	806	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	3.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	828	1482	-
HCM Lane V/C Ratio	-	-	0.087	0.036	-
HCM Control Delay (s)	-	-	9.8	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	8.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	72	0	0	0	0	81
Future Vol, veh/h	72	0	0	0	0	81
Conflicting Peds, #/hr	10	0	0	10	10	10
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	87	0	0	0	0	98

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	11	0	-	0	195	21
Stage 1	-	-	-	-	11	-
Stage 2	-	-	-	-	184	-
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	1608	-	-	-	794	1056
Stage 1	-	-	-	-	1012	-
Stage 2	-	-	-	-	848	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1593	-	-	-	735	1036
Mov Cap-2 Maneuver	-	-	-	-	735	-
Stage 1	-	-	-	-	947	-
Stage 2	-	-	-	-	840	-

Approach	EB	WB	SB
HCM Control Delay, s	7.4	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1593	-	-	-	1036
HCM Lane V/C Ratio	0.054	-	-	-	0.094
HCM Control Delay (s)	7.4	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.3

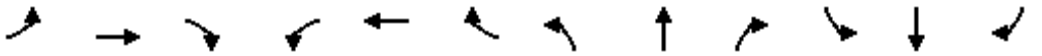
Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	31	35	119	59	19
Future Vol, veh/h	12	31	35	119	59	19
Conflicting Peds, #/hr	10	10	10	0	0	10
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	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	35	40	135	67	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	313	98	99	0	-	0
Stage 1	88	-	-	-	-	-
Stage 2	225	-	-	-	-	-
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	680	958	1494	-	-	-
Stage 1	935	-	-	-	-	-
Stage 2	812	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	647	940	1480	-	-	-
Mov Cap-2 Maneuver	647	-	-	-	-	-
Stage 1	899	-	-	-	-	-
Stage 2	804	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.6	1.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1480	-	835	-	-
HCM Lane V/C Ratio	0.027	-	0.059	-	-
HCM Control Delay (s)	7.5	0	9.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	411	29	659	322	22	44	93	804	21	41	32
Future Volume (veh/h)	60	411	29	659	322	22	44	93	804	21	41	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	442	31	709	346	24	47	100	865	23	44	34
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	84	693	48	805	1318	91	60	596	860	34	293	227
Arrive On Green	0.05	0.21	0.21	0.23	0.39	0.39	0.03	0.32	0.32	0.02	0.30	0.30
Sat Flow, veh/h	1781	3360	235	3456	3362	232	1781	1870	1541	1781	965	745
Grp Volume(v), veh/h	65	233	240	709	182	188	47	100	865	23	0	78
Grp Sat Flow(s),veh/h/ln	1781	1777	1818	1728	1777	1817	1781	1870	1541	1781	0	1710
Q Serve(g_s), s	3.4	11.4	11.5	18.9	6.6	6.7	2.5	3.7	30.4	1.2	0.0	3.2
Cycle Q Clear(g_c), s	3.4	11.4	11.5	18.9	6.6	6.7	2.5	3.7	30.4	1.2	0.0	3.2
Prop In Lane	1.00		0.13	1.00		0.13	1.00		1.00	1.00		0.44
Lane Grp Cap(c), veh/h	84	367	375	805	697	712	60	596	860	34	0	520
V/C Ratio(X)	0.78	0.64	0.64	0.88	0.26	0.26	0.79	0.17	1.01	0.67	0.00	0.15
Avail Cap(c_a), veh/h	181	521	533	1253	1004	1026	86	596	860	106	0	579
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.0	34.6	34.6	35.3	19.6	19.7	45.8	23.4	21.6	46.5	0.0	24.2
Incr Delay (d2), s/veh	5.7	2.9	2.9	3.2	0.3	0.3	15.9	0.1	32.2	8.3	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	5.2	5.3	8.1	2.7	2.8	1.4	1.6	25.0	0.6	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.6	37.5	37.5	38.5	20.0	20.0	61.6	23.6	53.8	54.8	0.0	24.4
LnGrp LOS	D	D	D	D	B	B	E	C	F	D	A	C
Approach Vol, veh/h		538			1079			1012			101	
Approach Delay, s/veh		39.1			32.1			51.2			31.3	
Approach LOS		D			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.2	36.1	26.6	26.5	7.6	34.7	8.9	44.2
Change Period (Y+Rc), s	4.4	5.7	4.4	6.8	4.4	* 5.7	4.4	* 6.8
Max Green Setting (Gmax), s	5.7	30.4	34.6	28.0	4.6	* 32	9.7	* 54
Max Q Clear Time (g_c+I1), s	3.2	32.4	20.9	13.5	4.5	5.2	5.4	8.7
Green Ext Time (p_c), s	0.0	0.0	1.3	3.6	0.0	0.5	0.0	3.9

Intersection Summary	
HCM 6th Ctrl Delay	40.5
HCM 6th LOS	D

Notes

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



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	965	263	165	832	187	156
Future Volume (veh/h)	965	263	165	832	187	156
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	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	1049	286	179	904	203	170
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1617	693	214	2213	859	394
Arrive On Green	0.46	0.46	0.12	0.62	0.25	0.25
Sat Flow, veh/h	3647	1524	1781	3647	3456	1585
Grp Volume(v), veh/h	1049	286	179	904	203	170
Grp Sat Flow(s),veh/h/ln	1777	1524	1781	1777	1728	1585
Q Serve(g_s), s	21.1	11.7	9.1	11.9	4.3	8.4
Cycle Q Clear(g_c), s	21.1	11.7	9.1	11.9	4.3	8.4
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1617	693	214	2213	859	394
V/C Ratio(X)	0.65	0.41	0.84	0.41	0.24	0.43
Avail Cap(c_a), veh/h	1617	693	358	2546	859	394
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	19.5	16.9	39.8	8.8	27.8	29.3
Incr Delay (d2), s/veh	2.0	1.8	3.3	0.2	0.6	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	4.3	4.1	4.2	1.8	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.5	18.7	43.1	9.1	28.4	32.7
LnGrp LOS	C	B	D	A	C	C
Approach Vol, veh/h	1335			1083	373	
Approach Delay, s/veh	20.9			14.7	30.3	
Approach LOS	C			B	C	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	15.5	49.0			64.5	28.0
Change Period (Y+Rc), s	4.4	6.9			* 6.9	5.0
Max Green Setting (Gmax), s	18.6	42.1			* 66	23.0
Max Q Clear Time (g_c+I1), s	11.1	23.1			13.9	10.4
Green Ext Time (p_c), s	0.1	11.5			15.7	0.9

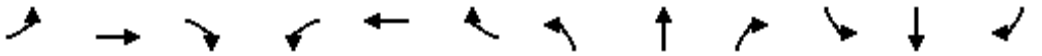
Intersection Summary	
HCM 6th Ctrl Delay	19.8
HCM 6th LOS	B

Notes

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

APPENDIX I

OPENING YEAR 2025 (NO CONNECTION) WITH PROJECT INTERSECTION ANALYSIS CALCULATION SHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	1644	196	167	1609	7	429	23	59	9	15	55
Future Volume (veh/h)	32	1644	196	167	1609	7	429	23	59	9	15	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.95	1.00		0.88
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	36	1827	218	186	1788	8	496	0	66	10	17	61
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	46	2531	768	209	3080	14	639	0	271	38	64	78
Arrive On Green	0.03	0.50	0.50	0.12	0.59	0.59	0.18	0.00	0.18	0.06	0.06	0.06
Sat Flow, veh/h	1781	5106	1550	1781	5246	23	3563	0	1513	680	1156	1401
Grp Volume(v), veh/h	36	1827	218	186	1160	636	496	0	66	27	0	61
Grp Sat Flow(s),veh/h/ln	1781	1702	1550	1781	1702	1865	1781	0	1513	1836	0	1401
Q Serve(g_s), s	2.8	39.3	11.6	14.4	29.9	29.9	18.6	0.0	5.2	2.0	0.0	6.0
Cycle Q Clear(g_c), s	2.8	39.3	11.6	14.4	29.9	29.9	18.6	0.0	5.2	2.0	0.0	6.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	0.37		1.00
Lane Grp Cap(c), veh/h	46	2531	768	209	1999	1095	639	0	271	102	0	78
V/C Ratio(X)	0.78	0.72	0.28	0.89	0.58	0.58	0.78	0.00	0.24	0.27	0.00	0.79
Avail Cap(c_a), veh/h	90	2531	768	224	1999	1095	942	0	400	106	0	81
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	67.8	27.7	20.7	60.9	18.1	18.1	54.8	0.0	49.3	63.4	0.0	65.3
Incr Delay (d2), s/veh	10.0	1.8	0.9	29.9	1.2	2.2	1.2	0.0	0.2	0.5	0.0	34.2
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	1.4	16.3	4.4	8.3	11.9	13.4	8.5	0.0	2.0	0.9	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.8	29.5	21.6	90.8	19.3	20.4	56.0	0.0	49.5	63.9	0.0	99.5
LnGrp LOS	E	C	C	F	B	C	E	A	D	E	A	F
Approach Vol, veh/h		2081			1982			562			88	
Approach Delay, s/veh		29.5			26.4			55.2			88.6	
Approach LOS		C			C			E			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.8	75.4		12.7	8.0	88.2		31.1				
Change Period (Y+Rc), s	4.4	6.0		4.9	4.4	* 6		6.0				
Max Green Setting (Gmax), s	17.6	56.0		8.1	7.1	* 67		37.0				
Max Q Clear Time (g_c+I1), s	16.4	41.3		8.0	4.8	31.9		20.6				
Green Ext Time (p_c), s	0.0	12.5		0.0	0.0	23.2		1.0				

Intersection Summary		
HCM 6th Ctrl Delay		32.4
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1602	88	3	1546	3	132	7	23	13	11	3
Future Volume (veh/h)	0	1602	88	3	1546	3	132	7	23	13	11	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.96	1.00		0.80
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	0	1780	98	3	1718	3	147	8	26	14	12	3
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	1	2049	112	6	2306	4	765	83	270	52	40	10
Arrive On Green	0.00	0.60	0.60	0.00	0.63	0.63	0.22	0.22	0.22	0.03	0.03	0.03
Sat Flow, veh/h	1781	3421	187	1781	3639	6	3456	375	1218	1781	1366	341
Grp Volume(v), veh/h	0	916	962	3	839	882	147	0	34	14	0	15
Grp Sat Flow(s),veh/h/ln	1781	1777	1831	1781	1777	1869	1728	0	1593	1781	0	1707
Q Serve(g_s), s	0.0	59.8	62.1	0.2	45.8	45.9	4.8	0.0	2.4	1.1	0.0	1.2
Cycle Q Clear(g_c), s	0.0	59.8	62.1	0.2	45.8	45.9	4.8	0.0	2.4	1.1	0.0	1.2
Prop In Lane	1.00		0.10	1.00		0.00	1.00		0.76	1.00		0.20
Lane Grp Cap(c), veh/h	1	1064	1097	6	1126	1184	765	0	353	52	0	50
V/C Ratio(X)	0.00	0.86	0.88	0.54	0.74	0.75	0.19	0.00	0.10	0.27	0.00	0.30
Avail Cap(c_a), veh/h	51	1064	1097	51	1126	1184	765	0	353	52	0	50
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)	0.00	1.00	1.00	0.66	0.66	0.66	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	23.2	23.7	69.7	17.8	17.8	44.3	0.0	43.4	66.5	0.0	66.5
Incr Delay (d2), s/veh	0.0	9.1	9.9	18.0	3.0	2.9	0.6	0.0	0.5	12.2	0.0	14.7
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	0.0	26.8	28.8	0.1	19.0	20.0	2.2	0.0	1.0	0.7	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	32.4	33.6	87.7	20.8	20.7	44.9	0.0	43.9	78.7	0.0	81.3
LnGrp LOS	A	C	C	F	C	C	D	A	D	E	A	F
Approach Vol, veh/h		1878			1724			181			29	
Approach Delay, s/veh		33.0			20.9			44.7			80.0	
Approach LOS		C			C			D			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.8	89.9		9.0	0.0	94.7		36.3				
Change Period (Y+Rc), s	4.4	* 6		4.9	4.4	6.0		5.3				
Max Green Setting (Gmax), s	4.3	* 81		4.1	4.0	80.3		31.0				
Max Q Clear Time (g_c+I1), s	2.2	64.1		3.2	0.0	47.9		6.8				
Green Ext Time (p_c), s	0.0	15.6		0.0	0.0	27.4		0.4				

Intersection Summary	
HCM 6th Ctrl Delay	28.4
HCM 6th LOS	C

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1575	30	33	1369	63	46	56	41	196	31	134
Future Volume (veh/h)	30	1575	30	33	1369	63	46	56	41	196	31	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	1831	35	38	1592	73	53	65	48	228	36	156
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	45	2183	941	49	2191	944	220	242	179	296	73	317
Arrive On Green	0.03	0.61	0.61	0.03	0.62	0.62	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1781	3554	1531	1781	3554	1531	1184	984	727	1269	298	1289
Grp Volume(v), veh/h	35	1831	35	38	1592	73	53	0	113	228	0	192
Grp Sat Flow(s),veh/h/ln	1781	1777	1531	1781	1777	1531	1184	0	1711	1269	0	1587
Q Serve(g_s), s	2.7	57.4	1.3	3.0	43.6	2.7	5.6	0.0	7.5	24.8	0.0	14.5
Cycle Q Clear(g_c), s	2.7	57.4	1.3	3.0	43.6	2.7	20.2	0.0	7.5	32.2	0.0	14.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.42	1.00		0.81
Lane Grp Cap(c), veh/h	45	2183	941	49	2191	944	220	0	421	296	0	390
V/C Ratio(X)	0.78	0.84	0.04	0.78	0.73	0.08	0.24	0.00	0.27	0.77	0.00	0.49
Avail Cap(c_a), veh/h	89	2183	941	71	2191	944	234	0	441	307	0	405
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)	0.40	0.40	0.40	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	67.9	21.5	10.7	67.7	18.6	10.8	53.9	0.0	42.6	55.6	0.0	45.3
Incr Delay (d2), s/veh	4.4	1.7	0.0	15.8	2.1	0.2	0.2	0.0	0.1	9.8	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	23.4	0.4	1.6	18.0	1.0	1.7	0.0	3.2	8.7	0.0	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.2	23.1	10.7	83.5	20.8	11.0	54.1	0.0	42.7	65.4	0.0	45.6
LnGrp LOS	E	C	B	F	C	B	D	A	D	E	A	D
Approach Vol, veh/h		1901			1703			166			420	
Approach Delay, s/veh		23.8			21.8			46.4			56.4	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.2	92.0		39.7	7.9	92.3		39.7
Change Period (Y+Rc), s	4.4	* 6		5.3	4.4	6.0		* 5.3
Max Green Setting (Gmax), s	5.6	* 83		35.7	7.0	81.6		* 36
Max Q Clear Time (g_c+I1), s	5.0	59.4		34.2	4.7	45.6		22.2
Green Ext Time (p_c), s	0.0	21.8		0.2	0.0	28.7		0.4

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	4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	41	71	27	28	31
Future Vol, veh/h	31	41	71	27	28	31
Conflicting Peds, #/hr	10	10	0	12	12	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	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	49	86	33	34	37

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	230	125	0	0	131	0
Stage 1	115	-	-	-	-	-
Stage 2	115	-	-	-	-	-
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	926	-	-	1454	-
Stage 1	910	-	-	-	-	-
Stage 2	910	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	725	907	-	-	1437	-
Mov Cap-2 Maneuver	725	-	-	-	-	-
Stage 1	900	-	-	-	-	-
Stage 2	880	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	3.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	819	1437	-
HCM Lane V/C Ratio	-	-	0.106	0.023	-
HCM Control Delay (s)	-	-	9.9	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	71	3	11	26	6	55
Future Vol, veh/h	71	3	11	26	6	55
Conflicting Peds, #/hr	10	0	0	10	10	10
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	86	4	13	31	7	66

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	54	0	-	0	225	49
Stage 1	-	-	-	-	39	-
Stage 2	-	-	-	-	186	-
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	1551	-	-	-	763	1020
Stage 1	-	-	-	-	983	-
Stage 2	-	-	-	-	846	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1536	-	-	-	706	1001
Mov Cap-2 Maneuver	-	-	-	-	706	-
Stage 1	-	-	-	-	919	-
Stage 2	-	-	-	-	838	-

Approach	EB	WB	SB
HCM Control Delay, s	7.2	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1536	-	-	-	961
HCM Lane V/C Ratio	0.056	-	-	-	0.076
HCM Control Delay (s)	7.5	0	-	-	9.1
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.2

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	29	32	22	62	109	17
Future Vol, veh/h	29	32	22	62	109	17
Conflicting Peds, #/hr	10	10	10	0	0	10
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	70	70	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	41	46	31	89	156	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	339	188	190	0	-	0
Stage 1	178	-	-	-	-	-
Stage 2	161	-	-	-	-	-
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	657	854	1384	-	-	-
Stage 1	853	-	-	-	-	-
Stage 2	868	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	629	838	1371	-	-	-
Mov Cap-2 Maneuver	629	-	-	-	-	-
Stage 1	824	-	-	-	-	-
Stage 2	859	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.7	2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1371	-	724	-	-
HCM Lane V/C Ratio	0.023	-	0.12	-	-
HCM Control Delay (s)	7.7	0	10.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	362	21	545	325	20	28	46	822	23	122	19
Future Volume (veh/h)	31	362	21	545	325	20	28	46	822	23	122	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	398	23	599	357	22	31	51	903	25	134	21
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	45	670	39	697	1265	78	42	654	859	37	545	85
Arrive On Green	0.03	0.20	0.20	0.20	0.37	0.37	0.02	0.35	0.35	0.02	0.35	0.35
Sat Flow, veh/h	1781	3407	196	3456	3391	208	1781	1870	1543	1781	1572	246
Grp Volume(v), veh/h	34	207	214	599	186	193	31	51	903	25	0	155
Grp Sat Flow(s),veh/h/ln	1781	1777	1826	1728	1777	1822	1781	1870	1543	1781	0	1818
Q Serve(g_s), s	1.7	9.7	9.8	15.4	6.8	6.8	1.6	1.7	32.2	1.3	0.0	5.6
Cycle Q Clear(g_c), s	1.7	9.7	9.8	15.4	6.8	6.8	1.6	1.7	32.2	1.3	0.0	5.6
Prop In Lane	1.00		0.11	1.00		0.11	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	45	349	359	697	663	680	42	654	859	37	0	630
V/C Ratio(X)	0.76	0.59	0.60	0.86	0.28	0.28	0.73	0.08	1.05	0.68	0.00	0.25
Avail Cap(c_a), veh/h	128	540	555	1337	1120	1148	77	654	859	114	0	630
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.6	33.6	33.6	35.5	20.2	20.2	44.6	20.0	20.8	44.8	0.0	21.5
Incr Delay (d2), s/veh	9.2	2.5	2.5	1.2	0.4	0.4	8.7	0.2	44.9	8.1	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	4.4	4.5	6.5	2.8	2.9	0.8	0.8	27.3	0.6	0.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.8	36.1	36.2	36.7	20.6	20.6	53.3	20.2	65.8	52.9	0.0	22.4
LnGrp LOS	D	D	D	D	C	C	D	C	F	D	A	C
Approach Vol, veh/h		455			978			985			180	
Approach Delay, s/veh		37.5			30.5			63.0			26.6	
Approach LOS		D			C			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.3	37.9	23.0	24.9	6.6	37.6	6.7	41.1
Change Period (Y+Rc), s	4.4	5.7	4.4	6.8	4.4	* 5.7	4.4	* 6.8
Max Green Setting (Gmax), s	5.9	29.2	35.6	28.0	4.0	* 32	6.6	* 58
Max Q Clear Time (g_c+I1), s	3.3	34.2	17.4	11.8	3.6	7.6	3.7	8.8
Green Ext Time (p_c), s	0.0	0.0	1.1	3.3	0.0	1.1	0.0	4.0

Intersection Summary	
HCM 6th Ctrl Delay	43.8
HCM 6th LOS	D

Notes

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



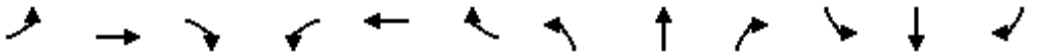
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	989	199	71	601	271	196
Future Volume (veh/h)	989	199	71	601	271	196
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1041	209	75	633	285	206
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1791	769	97	2151	924	424
Arrive On Green	0.50	0.50	0.05	0.61	0.27	0.27
Sat Flow, veh/h	3647	1526	1781	3647	3456	1585
Grp Volume(v), veh/h	1041	209	75	633	285	206
Grp Sat Flow(s),veh/h/ln	1777	1526	1781	1777	1728	1585
Q Serve(g_s), s	19.2	7.4	3.9	8.0	6.2	10.2
Cycle Q Clear(g_c), s	19.2	7.4	3.9	8.0	6.2	10.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1791	769	97	2151	924	424
V/C Ratio(X)	0.58	0.27	0.78	0.29	0.31	0.49
Avail Cap(c_a), veh/h	1791	769	221	2445	924	424
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	16.3	13.3	43.6	8.9	27.3	28.8
Incr Delay (d2), s/veh	1.4	0.9	4.9	0.1	0.9	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	2.6	1.8	2.9	2.6	4.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.7	14.2	48.6	9.0	28.2	32.8
LnGrp LOS	B	B	D	A	C	C
Approach Vol, veh/h	1250			708	491	
Approach Delay, s/veh	17.1			13.2	30.1	
Approach LOS	B			B	C	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	9.5	54.0			63.5	30.0
Change Period (Y+Rc), s	4.4	6.9			* 6.9	5.0
Max Green Setting (Gmax), s	11.6	47.1			* 64	25.0
Max Q Clear Time (g_c+I1), s	5.9	21.2			10.0	12.2
Green Ext Time (p_c), s	0.0	13.3			9.7	1.2

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.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	1328	221	259	1703	3	302	28	162	4	25	47
Future Volume (veh/h)	97	1328	221	259	1703	3	302	28	162	4	25	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.96	1.00		0.88
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	109	1492	248	291	1913	3	361	0	182	4	28	53
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	128	2256	684	314	2876	5	588	0	250	12	82	71
Arrive On Green	0.07	0.44	0.44	0.18	0.55	0.55	0.17	0.00	0.17	0.05	0.05	0.05
Sat Flow, veh/h	1781	5106	1548	1781	5264	8	3563	0	1514	232	1626	1402
Grp Volume(v), veh/h	109	1492	248	291	1237	679	361	0	182	32	0	53
Grp Sat Flow(s),veh/h/ln	1781	1702	1548	1781	1702	1869	1781	0	1514	1859	0	1402
Q Serve(g_s), s	7.7	29.5	13.6	20.6	33.1	33.2	12.1	0.0	14.6	2.1	0.0	4.8
Cycle Q Clear(g_c), s	7.7	29.5	13.6	20.6	33.1	33.2	12.1	0.0	14.6	2.1	0.0	4.8
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.12		1.00
Lane Grp Cap(c), veh/h	128	2256	684	314	1860	1021	588	0	250	94	0	71
V/C Ratio(X)	0.85	0.66	0.36	0.93	0.67	0.67	0.61	0.00	0.73	0.34	0.00	0.75
Avail Cap(c_a), veh/h	128	2256	684	315	1860	1021	1030	0	438	103	0	78
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	58.7	28.2	23.7	51.9	20.7	20.7	49.7	0.0	50.7	58.7	0.0	60.0
Incr Delay (d2), s/veh	37.5	1.5	1.5	31.7	1.9	3.4	0.4	0.0	1.5	0.8	0.0	25.8
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	4.8	12.2	5.3	11.9	13.4	15.1	5.4	0.0	5.6	1.0	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	96.2	29.7	25.2	83.5	22.6	24.1	50.0	0.0	52.2	59.5	0.0	85.8
LnGrp LOS	F	C	C	F	C	C	D	A	D	E	A	F
Approach Vol, veh/h		1849			2207			543			85	
Approach Delay, s/veh		33.0			31.1			50.8			75.9	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	27.0	62.5		11.3	13.6	75.9		27.1				
Change Period (Y+Rc), s	4.4	6.0		4.9	4.4	* 6		6.0				
Max Green Setting (Gmax), s	22.6	40.0		7.1	9.2	* 54		37.0				
Max Q Clear Time (g_c+I1), s	22.6	31.5		6.8	9.7	35.2		16.6				
Green Ext Time (p_c), s	0.0	7.0		0.0	0.0	15.1		1.0				

Intersection Summary		
HCM 6th Ctrl Delay		35.0
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	1235	151	31	1797	22	103	7	38	18	6	4
Future Volume (veh/h)	19	1235	151	31	1797	22	103	7	38	18	6	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.97	1.00		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	1286	157	32	1872	23	107	7	40	19	6	4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	28	1717	208	41	1964	24	840	57	326	60	33	22
Arrive On Green	0.02	0.54	0.54	0.02	0.55	0.55	0.24	0.24	0.24	0.03	0.03	0.03
Sat Flow, veh/h	1781	3181	386	1781	3593	44	3456	235	1340	1781	968	645
Grp Volume(v), veh/h	20	715	728	32	923	972	107	0	47	19	0	10
Grp Sat Flow(s),veh/h/ln	1781	1777	1791	1781	1777	1861	1728	0	1575	1781	0	1614
Q Serve(g_s), s	1.4	39.7	40.3	2.3	62.8	63.4	3.1	0.0	3.0	1.3	0.0	0.8
Cycle Q Clear(g_c), s	1.4	39.7	40.3	2.3	62.8	63.4	3.1	0.0	3.0	1.3	0.0	0.8
Prop In Lane	1.00		0.22	1.00		0.02	1.00		0.85	1.00		0.40
Lane Grp Cap(c), veh/h	28	959	967	41	971	1017	840	0	383	60	0	54
V/C Ratio(X)	0.71	0.75	0.75	0.79	0.95	0.96	0.13	0.00	0.12	0.32	0.00	0.18
Avail Cap(c_a), veh/h	58	959	967	67	971	1017	840	0	383	60	0	54
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.47	0.47	0.47	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	62.7	22.7	22.8	62.2	27.4	27.5	37.9	0.0	37.8	60.4	0.0	60.1
Incr Delay (d2), s/veh	11.3	5.3	5.4	5.9	11.2	11.4	0.3	0.0	0.7	13.4	0.0	7.4
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	0.7	17.6	18.0	1.1	28.5	30.1	1.4	0.0	1.2	0.8	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.0	27.9	28.3	68.1	38.6	38.9	38.2	0.0	38.5	73.8	0.0	67.5
LnGrp LOS	E	C	C	E	D	D	D	A	D	E	A	E
Approach Vol, veh/h		1463			1927			154			29	
Approach Delay, s/veh		28.7			39.2			38.3			71.6	
Approach LOS		C			D			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.3	75.1		9.2	6.4	76.0		36.4
Change Period (Y+Rc), s	4.4	* 6		4.9	4.4	6.0		5.3
Max Green Setting (Gmax), s	4.8	* 68		4.3	4.2	67.8		31.1
Max Q Clear Time (g_c+I1), s	4.3	42.3		3.3	3.4	65.4		5.1
Green Ext Time (p_c), s	0.0	19.7		0.0	0.0	2.3		0.4

Intersection Summary		
HCM 6th Ctrl Delay	35.2	
HCM 6th LOS	D	

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	1141	56	96	1679	231	44	35	54	168	59	66
Future Volume (veh/h)	107	1141	56	96	1679	231	44	35	54	168	59	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.96	0.99		0.96
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	115	1227	60	103	1805	248	47	38	58	181	63	71
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	139	2116	911	127	2091	900	233	137	210	264	166	187
Arrive On Green	0.08	0.60	0.60	0.07	0.59	0.59	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1781	3554	1531	1781	3554	1530	1243	652	995	1285	786	886
Grp Volume(v), veh/h	115	1227	60	103	1805	248	47	0	96	181	0	134
Grp Sat Flow(s),veh/h/ln	1781	1777	1531	1781	1777	1530	1243	0	1647	1285	0	1672
Q Serve(g_s), s	8.1	27.3	2.1	7.3	54.4	10.2	4.3	0.0	6.3	17.6	0.0	8.8
Cycle Q Clear(g_c), s	8.1	27.3	2.1	7.3	54.4	10.2	13.1	0.0	6.3	23.8	0.0	8.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.60	1.00		0.53
Lane Grp Cap(c), veh/h	139	2116	911	127	2091	900	233	0	347	264	0	352
V/C Ratio(X)	0.83	0.58	0.07	0.81	0.86	0.28	0.20	0.00	0.28	0.68	0.00	0.38
Avail Cap(c_a), veh/h	164	2116	911	209	2091	900	256	0	378	285	0	379
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)	0.59	0.59	0.59	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.1	16.0	10.9	58.6	22.0	12.9	49.0	0.0	42.3	52.3	0.0	43.3
Incr Delay (d2), s/veh	13.9	0.7	0.1	4.7	5.0	0.8	0.2	0.0	0.2	4.7	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	4.2	11.0	0.7	3.5	23.0	3.7	1.4	0.0	2.6	6.0	0.0	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.0	16.7	11.0	63.3	27.1	13.7	49.1	0.0	42.5	57.0	0.0	43.6
LnGrp LOS	E	B	B	E	C	B	D	A	D	E	A	D
Approach Vol, veh/h		1402			2156			143			315	
Approach Delay, s/veh		21.0			27.2			44.7			51.3	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.5	82.2		32.3	14.4	81.3		32.3
Change Period (Y+Rc), s	4.4	* 6		5.3	4.4	6.0		* 5.3
Max Green Setting (Gmax), s	15.6	* 69		29.0	11.8	71.5		* 29
Max Q Clear Time (g_c+I1), s	10.3	29.3		25.8	10.1	56.4		15.1
Green Ext Time (p_c), s	0.1	24.2		0.3	0.0	14.3		0.3

Intersection Summary	
HCM 6th Ctrl Delay	27.6
HCM 6th LOS	C

Notes

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

Intersection	
Int Delay, s/veh	4.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	38	44	54	40	59	74
Future Vol, veh/h	38	44	54	40	59	74
Conflicting Peds, #/hr	10	10	0	10	10	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	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	53	65	48	71	89

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	340	109	0	0	123	0
Stage 1	99	-	-	-	-	-
Stage 2	241	-	-	-	-	-
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	656	945	-	-	1464	-
Stage 1	925	-	-	-	-	-
Stage 2	799	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	609	927	-	-	1450	-
Mov Cap-2 Maneuver	609	-	-	-	-	-
Stage 1	916	-	-	-	-	-
Stage 2	750	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.6	0	3.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	746	1450	-
HCM Lane V/C Ratio	-	-	0.132	0.049	-
HCM Control Delay (s)	-	-	10.6	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.2	-

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	82	12	5	12	27	85
Future Vol, veh/h	82	12	5	12	27	85
Conflicting Peds, #/hr	10	0	0	10	10	10
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	99	14	6	14	33	102

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	30	0	-	0	245	33
Stage 1	-	-	-	-	23	-
Stage 2	-	-	-	-	222	-
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	1583	-	-	-	743	1041
Stage 1	-	-	-	-	1000	-
Stage 2	-	-	-	-	815	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1568	-	-	-	681	1021
Mov Cap-2 Maneuver	-	-	-	-	681	-
Stage 1	-	-	-	-	927	-
Stage 2	-	-	-	-	807	-

Approach	EB	WB	SB
HCM Control Delay, s	6.5	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1568	-	-	-	911
HCM Lane V/C Ratio	0.063	-	-	-	0.148
HCM Control Delay (s)	7.5	0	-	-	9.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.5

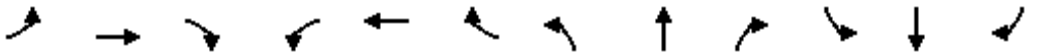
Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	37	49	131	64	44
Future Vol, veh/h	22	37	49	131	64	44
Conflicting Peds, #/hr	10	10	10	0	0	10
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	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	42	56	149	73	50

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	379	118	133	0	-	0
Stage 1	108	-	-	-	-	-
Stage 2	271	-	-	-	-	-
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	623	934	1452	-	-	-
Stage 1	916	-	-	-	-	-
Stage 2	775	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	585	916	1438	-	-	-
Mov Cap-2 Maneuver	585	-	-	-	-	-
Stage 1	868	-	-	-	-	-
Stage 2	767	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.2	2.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1438	-	756	-	-
HCM Lane V/C Ratio	0.039	-	0.089	-	-
HCM Control Delay (s)	7.6	0	10.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	411	29	659	322	27	44	112	804	23	49	33
Future Volume (veh/h)	62	411	29	659	322	27	44	112	804	23	49	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	67	442	31	709	346	29	47	120	865	25	53	35
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	86	698	49	807	1300	108	60	582	849	36	309	204
Arrive On Green	0.05	0.21	0.21	0.23	0.39	0.39	0.03	0.31	0.31	0.02	0.30	0.30
Sat Flow, veh/h	1781	3360	235	3456	3308	275	1781	1870	1540	1781	1038	685
Grp Volume(v), veh/h	67	233	240	709	185	190	47	120	865	25	0	88
Grp Sat Flow(s),veh/h/ln	1781	1777	1818	1728	1777	1807	1781	1870	1540	1781	0	1723
Q Serve(g_s), s	3.5	11.2	11.3	18.6	6.6	6.7	2.5	4.4	29.2	1.3	0.0	3.5
Cycle Q Clear(g_c), s	3.5	11.2	11.3	18.6	6.6	6.7	2.5	4.4	29.2	1.3	0.0	3.5
Prop In Lane	1.00		0.13	1.00		0.15	1.00		1.00	1.00		0.40
Lane Grp Cap(c), veh/h	86	369	378	807	698	710	60	582	849	36	0	513
V/C Ratio(X)	0.78	0.63	0.64	0.88	0.26	0.27	0.79	0.21	1.02	0.69	0.00	0.17
Avail Cap(c_a), veh/h	192	530	542	1311	1032	1049	87	582	849	112	0	575
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.1	33.9	33.9	34.7	19.3	19.3	45.0	23.8	21.5	45.7	0.0	24.4
Incr Delay (d2), s/veh	5.5	2.8	2.8	2.4	0.3	0.3	14.5	0.2	35.6	8.3	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	5.1	5.2	7.9	2.7	2.8	1.3	2.0	25.2	0.7	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.6	36.7	36.7	37.1	19.6	19.6	59.5	24.0	57.1	53.9	0.0	24.6
LnGrp LOS	D	D	D	D	B	B	E	C	F	D	A	C
Approach Vol, veh/h		540			1084			1032			113	
Approach Delay, s/veh		38.3			31.0			53.4			31.1	
Approach LOS		D			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.3	34.9	26.3	26.3	7.5	33.7	9.0	43.7
Change Period (Y+Rc), s	4.4	5.7	4.4	6.8	4.4	* 5.7	4.4	* 6.8
Max Green Setting (Gmax), s	5.9	29.2	35.6	28.0	4.6	* 31	10.1	* 55
Max Q Clear Time (g_c+I1), s	3.3	31.2	20.6	13.3	4.5	5.5	5.5	8.7
Green Ext Time (p_c), s	0.0	0.0	1.4	3.6	0.0	0.6	0.0	4.0

Intersection Summary	
HCM 6th Ctrl Delay	40.8
HCM 6th LOS	D

Notes

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



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	966	264	165	835	189	156
Future Volume (veh/h)	966	264	165	835	189	156
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	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	1050	287	179	908	205	170
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1617	693	214	2213	859	394
Arrive On Green	0.46	0.46	0.12	0.62	0.25	0.25
Sat Flow, veh/h	3647	1524	1781	3647	3456	1585
Grp Volume(v), veh/h	1050	287	179	908	205	170
Grp Sat Flow(s),veh/h/ln	1777	1524	1781	1777	1728	1585
Q Serve(g_s), s	21.1	11.7	9.1	12.0	4.4	8.4
Cycle Q Clear(g_c), s	21.1	11.7	9.1	12.0	4.4	8.4
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1617	693	214	2213	859	394
V/C Ratio(X)	0.65	0.41	0.84	0.41	0.24	0.43
Avail Cap(c_a), veh/h	1617	693	358	2546	859	394
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	19.5	16.9	39.8	8.8	27.8	29.3
Incr Delay (d2), s/veh	2.0	1.8	3.3	0.2	0.7	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	4.3	4.1	4.2	1.9	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.5	18.8	43.1	9.1	28.4	32.7
LnGrp LOS	C	B	D	A	C	C
Approach Vol, veh/h	1337			1087	375	
Approach Delay, s/veh	20.9			14.7	30.4	
Approach LOS	C			B	C	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	15.5	49.0			64.5	28.0
Change Period (Y+Rc), s	4.4	6.9			* 6.9	5.0
Max Green Setting (Gmax), s	18.6	42.1			* 66	23.0
Max Q Clear Time (g_c+I1), s	11.1	23.1			14.0	10.4
Green Ext Time (p_c), s	0.1	11.5			15.8	0.9

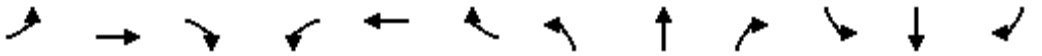
Intersection Summary		
HCM 6th Ctrl Delay		19.8
HCM 6th LOS		B

Notes

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

APPENDIX J

HORIZON YEAR 2050 (WITH CONNECTION) WITHOUT PROJECT INTERSECTION ANALYSIS CALCULATION SHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	1730	210	180	1690	10	460	30	70	10	20	60
Future Volume (veh/h)	40	1730	210	180	1690	10	460	30	70	10	20	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.96	1.00		0.88
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	1922	233	200	1878	11	535	0	78	11	22	67
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	57	2464	748	223	3015	18	670	0	285	32	64	73
Arrive On Green	0.03	0.48	0.48	0.12	0.58	0.58	0.19	0.00	0.19	0.05	0.05	0.05
Sat Flow, veh/h	1781	5106	1549	1781	5237	31	3563	0	1516	613	1226	1391
Grp Volume(v), veh/h	44	1922	233	200	1221	668	535	0	78	33	0	67
Grp Sat Flow(s),veh/h/ln	1781	1702	1549	1781	1702	1864	1781	0	1516	1840	0	1391
Q Serve(g_s), s	3.4	43.7	12.8	15.5	33.2	33.2	20.1	0.0	6.2	2.4	0.0	6.7
Cycle Q Clear(g_c), s	3.4	43.7	12.8	15.5	33.2	33.2	20.1	0.0	6.2	2.4	0.0	6.7
Prop In Lane	1.00		1.00	1.00		0.02	1.00		1.00	0.33		1.00
Lane Grp Cap(c), veh/h	57	2464	748	223	1960	1073	670	0	285	96	0	73
V/C Ratio(X)	0.78	0.78	0.31	0.90	0.62	0.62	0.80	0.00	0.27	0.34	0.00	0.92
Avail Cap(c_a), veh/h	97	2464	748	224	1960	1073	942	0	401	96	0	73
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	67.3	30.0	22.1	60.4	19.6	19.6	54.3	0.0	48.6	64.0	0.0	66.1
Incr Delay (d2), s/veh	8.2	2.5	1.1	33.3	1.5	2.7	2.1	0.0	0.2	0.8	0.0	78.6
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	1.7	18.3	5.0	9.1	13.3	15.0	9.2	0.0	2.4	1.2	0.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.4	32.6	23.1	93.7	21.1	22.4	56.4	0.0	48.8	64.8	0.0	144.7
LnGrp LOS	E	C	C	F	C	C	E	A	D	E	A	F
Approach Vol, veh/h		2199			2089			613			100	
Approach Delay, s/veh		32.4			28.5			55.5			118.4	
Approach LOS		C			C			E			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	21.9	73.6		12.2	8.9	86.6		32.3				
Change Period (Y+Rc), s	4.4	6.0		4.9	4.4	* 6		6.0				
Max Green Setting (Gmax), s	17.6	56.8		7.3	7.6	* 67		37.0				
Max Q Clear Time (g_c+I1), s	17.5	45.7		8.7	5.4	35.2		22.1				
Green Ext Time (p_c), s	0.0	9.9		0.0	0.0	23.0		1.1				

Intersection Summary		
HCM 6th Ctrl Delay	35.3	
HCM 6th LOS	D	

Notes

User approved volume balancing among the lanes for turning movement.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1690	110	10	1630	10	160	10	30	20	20	10
Future Volume (veh/h)	0	1690	110	10	1630	10	160	10	30	20	20	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.96	1.00		0.81
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	0	1878	122	11	1811	11	178	11	33	22	22	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	1	1992	128	18	2281	14	773	89	268	55	33	17
Arrive On Green	0.00	0.59	0.59	0.01	0.63	0.63	0.22	0.22	0.22	0.03	0.03	0.03
Sat Flow, veh/h	1781	3385	217	1781	3620	22	3456	399	1198	1781	1080	540
Grp Volume(v), veh/h	0	974	1026	11	888	934	178	0	44	22	0	33
Grp Sat Flow(s),veh/h/ln	1781	1777	1825	1781	1777	1865	1728	0	1598	1781	0	1620
Q Serve(g_s), s	0.0	69.9	73.9	0.9	51.7	52.0	5.9	0.0	3.1	1.7	0.0	2.8
Cycle Q Clear(g_c), s	0.0	69.9	73.9	0.9	51.7	52.0	5.9	0.0	3.1	1.7	0.0	2.8
Prop In Lane	1.00		0.12	1.00		0.01	1.00		0.75	1.00		0.33
Lane Grp Cap(c), veh/h	1	1046	1074	18	1119	1175	773	0	357	55	0	50
V/C Ratio(X)	0.00	0.93	0.95	0.62	0.79	0.79	0.23	0.00	0.12	0.40	0.00	0.66
Avail Cap(c_a), veh/h	51	1046	1074	52	1119	1175	773	0	357	55	0	50
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)	0.00	1.00	1.00	0.61	0.61	0.61	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	26.2	27.0	69.0	19.2	19.2	44.5	0.0	43.4	66.6	0.0	67.1
Incr Delay (d2), s/veh	0.0	15.6	18.5	7.8	3.6	3.5	0.7	0.0	0.7	20.6	0.0	52.8
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	0.0	32.8	36.2	0.4	21.5	22.6	2.6	0.0	1.3	1.1	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	41.8	45.6	76.8	22.8	22.7	45.2	0.0	44.1	87.1	0.0	119.9
LnGrp LOS	A	D	D	E	C	C	D	A	D	F	A	F
Approach Vol, veh/h		2000			1833			222			55	
Approach Delay, s/veh		43.7			23.1			45.0			106.8	
Approach LOS		D			C			D			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	88.4		9.2	0.0	94.2		36.6
Change Period (Y+Rc), s	4.4	* 6		4.9	4.4	6.0		5.3
Max Green Setting (Gmax), s	4.1	* 80		4.3	4.0	79.8		31.3
Max Q Clear Time (g_c+I1), s	2.9	75.9		4.8	0.0	54.0		7.9
Green Ext Time (p_c), s	0.0	4.0		0.0	0.0	23.2		0.5

Intersection Summary	
HCM 6th Ctrl Delay	35.4
HCM 6th LOS	D

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	1660	30	30	1450	70	50	50	30	210	30	140
Future Volume (veh/h)	40	1660	30	30	1450	70	50	50	30	210	30	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	1930	35	35	1686	81	58	58	35	244	35	163
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	61	2210	953	45	2179	939	207	259	156	306	67	314
Arrive On Green	0.03	0.62	0.62	0.03	0.61	0.61	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	1781	3554	1532	1781	3554	1531	1177	1077	650	1291	280	1303
Grp Volume(v), veh/h	47	1930	35	35	1686	81	58	0	93	244	0	198
Grp Sat Flow(s),veh/h/ln	1781	1777	1532	1781	1777	1531	1177	0	1727	1291	0	1583
Q Serve(g_s), s	3.7	62.9	1.2	2.7	48.9	3.0	6.3	0.0	6.1	26.2	0.0	15.2
Cycle Q Clear(g_c), s	3.7	62.9	1.2	2.7	48.9	3.0	21.5	0.0	6.1	32.2	0.0	15.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.38	1.00		0.82
Lane Grp Cap(c), veh/h	61	2210	953	45	2179	939	207	0	416	306	0	381
V/C Ratio(X)	0.78	0.87	0.04	0.78	0.77	0.09	0.28	0.00	0.22	0.80	0.00	0.52
Avail Cap(c_a), veh/h	84	2210	953	64	2179	939	210	0	421	306	0	381
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)	0.24	0.24	0.24	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	67.1	21.9	10.2	67.9	19.9	11.1	55.5	0.0	42.7	55.6	0.0	46.1
Incr Delay (d2), s/veh	4.5	1.3	0.0	20.5	2.8	0.2	0.3	0.0	0.1	12.6	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	25.4	0.4	1.5	20.3	1.1	1.9	0.0	2.6	9.6	0.0	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.6	23.2	10.3	88.3	22.7	11.2	55.7	0.0	42.8	68.2	0.0	46.7
LnGrp LOS	E	C	B	F	C	B	E	A	D	E	A	D
Approach Vol, veh/h		2012			1802			151			442	
Approach Delay, s/veh		24.1			23.4			47.7			58.6	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.9	93.1		39.0	9.2	91.8		39.0
Change Period (Y+Rc), s	4.4	* 6		5.3	4.4	6.0		* 5.3
Max Green Setting (Gmax), s	5.6	* 86		33.7	6.6	84.0		* 34
Max Q Clear Time (g_c+I1), s	4.7	64.9		34.2	5.7	50.9		23.5
Green Ext Time (p_c), s	0.0	19.7		0.0	0.0	27.9		0.3

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

Notes

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

Intersection	
Int Delay, s/veh	3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	30	100	10	30	50
Future Vol, veh/h	20	30	100	10	30	50
Conflicting Peds, #/hr	10	10	0	12	12	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	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	36	120	12	36	60

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	280	148	0	0	144	0
Stage 1	138	-	-	-	-	-
Stage 2	142	-	-	-	-	-
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	710	899	-	-	1438	-
Stage 1	889	-	-	-	-	-
Stage 2	885	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	677	880	-	-	1422	-
Mov Cap-2 Maneuver	677	-	-	-	-	-
Stage 1	879	-	-	-	-	-
Stage 2	854	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	2.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	786	1422	-
HCM Lane V/C Ratio	-	-	0.077	0.025	-
HCM Control Delay (s)	-	-	10	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	70	20	50	40	10	60
Future Vol, veh/h	70	20	50	40	10	60
Conflicting Peds, #/hr	10	0	0	10	10	10
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	84	24	60	48	12	72

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	118	0	-	0	296	104
Stage 1	-	-	-	-	94	-
Stage 2	-	-	-	-	202	-
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	1470	-	-	-	695	951
Stage 1	-	-	-	-	930	-
Stage 2	-	-	-	-	832	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1456	-	-	-	641	933
Mov Cap-2 Maneuver	-	-	-	-	641	-
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	824	-

Approach	EB	WB	SB
HCM Control Delay, s	5.9	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1456	-	-	-	876
HCM Lane V/C Ratio	0.058	-	-	-	0.096
HCM Control Delay (s)	7.6	0	-	-	9.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.3

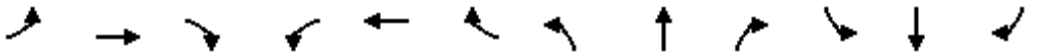
Intersection	
Int Delay, s/veh	4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	50	50	50	80	30
Future Vol, veh/h	20	50	50	50	80	30
Conflicting Peds, #/hr	10	10	10	0	0	10
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	70	70	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	71	71	71	114	43

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	369	156	167	0	-	0
Stage 1	146	-	-	-	-	-
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	631	890	1411	-	-	-
Stage 1	881	-	-	-	-	-
Stage 2	814	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	586	873	1398	-	-	-
Mov Cap-2 Maneuver	586	-	-	-	-	-
Stage 1	826	-	-	-	-	-
Stage 2	806	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	3.9	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1398	-	766	-	-
HCM Lane V/C Ratio	0.051	-	0.131	-	-
HCM Control Delay (s)	7.7	0	10.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.4	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	490	30	680	440	20	40	50	1030	20	110	20
Future Volume (veh/h)	40	490	30	680	440	20	40	50	1030	20	110	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	44	538	33	747	484	22	44	55	987	22	121	22
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	56	738	45	838	1480	67	56	598	877	32	469	85
Arrive On Green	0.03	0.22	0.22	0.24	0.43	0.43	0.03	0.32	0.32	0.02	0.31	0.31
Sat Flow, veh/h	1781	3393	208	3456	3455	157	1781	1870	1541	1781	1532	279
Grp Volume(v), veh/h	44	281	290	747	248	258	44	55	987	22	0	143
Grp Sat Flow(s),veh/h/ln	1781	1777	1824	1728	1777	1834	1781	1870	1541	1781	0	1811
Q Serve(g_s), s	2.6	15.5	15.6	22.0	9.8	9.8	2.6	2.2	33.7	1.3	0.0	6.3
Cycle Q Clear(g_c), s	2.6	15.5	15.6	22.0	9.8	9.8	2.6	2.2	33.7	1.3	0.0	6.3
Prop In Lane	1.00		0.11	1.00		0.09	1.00		1.00	1.00		0.15
Lane Grp Cap(c), veh/h	56	387	397	838	761	786	56	598	877	32	0	555
V/C Ratio(X)	0.78	0.73	0.73	0.89	0.33	0.33	0.78	0.09	1.13	0.69	0.00	0.26
Avail Cap(c_a), veh/h	157	472	484	2117	1421	1467	78	598	877	103	0	555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	50.7	38.3	38.4	38.6	20.0	20.0	50.7	25.1	23.3	51.5	0.0	27.5
Incr Delay (d2), s/veh	8.5	5.6	5.5	1.4	0.4	0.4	19.6	0.3	71.0	9.2	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	7.3	7.5	9.4	4.1	4.2	1.5	1.0	37.3	0.7	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.2	43.9	43.9	40.0	20.4	20.4	70.3	25.4	94.3	60.7	0.0	28.7
LnGrp LOS	E	D	D	D	C	C	E	C	F	E	A	C
Approach Vol, veh/h		615			1253			1086			165	
Approach Delay, s/veh		45.0			32.1			89.8			32.9	
Approach LOS		D			C			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.3	39.4	30.0	29.7	7.7	38.0	7.7	52.0
Change Period (Y+Rc), s	4.4	5.7	4.4	6.8	4.4	* 5.7	4.4	* 6.8
Max Green Setting (Gmax), s	6.1	30.0	64.6	28.0	4.6	* 32	9.3	* 84
Max Q Clear Time (g_c+I1), s	3.3	35.7	24.0	17.6	4.6	8.3	4.6	11.8
Green Ext Time (p_c), s	0.0	0.0	1.5	3.6	0.0	1.0	0.0	5.7

Intersection Summary	
HCM 6th Ctrl Delay	54.8
HCM 6th LOS	D

Notes

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



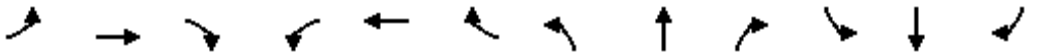
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1340	210	80	820	290	210
Future Volume (veh/h)	1340	210	80	820	290	210
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1411	221	84	863	305	221
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1888	811	108	2265	826	379
Arrive On Green	0.53	0.53	0.06	0.64	0.24	0.24
Sat Flow, veh/h	3647	1528	1781	3647	3456	1585
Grp Volume(v), veh/h	1411	221	84	863	305	221
Grp Sat Flow(s),veh/h/ln	1777	1528	1781	1777	1728	1585
Q Serve(g_s), s	29.7	7.6	4.5	11.2	7.1	11.9
Cycle Q Clear(g_c), s	29.7	7.6	4.5	11.2	7.1	11.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1888	811	108	2265	826	379
V/C Ratio(X)	0.75	0.27	0.78	0.38	0.37	0.58
Avail Cap(c_a), veh/h	1888	811	178	2449	826	379
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	17.5	12.4	44.6	8.4	30.5	32.4
Incr Delay (d2), s/veh	2.8	0.8	4.6	0.2	1.3	6.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.0	2.7	2.1	3.9	3.1	5.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.3	13.2	49.2	8.6	31.8	38.8
LnGrp LOS	C	B	D	A	C	D
Approach Vol, veh/h	1632			947	526	
Approach Delay, s/veh	19.3			12.2	34.7	
Approach LOS	B			B	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	10.2	58.0				68.2	28.0
Change Period (Y+Rc), s	4.4	6.9				* 6.9	5.0
Max Green Setting (Gmax), s	9.6	51.1				* 66	23.0
Max Q Clear Time (g_c+I1), s	6.5	31.7				13.2	13.9
Green Ext Time (p_c), s	0.0	14.4				14.7	1.2

Intersection Summary		
HCM 6th Ctrl Delay	19.8	
HCM 6th LOS	B	

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	1390	240	280	1790	10	320	30	180	10	30	50
Future Volume (veh/h)	110	1390	240	280	1790	10	320	30	180	10	30	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.96	1.00		0.89
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	124	1562	270	315	2011	11	384	0	202	11	34	56
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	139	2176	659	317	2757	15	626	0	267	24	75	75
Arrive On Green	0.08	0.43	0.43	0.18	0.53	0.53	0.18	0.00	0.18	0.05	0.05	0.05
Sat Flow, veh/h	1781	5106	1547	1781	5239	29	3563	0	1517	452	1396	1411
Grp Volume(v), veh/h	124	1562	270	315	1306	716	384	0	202	45	0	56
Grp Sat Flow(s),veh/h/ln	1781	1702	1547	1781	1702	1864	1781	0	1517	1848	0	1411
Q Serve(g_s), s	8.8	32.4	15.5	22.6	37.8	37.8	12.7	0.0	16.2	3.0	0.0	5.0
Cycle Q Clear(g_c), s	8.8	32.4	15.5	22.6	37.8	37.8	12.7	0.0	16.2	3.0	0.0	5.0
Prop In Lane	1.00		1.00	1.00		0.02	1.00		1.00	0.24		1.00
Lane Grp Cap(c), veh/h	139	2176	659	317	1791	981	626	0	267	99	0	75
V/C Ratio(X)	0.89	0.72	0.41	0.99	0.73	0.73	0.61	0.00	0.76	0.46	0.00	0.74
Avail Cap(c_a), veh/h	139	2176	659	317	1791	981	1030	0	439	127	0	97
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	58.5	30.4	25.5	52.5	23.3	23.3	48.7	0.0	50.2	58.8	0.0	59.7
Incr Delay (d2), s/veh	44.4	2.1	1.9	48.4	2.6	4.8	0.4	0.0	1.7	1.2	0.0	13.7
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	5.7	13.6	6.1	14.3	15.5	17.5	5.7	0.0	6.3	1.5	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	102.8	32.4	27.4	100.9	26.0	28.1	49.1	0.0	51.8	60.0	0.0	73.4
LnGrp LOS	F	C	C	F	C	C	D	A	D	E	A	E
Approach Vol, veh/h		1956			2337			586			101	
Approach Delay, s/veh		36.2			36.7			50.0			67.4	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	27.2	60.6		11.7	14.4	73.4		28.5				
Change Period (Y+Rc), s	4.4	6.0		4.9	4.4	* 6		6.0				
Max Green Setting (Gmax), s	22.8	38.1		8.8	10.0	* 51		37.0				
Max Q Clear Time (g_c+I1), s	24.6	34.4		7.0	10.8	39.8		18.2				
Green Ext Time (p_c), s	0.0	3.3		0.0	0.0	10.1		1.1				

Intersection Summary			
HCM 6th Ctrl Delay		38.7	
HCM 6th LOS		D	

Notes

User approved volume balancing among the lanes for turning movement.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1300	190	40	1890	30	130	10	50	30	10	10
Future Volume (veh/h)	30	1300	190	40	1890	30	130	10	50	30	10	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.97	1.00		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	1354	198	42	1969	31	135	10	52	31	10	10
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	39	1653	239	54	1934	30	840	62	322	60	26	26
Arrive On Green	0.02	0.53	0.53	0.03	0.54	0.54	0.24	0.24	0.24	0.03	0.03	0.03
Sat Flow, veh/h	1781	3105	450	1781	3578	56	3456	255	1324	1781	780	780
Grp Volume(v), veh/h	31	769	783	42	974	1026	135	0	62	31	0	20
Grp Sat Flow(s),veh/h/ln	1781	1777	1778	1781	1777	1858	1728	0	1579	1781	0	1560
Q Serve(g_s), s	2.2	45.7	47.1	3.0	69.2	69.2	3.9	0.0	4.0	2.2	0.0	1.6
Cycle Q Clear(g_c), s	2.2	45.7	47.1	3.0	69.2	69.2	3.9	0.0	4.0	2.2	0.0	1.6
Prop In Lane	1.00		0.25	1.00		0.03	1.00		0.84	1.00		0.50
Lane Grp Cap(c), veh/h	39	946	946	54	960	1004	840	0	384	60	0	52
V/C Ratio(X)	0.79	0.81	0.83	0.78	1.01	1.02	0.16	0.00	0.16	0.52	0.00	0.38
Avail Cap(c_a), veh/h	60	946	946	78	960	1004	840	0	384	60	0	52
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.37	0.37	0.37	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	62.3	24.7	25.0	61.6	29.4	29.4	38.2	0.0	38.2	60.8	0.0	60.5
Incr Delay (d2), s/veh	16.7	7.6	8.3	6.2	21.4	22.9	0.4	0.0	0.9	28.6	0.0	19.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	20.6	21.4	1.5	33.8	35.8	1.7	0.0	1.6	1.5	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.0	32.3	33.3	67.8	50.8	52.3	38.6	0.0	39.1	89.4	0.0	80.3
LnGrp LOS	E	C	C	E	F	F	D	A	D	F	A	F
Approach Vol, veh/h		1583			2042			197			51	
Approach Delay, s/veh		33.7			51.9			38.7			85.8	
Approach LOS		C			D			D			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.3	74.1		9.2	7.2	75.2		36.4
Change Period (Y+Rc), s	4.4	* 6		4.9	4.4	6.0		5.3
Max Green Setting (Gmax), s	5.6	* 67		4.3	4.3	67.7		31.1
Max Q Clear Time (g_c+I1), s	5.0	49.1		4.2	4.2	71.2		6.0
Green Ext Time (p_c), s	0.0	15.2		0.0	0.0	0.0		0.5

Intersection Summary	
HCM 6th Ctrl Delay	44.2
HCM 6th LOS	D

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	1210	60	90	1770	250	50	30	50	180	50	70
Future Volume (veh/h)	120	1210	60	90	1770	250	50	30	50	180	50	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.96	0.99		0.96
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	129	1301	65	97	1903	269	54	32	54	194	54	75
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	2121	913	120	2054	884	239	130	219	276	148	205
Arrive On Green	0.09	0.60	0.60	0.07	0.58	0.58	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1781	3554	1531	1781	3554	1530	1249	610	1030	1297	693	962
Grp Volume(v), veh/h	129	1301	65	97	1903	269	54	0	86	194	0	129
Grp Sat Flow(s),veh/h/ln	1781	1777	1531	1781	1777	1530	1249	0	1640	1297	0	1655
Q Serve(g_s), s	9.1	29.8	2.3	6.9	62.3	11.5	4.9	0.0	5.6	18.7	0.0	8.5
Cycle Q Clear(g_c), s	9.1	29.8	2.3	6.9	62.3	11.5	13.5	0.0	5.6	24.3	0.0	8.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.63	1.00		0.58
Lane Grp Cap(c), veh/h	153	2121	913	120	2054	884	239	0	349	276	0	353
V/C Ratio(X)	0.84	0.61	0.07	0.81	0.93	0.30	0.23	0.00	0.25	0.70	0.00	0.37
Avail Cap(c_a), veh/h	161	2121	913	189	2054	884	260	0	377	294	0	375
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)	0.45	0.45	0.45	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.6	16.4	10.9	58.9	24.5	13.8	48.7	0.0	41.8	51.9	0.0	43.0
Incr Delay (d2), s/veh	14.6	0.6	0.1	6.1	8.7	0.9	0.2	0.0	0.1	5.6	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	11.9	0.8	3.3	27.3	4.2	1.6	0.0	2.3	6.5	0.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.2	17.0	10.9	64.9	33.2	14.7	48.9	0.0	42.0	57.5	0.0	43.2
LnGrp LOS	E	B	B	E	C	B	D	A	D	E	A	D
Approach Vol, veh/h		1495			2269			140			323	
Approach Delay, s/veh		21.5			32.4			44.6			51.8	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.0	82.4		32.6	15.4	80.0		32.6
Change Period (Y+Rc), s	4.4	* 6		5.3	4.4	6.0		* 5.3
Max Green Setting (Gmax), s	13.6	* 70		29.0	11.6	71.7		* 29
Max Q Clear Time (g_c+I1), s	10.5	31.8		26.3	11.1	64.3		15.5
Green Ext Time (p_c), s	0.0	25.3		0.2	0.0	7.2		0.3

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

Notes

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

Intersection	
Int Delay, s/veh	3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	40	70	20	40	110
Future Vol, veh/h	20	40	70	20	40	110
Conflicting Peds, #/hr	10	10	0	10	10	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	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	48	84	24	48	133

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	345	116	0	0	118	0
Stage 1	106	-	-	-	-	-
Stage 2	239	-	-	-	-	-
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	652	936	-	-	1470	-
Stage 1	918	-	-	-	-	-
Stage 2	801	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	616	918	-	-	1456	-
Mov Cap-2 Maneuver	616	-	-	-	-	-
Stage 1	909	-	-	-	-	-
Stage 2	765	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	789	1456	-
HCM Lane V/C Ratio	-	-	0.092	0.033	-
HCM Control Delay (s)	-	-	10	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	70	50	30	20	50	80
Future Vol, veh/h	70	50	30	20	50	80
Conflicting Peds, #/hr	10	0	0	10	10	10
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	84	60	36	24	60	96

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	70	0	-	0	296	68
Stage 1	-	-	-	-	58	-
Stage 2	-	-	-	-	238	-
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	1531	-	-	-	695	995
Stage 1	-	-	-	-	965	-
Stage 2	-	-	-	-	802	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1516	-	-	-	642	976
Mov Cap-2 Maneuver	-	-	-	-	642	-
Stage 1	-	-	-	-	901	-
Stage 2	-	-	-	-	794	-

Approach	EB	WB	SB
HCM Control Delay, s	4.4	0	10.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1516	-	-	-	813
HCM Lane V/C Ratio	0.056	-	-	-	0.193
HCM Control Delay (s)	7.5	0	-	-	10.5
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.7

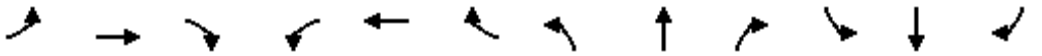
Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	80	80	100	50	50
Future Vol, veh/h	30	80	80	100	50	50
Conflicting Peds, #/hr	10	10	10	0	0	10
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	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	91	91	114	57	57

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	402	106	124	0	-	0
Stage 1	96	-	-	-	-	-
Stage 2	306	-	-	-	-	-
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	604	948	1463	-	-	-
Stage 1	928	-	-	-	-	-
Stage 2	747	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	552	930	1449	-	-	-
Mov Cap-2 Maneuver	552	-	-	-	-	-
Stage 1	857	-	-	-	-	-
Stage 2	740	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.5	3.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1449	-	784	-	-
HCM Lane V/C Ratio	0.063	-	0.159	-	-
HCM Control Delay (s)	7.7	0	10.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.6	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	550	40	830	430	30	60	100	1010	30	50	40
Future Volume (veh/h)	70	550	40	830	430	30	60	100	1010	30	50	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	75	591	43	892	462	32	65	108	978	32	54	43
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	96	753	55	983	1531	106	83	513	873	40	237	189
Arrive On Green	0.05	0.22	0.22	0.28	0.46	0.46	0.05	0.27	0.27	0.02	0.25	0.25
Sat Flow, veh/h	1781	3350	243	3456	3362	232	1781	1870	1536	1781	949	756
Grp Volume(v), veh/h	75	313	321	892	243	251	65	108	978	32	0	97
Grp Sat Flow(s),veh/h/ln	1781	1777	1816	1728	1777	1818	1781	1870	1536	1781	0	1704
Q Serve(g_s), s	4.6	18.2	18.3	27.4	9.5	9.6	4.0	4.9	30.2	2.0	0.0	5.0
Cycle Q Clear(g_c), s	4.6	18.2	18.3	27.4	9.5	9.6	4.0	4.9	30.2	2.0	0.0	5.0
Prop In Lane	1.00		0.13	1.00		0.13	1.00		1.00	1.00		0.44
Lane Grp Cap(c), veh/h	96	399	408	983	809	828	83	513	873	40	0	427
V/C Ratio(X)	0.78	0.78	0.79	0.91	0.30	0.30	0.78	0.21	1.12	0.79	0.00	0.23
Avail Cap(c_a), veh/h	209	452	462	1997	1287	1316	100	513	873	112	0	491
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.4	40.1	40.2	38.0	18.9	18.9	51.9	30.7	24.5	53.5	0.0	32.8
Incr Delay (d2), s/veh	5.1	8.9	8.9	1.4	0.3	0.3	21.9	0.2	69.4	12.1	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	8.9	9.1	11.6	4.0	4.1	2.3	2.2	37.9	1.0	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.5	49.0	49.0	39.4	19.2	19.3	73.8	31.0	93.9	65.6	0.0	33.1
LnGrp LOS	E	D	D	D	B	B	E	C	F	E	A	C
Approach Vol, veh/h		709			1386			1151			129	
Approach Delay, s/veh		49.8			32.2			86.8			41.2	
Approach LOS		D			C			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.9	35.9	35.7	31.5	9.6	33.2	10.3	56.9
Change Period (Y+Rc), s	4.4	5.7	4.4	6.8	4.4	* 5.7	4.4	* 6.8
Max Green Setting (Gmax), s	6.9	30.2	63.6	28.0	6.2	* 32	12.9	* 80
Max Q Clear Time (g_c+I1), s	4.0	32.2	29.4	20.3	6.0	7.0	6.6	11.6
Green Ext Time (p_c), s	0.0	0.0	1.9	3.2	0.0	0.6	0.0	5.6

Intersection Summary	
HCM 6th Ctrl Delay	54.9
HCM 6th LOS	D

Notes

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



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1310	280	180	1130	200	170
Future Volume (veh/h)	1310	280	180	1130	200	170
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	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	1424	304	196	1228	217	185
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1669	716	228	2285	813	373
Arrive On Green	0.47	0.47	0.13	0.64	0.24	0.24
Sat Flow, veh/h	3647	1524	1781	3647	3456	1585
Grp Volume(v), veh/h	1424	304	196	1228	217	185
Grp Sat Flow(s),veh/h/ln	1777	1524	1781	1777	1728	1585
Q Serve(g_s), s	34.7	12.9	10.5	18.4	5.0	9.9
Cycle Q Clear(g_c), s	34.7	12.9	10.5	18.4	5.0	9.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1669	716	228	2285	813	373
V/C Ratio(X)	0.85	0.42	0.86	0.54	0.27	0.50
Avail Cap(c_a), veh/h	1669	716	270	2411	813	373
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	22.9	17.2	41.7	9.5	30.5	32.4
Incr Delay (d2), s/veh	5.8	1.8	18.4	0.4	0.8	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.0	4.7	5.7	6.5	2.2	4.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	28.7	19.0	60.1	9.9	31.3	37.0
LnGrp LOS	C	B	E	A	C	D
Approach Vol, veh/h	1728			1424	402	
Approach Delay, s/veh	27.0			16.8	33.9	
Approach LOS	C			B	C	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	16.9	52.8			69.7	28.0
Change Period (Y+Rc), s	4.4	6.9			* 6.9	5.0
Max Green Setting (Gmax), s	14.8	45.9			* 66	23.0
Max Q Clear Time (g_c+I1), s	12.5	36.7			20.4	11.9
Green Ext Time (p_c), s	0.1	7.8			23.0	0.9

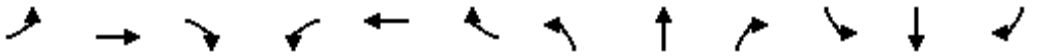
Intersection Summary		
HCM 6th Ctrl Delay	23.7	
HCM 6th LOS	C	

Notes

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

APPENDIX K

HORIZON YEAR 2050 (WITH CONNECTION) WITH PROJECT INTERSECTION ANALYSIS CALCULATION SHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	1732	210	180	1698	10	460	30	70	10	20	60
Future Volume (veh/h)	40	1732	210	180	1698	10	460	30	70	10	20	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.96	1.00		0.88
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	1924	233	200	1887	11	535	0	78	11	22	67
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	57	2464	748	223	3015	18	670	0	285	32	64	73
Arrive On Green	0.03	0.48	0.48	0.12	0.58	0.58	0.19	0.00	0.19	0.05	0.05	0.05
Sat Flow, veh/h	1781	5106	1549	1781	5237	31	3563	0	1516	613	1226	1391
Grp Volume(v), veh/h	44	1924	233	200	1226	672	535	0	78	33	0	67
Grp Sat Flow(s),veh/h/ln	1781	1702	1549	1781	1702	1864	1781	0	1516	1840	0	1391
Q Serve(g_s), s	3.4	43.8	12.8	15.5	33.4	33.5	20.1	0.0	6.2	2.4	0.0	6.7
Cycle Q Clear(g_c), s	3.4	43.8	12.8	15.5	33.4	33.5	20.1	0.0	6.2	2.4	0.0	6.7
Prop In Lane	1.00		1.00	1.00		0.02	1.00		1.00	0.33		1.00
Lane Grp Cap(c), veh/h	57	2464	748	223	1960	1073	670	0	285	96	0	73
V/C Ratio(X)	0.78	0.78	0.31	0.90	0.63	0.63	0.80	0.00	0.27	0.34	0.00	0.92
Avail Cap(c_a), veh/h	97	2464	748	224	1960	1073	942	0	401	96	0	73
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	67.3	30.1	22.1	60.4	19.7	19.7	54.3	0.0	48.6	64.0	0.0	66.1
Incr Delay (d2), s/veh	8.2	2.5	1.1	33.3	1.5	2.8	2.1	0.0	0.2	0.8	0.0	78.6
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	1.7	18.3	5.0	9.1	13.4	15.1	9.2	0.0	2.4	1.2	0.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.4	32.6	23.1	93.7	21.2	22.5	56.4	0.0	48.8	64.8	0.0	144.7
LnGrp LOS	E	C	C	F	C	C	E	A	D	E	A	F
Approach Vol, veh/h		2201			2098			613			100	
Approach Delay, s/veh		32.5			28.5			55.5			118.4	
Approach LOS		C			C			E			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	21.9	73.6		12.2	8.9	86.6		32.3				
Change Period (Y+Rc), s	4.4	6.0		4.9	4.4	* 6		6.0				
Max Green Setting (Gmax), s	17.6	56.8		7.3	7.6	* 67		37.0				
Max Q Clear Time (g_c+I1), s	17.5	45.8		8.7	5.4	35.5		22.1				
Green Ext Time (p_c), s	0.0	9.8		0.0	0.0	22.9		1.1				

Intersection Summary		
HCM 6th Ctrl Delay		35.3
HCM 6th LOS		D

Notes

User approved volume balancing among the lanes for turning movement.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1690	112	10	1630	10	168	10	30	20	20	10
Future Volume (veh/h)	0	1690	112	10	1630	10	168	10	30	20	20	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.96	1.00		0.81
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	0	1878	124	11	1811	11	187	11	33	22	22	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	1	1990	130	18	2281	14	773	89	268	55	33	17
Arrive On Green	0.00	0.59	0.59	0.01	0.63	0.63	0.22	0.22	0.22	0.03	0.03	0.03
Sat Flow, veh/h	1781	3381	220	1781	3620	22	3456	399	1198	1781	1080	540
Grp Volume(v), veh/h	0	975	1027	11	888	934	187	0	44	22	0	33
Grp Sat Flow(s),veh/h/ln	1781	1777	1824	1781	1777	1865	1728	0	1598	1781	0	1620
Q Serve(g_s), s	0.0	70.1	74.1	0.9	51.7	52.0	6.2	0.0	3.1	1.7	0.0	2.8
Cycle Q Clear(g_c), s	0.0	70.1	74.1	0.9	51.7	52.0	6.2	0.0	3.1	1.7	0.0	2.8
Prop In Lane	1.00		0.12	1.00		0.01	1.00		0.75	1.00		0.33
Lane Grp Cap(c), veh/h	1	1046	1074	18	1119	1175	773	0	357	55	0	50
V/C Ratio(X)	0.00	0.93	0.96	0.62	0.79	0.79	0.24	0.00	0.12	0.40	0.00	0.66
Avail Cap(c_a), veh/h	51	1046	1074	52	1119	1175	773	0	357	55	0	50
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)	0.00	1.00	1.00	0.58	0.58	0.58	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	26.3	27.1	69.0	19.2	19.2	44.6	0.0	43.4	66.6	0.0	67.1
Incr Delay (d2), s/veh	0.0	15.7	18.7	7.4	3.4	3.3	0.7	0.0	0.7	20.6	0.0	52.8
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	0.0	32.9	36.4	0.4	21.5	22.6	2.8	0.0	1.3	1.1	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	41.9	45.8	76.5	22.6	22.5	45.4	0.0	44.1	87.1	0.0	119.9
LnGrp LOS	A	D	D	E	C	C	D	A	D	F	A	F
Approach Vol, veh/h		2002			1833			231			55	
Approach Delay, s/veh		43.9			22.9			45.1			106.8	
Approach LOS		D			C			D			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	88.4		9.2	0.0	94.2		36.6
Change Period (Y+Rc), s	4.4	* 6		4.9	4.4	6.0		5.3
Max Green Setting (Gmax), s	4.1	* 80		4.3	4.0	79.8		31.3
Max Q Clear Time (g_c+I1), s	2.9	76.1		4.8	0.0	54.0		8.2
Green Ext Time (p_c), s	0.0	3.8		0.0	0.0	23.2		0.5

Intersection Summary	
HCM 6th Ctrl Delay	35.5
HCM 6th LOS	D

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	1660	30	33	1450	70	50	62	43	210	33	140
Future Volume (veh/h)	40	1660	30	33	1450	70	50	62	43	210	33	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	1930	35	38	1686	81	58	72	50	244	38	163
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	61	2147	925	49	2123	914	226	260	180	303	77	330
Arrive On Green	0.03	0.60	0.60	0.03	0.60	0.60	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1781	3554	1531	1781	3554	1531	1175	1013	703	1259	300	1288
Grp Volume(v), veh/h	47	1930	35	38	1686	81	58	0	122	244	0	201
Grp Sat Flow(s),veh/h/ln	1781	1777	1531	1781	1777	1531	1175	0	1716	1259	0	1588
Q Serve(g_s), s	3.7	65.9	1.3	3.0	50.9	3.1	6.2	0.0	8.0	26.9	0.0	15.1
Cycle Q Clear(g_c), s	3.7	65.9	1.3	3.0	50.9	3.1	21.3	0.0	8.0	34.9	0.0	15.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.41	1.00		0.81
Lane Grp Cap(c), veh/h	61	2147	925	49	2123	914	226	0	440	303	0	407
V/C Ratio(X)	0.78	0.90	0.04	0.78	0.79	0.09	0.26	0.00	0.28	0.81	0.00	0.49
Avail Cap(c_a), veh/h	84	2147	925	66	2123	914	229	0	445	303	0	407
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)	0.24	0.24	0.24	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	67.1	24.0	11.2	67.7	21.6	12.0	53.4	0.0	41.7	55.6	0.0	44.3
Incr Delay (d2), s/veh	4.5	1.7	0.0	22.9	3.2	0.2	0.2	0.0	0.1	13.7	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	27.0	0.5	1.7	21.4	1.1	1.9	0.0	3.4	9.7	0.0	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.6	25.7	11.3	90.6	24.7	12.2	53.6	0.0	41.8	69.4	0.0	44.7
LnGrp LOS	E	C	B	F	C	B	D	A	D	E	A	D
Approach Vol, veh/h		2012			1805			180			445	
Approach Delay, s/veh		26.6			25.6			45.6			58.2	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.2	90.6		41.2	9.2	89.6		41.2
Change Period (Y+Rc), s	4.4	* 6		5.3	4.4	6.0		* 5.3
Max Green Setting (Gmax), s	5.3	* 84		35.9	6.6	81.8		* 36
Max Q Clear Time (g_c+I1), s	5.0	67.9		36.9	5.7	52.9		23.3
Green Ext Time (p_c), s	0.0	14.8		0.0	0.0	24.8		0.4

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

Notes

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

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	30	125	10	30	56
Future Vol, veh/h	20	30	125	10	30	56
Conflicting Peds, #/hr	10	10	0	12	12	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	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	36	151	12	36	67

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	318	179	0	0	175	0
Stage 1	169	-	-	-	-	-
Stage 2	149	-	-	-	-	-
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	675	864	-	-	1401	-
Stage 1	861	-	-	-	-	-
Stage 2	879	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	643	846	-	-	1385	-
Mov Cap-2 Maneuver	643	-	-	-	-	-
Stage 1	852	-	-	-	-	-
Stage 2	847	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.2	0	2.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	751	1385	-
HCM Lane V/C Ratio	-	-	0.08	0.026	-
HCM Control Delay (s)	-	-	10.2	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	70	26	74	65	16	60
Future Vol, veh/h	70	26	74	65	16	60
Conflicting Peds, #/hr	10	0	0	10	10	10
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	84	31	89	78	19	72

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	177	0	-	0	347	148
Stage 1	-	-	-	-	138	-
Stage 2	-	-	-	-	209	-
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	1399	-	-	-	650	899
Stage 1	-	-	-	-	889	-
Stage 2	-	-	-	-	826	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1386	-	-	-	597	882
Mov Cap-2 Maneuver	-	-	-	-	597	-
Stage 1	-	-	-	-	826	-
Stage 2	-	-	-	-	818	-

Approach	EB	WB	SB
HCM Control Delay, s	5.7	0	10.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1386	-	-	-	801
HCM Lane V/C Ratio	0.061	-	-	-	0.114
HCM Control Delay (s)	7.8	0	-	-	10.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.4

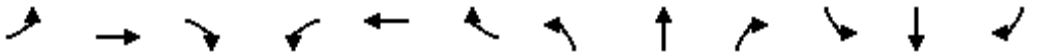
Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	71	55	50	80	30
Future Vol, veh/h	20	71	55	50	80	30
Conflicting Peds, #/hr	10	10	10	0	0	10
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	70	70	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	101	79	71	114	43

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	385	156	167	0	-	0
Stage 1	146	-	-	-	-	-
Stage 2	239	-	-	-	-	-
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	618	890	1411	-	-	-
Stage 1	881	-	-	-	-	-
Stage 2	801	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	570	873	1398	-	-	-
Mov Cap-2 Maneuver	570	-	-	-	-	-
Stage 1	821	-	-	-	-	-
Stage 2	793	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.5	4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1398	-	782	-	-
HCM Lane V/C Ratio	0.056	-	0.166	-	-
HCM Control Delay (s)	7.7	0	10.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.6	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	490	30	680	440	21	40	54	1030	24	126	21
Future Volume (veh/h)	40	490	30	680	440	21	40	54	1030	24	126	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	44	538	33	747	484	23	44	59	984	26	138	23
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	56	739	45	838	1478	70	56	592	872	36	475	79
Arrive On Green	0.03	0.22	0.22	0.24	0.43	0.43	0.03	0.32	0.32	0.02	0.31	0.31
Sat Flow, veh/h	1781	3393	208	3456	3446	163	1781	1870	1540	1781	1555	259
Grp Volume(v), veh/h	44	281	290	747	249	258	44	59	984	26	0	161
Grp Sat Flow(s),veh/h/ln	1781	1777	1824	1728	1777	1833	1781	1870	1540	1781	0	1815
Q Serve(g_s), s	2.6	15.5	15.5	22.0	9.8	9.8	2.6	2.3	33.3	1.5	0.0	7.1
Cycle Q Clear(g_c), s	2.6	15.5	15.5	22.0	9.8	9.8	2.6	2.3	33.3	1.5	0.0	7.1
Prop In Lane	1.00		0.11	1.00		0.09	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	56	387	397	838	762	786	56	592	872	36	0	554
V/C Ratio(X)	0.78	0.73	0.73	0.89	0.33	0.33	0.78	0.10	1.13	0.72	0.00	0.29
Avail Cap(c_a), veh/h	158	473	486	2130	1428	1473	78	592	872	108	0	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	0.00	1.00
Uniform Delay (d), s/veh	50.5	38.2	38.2	38.5	19.9	19.9	50.6	25.3	23.4	51.2	0.0	27.8
Incr Delay (d2), s/veh	8.5	5.5	5.5	1.4	0.4	0.4	19.3	0.3	72.2	9.6	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	7.3	7.5	9.3	4.1	4.2	1.4	1.1	37.3	0.8	0.0	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.0	43.7	43.7	39.8	20.3	20.3	69.9	25.7	95.6	60.8	0.0	29.2
LnGrp LOS	E	D	D	D	C	C	E	C	F	E	A	C
Approach Vol, veh/h		615			1254			1087			187	
Approach Delay, s/veh		44.8			32.0			90.7			33.6	
Approach LOS		D			C			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.5	39.0	29.9	29.7	7.7	37.8	7.7	51.9
Change Period (Y+Rc), s	4.4	5.7	4.4	6.8	4.4	* 5.7	4.4	* 6.8
Max Green Setting (Gmax), s	6.4	29.5	64.8	28.0	4.6	* 32	9.3	* 85
Max Q Clear Time (g_c+I1), s	3.5	35.3	24.0	17.5	4.6	9.1	4.6	11.8
Green Ext Time (p_c), s	0.0	0.0	1.5	3.6	0.0	1.1	0.0	5.8

Intersection Summary	
HCM 6th Ctrl Delay	54.9
HCM 6th LOS	D

Notes

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



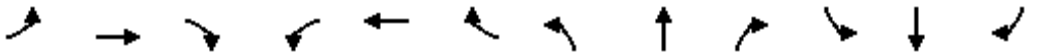
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1343	211	80	821	290	210
Future Volume (veh/h)	1343	211	80	821	290	210
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1414	222	84	864	305	221
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1888	811	108	2265	826	379
Arrive On Green	0.53	0.53	0.06	0.64	0.24	0.24
Sat Flow, veh/h	3647	1528	1781	3647	3456	1585
Grp Volume(v), veh/h	1414	222	84	864	305	221
Grp Sat Flow(s),veh/h/ln	1777	1528	1781	1777	1728	1585
Q Serve(g_s), s	29.8	7.7	4.5	11.2	7.1	11.9
Cycle Q Clear(g_c), s	29.8	7.7	4.5	11.2	7.1	11.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1888	811	108	2265	826	379
V/C Ratio(X)	0.75	0.27	0.78	0.38	0.37	0.58
Avail Cap(c_a), veh/h	1888	811	178	2449	826	379
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	17.6	12.4	44.6	8.4	30.5	32.4
Incr Delay (d2), s/veh	2.8	0.8	4.6	0.2	1.3	6.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.1	2.7	2.1	3.9	3.1	5.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.3	13.2	49.2	8.6	31.8	38.8
LnGrp LOS	C	B	D	A	C	D
Approach Vol, veh/h	1636			948	526	
Approach Delay, s/veh	19.4			12.2	34.7	
Approach LOS	B			B	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	10.2	58.0				68.2	28.0
Change Period (Y+Rc), s	4.4	6.9				* 6.9	5.0
Max Green Setting (Gmax), s	9.6	51.1				* 66	23.0
Max Q Clear Time (g_c+I1), s	6.5	31.8				13.2	13.9
Green Ext Time (p_c), s	0.0	14.3				14.8	1.2

Intersection Summary		
HCM 6th Ctrl Delay	19.8	
HCM 6th LOS	B	

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	1399	240	280	1794	10	320	30	180	10	30	50
Future Volume (veh/h)	110	1399	240	280	1794	10	320	30	180	10	30	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.96	1.00		0.89
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	124	1572	270	315	2016	11	384	0	202	11	34	56
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	136	2201	667	309	2766	15	626	0	267	24	75	75
Arrive On Green	0.08	0.43	0.43	0.17	0.53	0.53	0.18	0.00	0.18	0.05	0.05	0.05
Sat Flow, veh/h	1781	5106	1547	1781	5239	29	3563	0	1517	452	1396	1411
Grp Volume(v), veh/h	124	1572	270	315	1310	717	384	0	202	45	0	56
Grp Sat Flow(s),veh/h/ln	1781	1702	1547	1781	1702	1864	1781	0	1517	1848	0	1411
Q Serve(g_s), s	8.8	32.4	15.4	22.2	37.8	37.8	12.7	0.0	16.2	3.0	0.0	5.0
Cycle Q Clear(g_c), s	8.8	32.4	15.4	22.2	37.8	37.8	12.7	0.0	16.2	3.0	0.0	5.0
Prop In Lane	1.00		1.00	1.00		0.02	1.00		1.00	0.24		1.00
Lane Grp Cap(c), veh/h	136	2201	667	309	1797	984	626	0	267	99	0	75
V/C Ratio(X)	0.91	0.71	0.40	1.02	0.73	0.73	0.61	0.00	0.76	0.46	0.00	0.74
Avail Cap(c_a), veh/h	136	2201	667	309	1797	984	1030	0	439	120	0	91
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	58.7	29.9	25.1	52.9	23.2	23.2	48.7	0.0	50.2	58.8	0.0	59.7
Incr Delay (d2), s/veh	49.7	2.0	1.8	56.3	2.6	4.7	0.4	0.0	1.7	1.2	0.0	17.2
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	5.9	13.6	6.0	14.7	15.5	17.5	5.7	0.0	6.3	1.5	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	108.3	32.0	26.9	109.2	25.8	27.9	49.1	0.0	51.8	60.0	0.0	76.9
LnGrp LOS	F	C	C	F	C	C	D	A	D	E	A	E
Approach Vol, veh/h		1966			2342			586			101	
Approach Delay, s/veh		36.1			37.7			50.0			69.4	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	26.6	61.2		11.7	14.2	73.6		28.5				
Change Period (Y+Rc), s	4.4	6.0		4.9	4.4	* 6		6.0				
Max Green Setting (Gmax), s	22.2	39.2		8.3	9.8	* 52		37.0				
Max Q Clear Time (g_c+I1), s	24.2	34.4		7.0	10.8	39.8		18.2				
Green Ext Time (p_c), s	0.0	4.2		0.0	0.0	10.7		1.1				

Intersection Summary		
HCM 6th Ctrl Delay		39.1
HCM 6th LOS		D

Notes

User approved volume balancing among the lanes for turning movement.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1300	199	40	1890	30	134	10	50	30	10	10
Future Volume (veh/h)	30	1300	199	40	1890	30	134	10	50	30	10	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.97	1.00		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	1354	207	42	1969	31	140	10	26	31	10	10
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	39	1642	248	54	1934	30	840	109	283	60	26	26
Arrive On Green	0.02	0.53	0.53	0.03	0.54	0.54	0.24	0.24	0.24	0.03	0.03	0.03
Sat Flow, veh/h	1781	3085	466	1781	3578	56	3456	448	1165	1781	780	780
Grp Volume(v), veh/h	31	774	787	42	974	1026	140	0	36	31	0	20
Grp Sat Flow(s),veh/h/ln	1781	1777	1774	1781	1777	1858	1728	0	1614	1781	0	1560
Q Serve(g_s), s	2.2	46.2	47.8	3.0	69.2	69.2	4.1	0.0	2.2	2.2	0.0	1.6
Cycle Q Clear(g_c), s	2.2	46.2	47.8	3.0	69.2	69.2	4.1	0.0	2.2	2.2	0.0	1.6
Prop In Lane	1.00		0.26	1.00		0.03	1.00		0.72	1.00		0.50
Lane Grp Cap(c), veh/h	39	946	944	54	960	1004	840	0	392	60	0	52
V/C Ratio(X)	0.79	0.82	0.83	0.78	1.01	1.02	0.17	0.00	0.09	0.52	0.00	0.38
Avail Cap(c_a), veh/h	60	946	944	78	960	1004	840	0	392	60	0	52
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.35	0.35	0.35	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	62.3	24.8	25.2	61.6	29.4	29.4	38.2	0.0	37.5	60.8	0.0	60.5
Incr Delay (d2), s/veh	16.7	7.8	8.6	5.9	20.9	22.5	0.4	0.0	0.5	28.6	0.0	19.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	20.9	21.7	1.4	33.7	35.7	1.8	0.0	0.9	1.5	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.0	32.6	33.8	67.5	50.3	51.9	38.7	0.0	38.0	89.4	0.0	80.3
LnGrp LOS	E	C	C	E	F	F	D	A	D	F	A	F
Approach Vol, veh/h		1592			2042			176			51	
Approach Delay, s/veh		34.1			51.4			38.5			85.8	
Approach LOS		C			D			D			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.3	74.1		9.2	7.2	75.2		36.4
Change Period (Y+Rc), s	4.4	* 6		4.9	4.4	6.0		5.3
Max Green Setting (Gmax), s	5.6	* 67		4.3	4.3	67.7		31.1
Max Q Clear Time (g_c+I1), s	5.0	49.8		4.2	4.2	71.2		6.1
Green Ext Time (p_c), s	0.0	14.7		0.0	0.0	0.0		0.4

Intersection Summary	
HCM 6th Ctrl Delay	44.2
HCM 6th LOS	D

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	1210	60	105	1770	250	50	36	56	180	63	70
Future Volume (veh/h)	120	1210	60	105	1770	250	50	36	56	180	63	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.96	0.99		0.96
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	129	1301	65	113	1903	269	54	39	60	194	68	75
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	2067	890	137	2035	876	236	142	218	273	174	192
Arrive On Green	0.09	0.58	0.58	0.08	0.57	0.57	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1781	3554	1530	1781	3554	1530	1234	649	998	1282	796	878
Grp Volume(v), veh/h	129	1301	65	113	1903	269	54	0	99	194	0	143
Grp Sat Flow(s),veh/h/ln	1781	1777	1530	1781	1777	1530	1234	0	1647	1282	0	1674
Q Serve(g_s), s	9.1	30.9	2.4	8.0	63.1	11.7	5.0	0.0	6.4	19.0	0.0	9.3
Cycle Q Clear(g_c), s	9.1	30.9	2.4	8.0	63.1	11.7	14.3	0.0	6.4	25.4	0.0	9.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.61	1.00		0.52
Lane Grp Cap(c), veh/h	153	2067	890	137	2035	876	236	0	360	273	0	366
V/C Ratio(X)	0.84	0.63	0.07	0.82	0.94	0.31	0.23	0.00	0.27	0.71	0.00	0.39
Avail Cap(c_a), veh/h	161	2067	890	218	2035	876	250	0	378	283	0	379
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)	0.44	0.44	0.44	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.6	17.7	11.7	58.2	25.2	14.2	48.9	0.0	41.6	52.1	0.0	42.7
Incr Delay (d2), s/veh	14.3	0.6	0.1	6.3	9.6	0.9	0.2	0.0	0.2	6.6	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	4.7	12.5	0.8	3.9	28.0	4.2	1.6	0.0	2.6	6.6	0.0	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.9	18.3	11.8	64.5	34.8	15.1	49.0	0.0	41.7	58.7	0.0	43.0
LnGrp LOS	E	B	B	E	C	B	D	A	D	E	A	D
Approach Vol, veh/h		1495			2285			153			337	
Approach Delay, s/veh		22.7			33.9			44.3			52.0	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.3	80.4		33.3	15.4	79.3		33.3
Change Period (Y+Rc), s	4.4	* 6		5.3	4.4	6.0		* 5.3
Max Green Setting (Gmax), s	15.7	* 68		29.0	11.6	71.7		* 29
Max Q Clear Time (g_c+I1), s	10.3	32.9		27.4	11.1	65.1		16.3
Green Ext Time (p_c), s	0.1	23.8		0.2	0.0	6.5		0.3

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

Notes

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

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	40	82	20	40	138
Future Vol, veh/h	20	40	82	20	40	138
Conflicting Peds, #/hr	10	10	0	10	10	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	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	48	99	24	48	166

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	393	131	0	0	133	0
Stage 1	121	-	-	-	-	-
Stage 2	272	-	-	-	-	-
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	611	919	-	-	1452	-
Stage 1	904	-	-	-	-	-
Stage 2	774	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	577	902	-	-	1438	-
Mov Cap-2 Maneuver	577	-	-	-	-	-
Stage 1	895	-	-	-	-	-
Stage 2	738	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.2	0	1.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	759	1438	-
HCM Lane V/C Ratio	-	-	0.095	0.034	-
HCM Control Delay (s)	-	-	10.2	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	70	76	41	32	78	80
Future Vol, veh/h	70	76	41	32	78	80
Conflicting Peds, #/hr	10	0	0	10	10	10
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	84	92	49	39	94	96

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	98	0	-	0	349	89
Stage 1	-	-	-	-	79	-
Stage 2	-	-	-	-	270	-
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	1495	-	-	-	648	969
Stage 1	-	-	-	-	944	-
Stage 2	-	-	-	-	775	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1481	-	-	-	597	951
Mov Cap-2 Maneuver	-	-	-	-	597	-
Stage 1	-	-	-	-	879	-
Stage 2	-	-	-	-	767	-

Approach	EB	WB	SB
HCM Control Delay, s	3.6	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1481	-	-	-	736
HCM Lane V/C Ratio	0.057	-	-	-	0.259
HCM Control Delay (s)	7.6	0	-	-	11.6
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	1

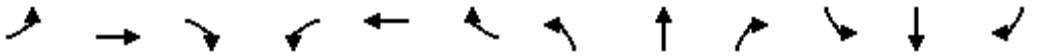
Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	91	104	100	50	50
Future Vol, veh/h	30	91	104	100	50	50
Conflicting Peds, #/hr	10	10	10	0	0	10
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	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	103	118	114	57	57

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	456	106	124	0	-	0
Stage 1	96	-	-	-	-	-
Stage 2	360	-	-	-	-	-
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	562	948	1463	-	-	-
Stage 1	928	-	-	-	-	-
Stage 2	706	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	503	930	1449	-	-	-
Mov Cap-2 Maneuver	503	-	-	-	-	-
Stage 1	839	-	-	-	-	-
Stage 2	699	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.7	3.9	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1449	-	768	-	-
HCM Lane V/C Ratio	0.082	-	0.179	-	-
HCM Control Delay (s)	7.7	0	10.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.6	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	550	40	830	430	34	60	118	1010	32	58	41
Future Volume (veh/h)	72	550	40	830	430	34	60	118	1010	32	58	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	77	591	43	892	462	37	65	127	977	34	62	44
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	753	55	983	1508	120	83	510	870	43	251	178
Arrive On Green	0.06	0.22	0.22	0.28	0.45	0.45	0.05	0.27	0.27	0.02	0.25	0.25
Sat Flow, veh/h	1781	3350	243	3456	3322	265	1781	1870	1536	1781	1003	712
Grp Volume(v), veh/h	77	313	321	892	246	253	65	127	977	34	0	106
Grp Sat Flow(s),veh/h/ln	1781	1777	1816	1728	1777	1810	1781	1870	1536	1781	0	1714
Q Serve(g_s), s	4.7	18.2	18.3	27.4	9.7	9.7	4.0	5.8	30.0	2.1	0.0	5.4
Cycle Q Clear(g_c), s	4.7	18.2	18.3	27.4	9.7	9.7	4.0	5.8	30.0	2.1	0.0	5.4
Prop In Lane	1.00		0.13	1.00		0.15	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	99	400	408	983	807	822	83	510	870	43	0	429
V/C Ratio(X)	0.78	0.78	0.79	0.91	0.31	0.31	0.78	0.25	1.12	0.79	0.00	0.25
Avail Cap(c_a), veh/h	211	452	462	1999	1286	1310	100	510	870	115	0	494
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.3	40.1	40.1	37.9	19.0	19.0	51.8	31.2	24.6	53.4	0.0	33.0
Incr Delay (d2), s/veh	5.0	8.9	8.9	1.4	0.3	0.3	21.9	0.3	70.2	11.5	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	8.9	9.1	11.6	4.0	4.1	2.3	2.7	38.0	1.1	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.2	49.0	49.0	39.3	19.4	19.4	73.7	31.5	94.8	64.9	0.0	33.3
LnGrp LOS	E	D	D	D	B	B	E	C	F	E	A	C
Approach Vol, veh/h		711			1391			1169			140	
Approach Delay, s/veh		49.8			32.2			86.7			41.0	
Approach LOS		D			C			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	35.7	35.7	31.5	9.6	33.2	10.5	56.7
Change Period (Y+Rc), s	4.4	5.7	4.4	6.8	4.4	* 5.7	4.4	* 6.8
Max Green Setting (Gmax), s	7.1	30.0	63.6	28.0	6.2	* 32	13.0	* 80
Max Q Clear Time (g_c+I1), s	4.1	32.0	29.4	20.3	6.0	7.4	6.7	11.7
Green Ext Time (p_c), s	0.0	0.0	1.9	3.2	0.0	0.7	0.0	5.7

Intersection Summary	
HCM 6th Ctrl Delay	54.9
HCM 6th LOS	D

Notes

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



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1311	281	180	1133	201	170
Future Volume (veh/h)	1311	281	180	1133	201	170
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	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	1425	305	196	1232	218	185
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1669	716	228	2285	813	373
Arrive On Green	0.47	0.47	0.13	0.64	0.24	0.24
Sat Flow, veh/h	3647	1524	1781	3647	3456	1585
Grp Volume(v), veh/h	1425	305	196	1232	218	185
Grp Sat Flow(s),veh/h/ln	1777	1524	1781	1777	1728	1585
Q Serve(g_s), s	34.7	13.0	10.5	18.5	5.0	9.9
Cycle Q Clear(g_c), s	34.7	13.0	10.5	18.5	5.0	9.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1669	716	228	2285	813	373
V/C Ratio(X)	0.85	0.43	0.86	0.54	0.27	0.50
Avail Cap(c_a), veh/h	1669	716	270	2411	813	373
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	22.9	17.2	41.7	9.5	30.5	32.4
Incr Delay (d2), s/veh	5.8	1.9	18.4	0.4	0.8	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.0	4.8	5.7	6.5	2.2	4.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	28.7	19.0	60.1	9.9	31.3	37.0
LnGrp LOS	C	B	E	A	C	D
Approach Vol, veh/h	1730			1428	403	
Approach Delay, s/veh	27.0			16.8	33.9	
Approach LOS	C			B	C	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	16.9	52.8			69.7	28.0
Change Period (Y+Rc), s	4.4	6.9			* 6.9	5.0
Max Green Setting (Gmax), s	14.8	45.9			* 66	23.0
Max Q Clear Time (g_c+I1), s	12.5	36.7			20.5	11.9
Green Ext Time (p_c), s	0.1	7.8			23.1	0.9

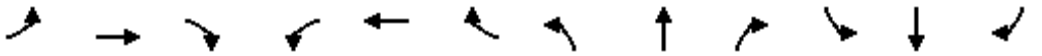
Intersection Summary		
HCM 6th Ctrl Delay	23.7	
HCM 6th LOS	C	

Notes

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

APPENDIX L

HORIZON YEAR 2050 (NO CONNECTION) WITHOUT PROJECT INTERSECTION ANALYSIS CALCULATION SHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	1730	210	180	1690	10	460	30	70	10	20	60
Future Volume (veh/h)	40	1730	210	180	1690	10	460	30	70	10	20	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.96	1.00		0.88
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	1922	233	200	1878	11	535	0	78	11	22	67
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	57	2464	748	223	3015	18	670	0	285	32	64	73
Arrive On Green	0.03	0.48	0.48	0.12	0.58	0.58	0.19	0.00	0.19	0.05	0.05	0.05
Sat Flow, veh/h	1781	5106	1549	1781	5237	31	3563	0	1516	613	1226	1391
Grp Volume(v), veh/h	44	1922	233	200	1221	668	535	0	78	33	0	67
Grp Sat Flow(s),veh/h/ln	1781	1702	1549	1781	1702	1864	1781	0	1516	1840	0	1391
Q Serve(g_s), s	3.4	43.7	12.8	15.5	33.2	33.2	20.1	0.0	6.2	2.4	0.0	6.7
Cycle Q Clear(g_c), s	3.4	43.7	12.8	15.5	33.2	33.2	20.1	0.0	6.2	2.4	0.0	6.7
Prop In Lane	1.00		1.00	1.00		0.02	1.00		1.00	0.33		1.00
Lane Grp Cap(c), veh/h	57	2464	748	223	1960	1073	670	0	285	96	0	73
V/C Ratio(X)	0.78	0.78	0.31	0.90	0.62	0.62	0.80	0.00	0.27	0.34	0.00	0.92
Avail Cap(c_a), veh/h	97	2464	748	224	1960	1073	942	0	401	96	0	73
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	67.3	30.0	22.1	60.4	19.6	19.6	54.3	0.0	48.6	64.0	0.0	66.1
Incr Delay (d2), s/veh	8.2	2.5	1.1	33.3	1.5	2.7	2.1	0.0	0.2	0.8	0.0	78.6
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	1.7	18.3	5.0	9.1	13.3	15.0	9.2	0.0	2.4	1.2	0.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.4	32.6	23.1	93.7	21.1	22.4	56.4	0.0	48.8	64.8	0.0	144.7
LnGrp LOS	E	C	C	F	C	C	E	A	D	E	A	F
Approach Vol, veh/h		2199			2089			613			100	
Approach Delay, s/veh		32.4			28.5			55.5			118.4	
Approach LOS		C			C			E			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	21.9	73.6		12.2	8.9	86.6		32.3				
Change Period (Y+Rc), s	4.4	6.0		4.9	4.4	* 6		6.0				
Max Green Setting (Gmax), s	17.6	56.8		7.3	7.6	* 67		37.0				
Max Q Clear Time (g_c+I1), s	17.5	45.7		8.7	5.4	35.2		22.1				
Green Ext Time (p_c), s	0.0	9.9		0.0	0.0	23.0		1.1				

Intersection Summary			
HCM 6th Ctrl Delay		35.3	
HCM 6th LOS		D	

Notes

User approved volume balancing among the lanes for turning movement.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1690	110	10	1630	10	170	10	30	20	20	10
Future Volume (veh/h)	0	1690	110	10	1630	10	170	10	30	20	20	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.96	1.00		0.81
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	0	1878	122	11	1811	11	189	11	33	22	22	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	1	1992	128	18	2281	14	773	89	268	55	33	17
Arrive On Green	0.00	0.59	0.59	0.01	0.63	0.63	0.22	0.22	0.22	0.03	0.03	0.03
Sat Flow, veh/h	1781	3385	217	1781	3620	22	3456	399	1198	1781	1080	540
Grp Volume(v), veh/h	0	974	1026	11	888	934	189	0	44	22	0	33
Grp Sat Flow(s),veh/h/ln	1781	1777	1825	1781	1777	1865	1728	0	1598	1781	0	1620
Q Serve(g_s), s	0.0	69.9	73.9	0.9	51.7	52.0	6.3	0.0	3.1	1.7	0.0	2.8
Cycle Q Clear(g_c), s	0.0	69.9	73.9	0.9	51.7	52.0	6.3	0.0	3.1	1.7	0.0	2.8
Prop In Lane	1.00		0.12	1.00		0.01	1.00		0.75	1.00		0.33
Lane Grp Cap(c), veh/h	1	1046	1074	18	1119	1175	773	0	357	55	0	50
V/C Ratio(X)	0.00	0.93	0.95	0.62	0.79	0.79	0.24	0.00	0.12	0.40	0.00	0.66
Avail Cap(c_a), veh/h	51	1046	1074	52	1119	1175	773	0	357	55	0	50
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)	0.00	1.00	1.00	0.62	0.62	0.62	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	26.2	27.0	69.0	19.2	19.2	44.6	0.0	43.4	66.6	0.0	67.1
Incr Delay (d2), s/veh	0.0	15.6	18.5	7.9	3.7	3.5	0.8	0.0	0.7	20.6	0.0	52.8
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	0.0	32.8	36.2	0.4	21.5	22.7	2.8	0.0	1.3	1.1	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	41.8	45.6	77.0	22.8	22.7	45.4	0.0	44.1	87.1	0.0	119.9
LnGrp LOS	A	D	D	E	C	C	D	A	D	F	A	F
Approach Vol, veh/h		2000			1833			233			55	
Approach Delay, s/veh		43.7			23.1			45.1			106.8	
Approach LOS		D			C			D			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	88.4		9.2	0.0	94.2		36.6
Change Period (Y+Rc), s	4.4	* 6		4.9	4.4	6.0		5.3
Max Green Setting (Gmax), s	4.1	* 80		4.3	4.0	79.8		31.3
Max Q Clear Time (g_c+I1), s	2.9	75.9		4.8	0.0	54.0		8.3
Green Ext Time (p_c), s	0.0	4.0		0.0	0.0	23.2		0.5

Intersection Summary	
HCM 6th Ctrl Delay	35.5
HCM 6th LOS	D

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	1660	30	30	1450	70	50	40	30	210	30	140
Future Volume (veh/h)	40	1660	30	30	1450	70	50	40	30	210	30	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	1930	35	35	1686	81	58	47	35	244	35	163
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	61	2236	964	45	2204	950	197	229	170	305	65	304
Arrive On Green	0.03	0.63	0.63	0.03	0.62	0.62	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1781	3554	1532	1781	3554	1531	1177	979	729	1303	280	1302
Grp Volume(v), veh/h	47	1930	35	35	1686	81	58	0	82	244	0	198
Grp Sat Flow(s),veh/h/ln	1781	1777	1532	1781	1777	1531	1177	0	1709	1303	0	1582
Q Serve(g_s), s	3.7	61.7	1.2	2.7	48.0	3.0	6.4	0.0	5.4	26.0	0.0	15.4
Cycle Q Clear(g_c), s	3.7	61.7	1.2	2.7	48.0	3.0	21.7	0.0	5.4	31.4	0.0	15.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.43	1.00		0.82
Lane Grp Cap(c), veh/h	61	2236	964	45	2204	950	197	0	399	305	0	370
V/C Ratio(X)	0.78	0.86	0.04	0.78	0.76	0.09	0.29	0.00	0.21	0.80	0.00	0.54
Avail Cap(c_a), veh/h	87	2236	964	64	2204	950	201	0	404	305	0	370
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)	0.24	0.24	0.24	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	67.1	21.1	9.9	67.9	19.2	10.7	56.5	0.0	43.2	55.8	0.0	47.0
Incr Delay (d2), s/veh	3.8	1.2	0.0	20.5	2.6	0.2	0.3	0.0	0.1	12.9	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	24.8	0.4	1.5	19.9	1.1	1.9	0.0	2.3	9.6	0.0	6.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.9	22.3	9.9	88.3	21.8	10.8	56.8	0.0	43.3	68.7	0.0	47.8
LnGrp LOS	E	C	A	F	C	B	E	A	D	E	A	D
Approach Vol, veh/h		2012			1802			140			442	
Approach Delay, s/veh		23.2			22.6			48.9			59.4	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.9	94.1		38.0	9.2	92.8		38.0
Change Period (Y+Rc), s	4.4	* 6		5.3	4.4	6.0		* 5.3
Max Green Setting (Gmax), s	5.6	* 87		32.7	6.8	84.8		* 33
Max Q Clear Time (g_c+I1), s	4.7	63.7		33.4	5.7	50.0		23.7
Green Ext Time (p_c), s	0.0	21.6		0.0	0.0	29.2		0.2

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

Notes

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

Intersection	
Int Delay, s/veh	4.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	40	50	20	40	30
Future Vol, veh/h	30	40	50	20	40	30
Conflicting Peds, #/hr	10	10	0	12	12	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	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	48	60	24	48	36

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	226	94	0	0	96	0
Stage 1	84	-	-	-	-	-
Stage 2	142	-	-	-	-	-
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	762	963	-	-	1498	-
Stage 1	939	-	-	-	-	-
Stage 2	885	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	722	943	-	-	1481	-
Mov Cap-2 Maneuver	722	-	-	-	-	-
Stage 1	929	-	-	-	-	-
Stage 2	848	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	4.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	834	1481	-
HCM Lane V/C Ratio	-	-	0.101	0.033	-
HCM Control Delay (s)	-	-	9.8	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	70	0	0	0	0	60
Future Vol, veh/h	70	0	0	0	0	60
Conflicting Peds, #/hr	10	0	0	10	10	10
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	84	0	0	0	0	72

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	11	0	-	0	189	21
Stage 1	-	-	-	-	11	-
Stage 2	-	-	-	-	178	-
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	1608	-	-	-	800	1056
Stage 1	-	-	-	-	1012	-
Stage 2	-	-	-	-	853	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1593	-	-	-	742	1036
Mov Cap-2 Maneuver	-	-	-	-	742	-
Stage 1	-	-	-	-	949	-
Stage 2	-	-	-	-	844	-

Approach	EB	WB	SB
HCM Control Delay, s	7.4	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1593	-	-	-	1036
HCM Lane V/C Ratio	0.053	-	-	-	0.07
HCM Control Delay (s)	7.4	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.2

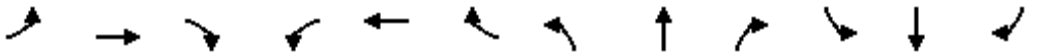
Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	20	20	60	100	20
Future Vol, veh/h	10	20	20	60	100	20
Conflicting Peds, #/hr	10	10	10	0	0	10
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	70	70	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	29	29	86	143	29

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	322	178	182	0	-	0
Stage 1	168	-	-	-	-	-
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	672	865	1393	-	-	-
Stage 1	862	-	-	-	-	-
Stage 2	874	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	644	849	1380	-	-	-
Mov Cap-2 Maneuver	644	-	-	-	-	-
Stage 1	834	-	-	-	-	-
Stage 2	865	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10	1.9	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1380	-	768	-	-
HCM Lane V/C Ratio	0.021	-	0.056	-	-
HCM Control Delay (s)	7.7	0	10	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	480	30	660	430	20	40	40	990	20	90	20
Future Volume (veh/h)	30	480	30	660	430	20	40	40	990	20	90	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	527	33	725	473	22	44	44	978	22	99	22
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	42	739	46	818	1487	69	56	598	868	32	451	100
Arrive On Green	0.02	0.22	0.22	0.24	0.43	0.43	0.03	0.32	0.32	0.02	0.31	0.31
Sat Flow, veh/h	1781	3388	212	3456	3450	160	1781	1870	1541	1781	1473	327
Grp Volume(v), veh/h	33	276	284	725	243	252	44	44	978	22	0	121
Grp Sat Flow(s),veh/h/ln	1781	1777	1823	1728	1777	1834	1781	1870	1541	1781	0	1800
Q Serve(g_s), s	1.9	14.8	14.8	20.8	9.3	9.3	2.5	1.7	32.9	1.3	0.0	5.1
Cycle Q Clear(g_c), s	1.9	14.8	14.8	20.8	9.3	9.3	2.5	1.7	32.9	1.3	0.0	5.1
Prop In Lane	1.00		0.12	1.00		0.09	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	42	388	398	818	766	790	56	598	868	32	0	552
V/C Ratio(X)	0.78	0.71	0.71	0.89	0.32	0.32	0.79	0.07	1.13	0.68	0.00	0.22
Avail Cap(c_a), veh/h	121	484	497	2199	1511	1559	80	598	868	106	0	552
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	49.9	37.2	37.2	37.9	19.3	19.3	49.4	24.3	23.0	50.2	0.0	26.5
Incr Delay (d2), s/veh	10.9	4.8	4.8	1.3	0.4	0.4	17.5	0.2	71.8	9.0	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	6.9	7.1	8.8	3.8	4.0	1.4	0.8	36.5	0.6	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.8	42.0	42.0	39.2	19.6	19.7	66.9	24.6	94.8	59.1	0.0	27.4
LnGrp LOS	E	D	D	D	B	B	E	C	F	E	A	C
Approach Vol, veh/h		593			1220			1066			143	
Approach Delay, s/veh		43.0			31.3			90.7			32.3	
Approach LOS		D			C			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.3	38.6	28.7	29.2	7.6	37.2	6.8	51.1
Change Period (Y+Rc), s	4.4	5.7	4.4	6.8	4.4	* 5.7	4.4	* 6.8
Max Green Setting (Gmax), s	6.1	29.2	65.4	28.0	4.6	* 32	7.0	* 87
Max Q Clear Time (g_c+I1), s	3.3	34.9	22.8	16.8	4.5	7.1	3.9	11.3
Green Ext Time (p_c), s	0.0	0.0	1.5	3.7	0.0	0.8	0.0	5.6

Intersection Summary	
HCM 6th Ctrl Delay	54.6
HCM 6th LOS	D

Notes

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



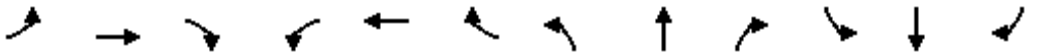
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1300	210	80	790	290	210
Future Volume (veh/h)	1300	210	80	790	290	210
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1368	221	84	832	305	221
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1876	806	108	2255	833	382
Arrive On Green	0.53	0.53	0.06	0.63	0.24	0.24
Sat Flow, veh/h	3647	1528	1781	3647	3456	1585
Grp Volume(v), veh/h	1368	221	84	832	305	221
Grp Sat Flow(s),veh/h/ln	1777	1528	1781	1777	1728	1585
Q Serve(g_s), s	28.2	7.6	4.4	10.7	7.0	11.7
Cycle Q Clear(g_c), s	28.2	7.6	4.4	10.7	7.0	11.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1876	806	108	2255	833	382
V/C Ratio(X)	0.73	0.27	0.78	0.37	0.37	0.58
Avail Cap(c_a), veh/h	1876	806	192	2468	833	382
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	17.3	12.4	44.2	8.3	30.2	32.0
Incr Delay (d2), s/veh	2.5	0.8	4.6	0.2	1.2	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.4	2.7	2.1	3.7	3.0	5.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.8	13.3	48.8	8.5	31.4	38.2
LnGrp LOS	B	B	D	A	C	D
Approach Vol, veh/h	1589			916	526	
Approach Delay, s/veh	18.9			12.2	34.3	
Approach LOS	B			B	C	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	10.2	57.3			67.5	28.0
Change Period (Y+Rc), s	4.4	6.9			* 6.9	5.0
Max Green Setting (Gmax), s	10.3	50.4			* 66	23.0
Max Q Clear Time (g_c+I1), s	6.4	30.2			12.7	13.7
Green Ext Time (p_c), s	0.0	14.5			14.0	1.2

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

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	1390	240	280	1790	10	320	30	180	10	30	50
Future Volume (veh/h)	110	1390	240	280	1790	10	320	30	180	10	30	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.96	1.00		0.89
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	124	1562	270	315	2011	11	384	0	202	11	34	56
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	139	2176	659	317	2757	15	626	0	267	24	75	75
Arrive On Green	0.08	0.43	0.43	0.18	0.53	0.53	0.18	0.00	0.18	0.05	0.05	0.05
Sat Flow, veh/h	1781	5106	1547	1781	5239	29	3563	0	1517	452	1396	1411
Grp Volume(v), veh/h	124	1562	270	315	1306	716	384	0	202	45	0	56
Grp Sat Flow(s),veh/h/ln	1781	1702	1547	1781	1702	1864	1781	0	1517	1848	0	1411
Q Serve(g_s), s	8.8	32.4	15.5	22.6	37.8	37.8	12.7	0.0	16.2	3.0	0.0	5.0
Cycle Q Clear(g_c), s	8.8	32.4	15.5	22.6	37.8	37.8	12.7	0.0	16.2	3.0	0.0	5.0
Prop In Lane	1.00		1.00	1.00		0.02	1.00		1.00	0.24		1.00
Lane Grp Cap(c), veh/h	139	2176	659	317	1791	981	626	0	267	99	0	75
V/C Ratio(X)	0.89	0.72	0.41	0.99	0.73	0.73	0.61	0.00	0.76	0.46	0.00	0.74
Avail Cap(c_a), veh/h	139	2176	659	317	1791	981	1030	0	439	127	0	97
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	58.5	30.4	25.5	52.5	23.3	23.3	48.7	0.0	50.2	58.8	0.0	59.7
Incr Delay (d2), s/veh	44.4	2.1	1.9	48.4	2.6	4.8	0.4	0.0	1.7	1.2	0.0	13.7
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	5.7	13.6	6.1	14.3	15.5	17.5	5.7	0.0	6.3	1.5	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	102.8	32.4	27.4	100.9	26.0	28.1	49.1	0.0	51.8	60.0	0.0	73.4
LnGrp LOS	F	C	C	F	C	C	D	A	D	E	A	E
Approach Vol, veh/h		1956			2337			586			101	
Approach Delay, s/veh		36.2			36.7			50.0			67.4	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	27.2	60.6		11.7	14.4	73.4		28.5				
Change Period (Y+Rc), s	4.4	6.0		4.9	4.4	* 6		6.0				
Max Green Setting (Gmax), s	22.8	38.1		8.8	10.0	* 51		37.0				
Max Q Clear Time (g_c+I1), s	24.6	34.4		7.0	10.8	39.8		18.2				
Green Ext Time (p_c), s	0.0	3.3		0.0	0.0	10.1		1.1				

Intersection Summary		
HCM 6th Ctrl Delay		38.7
HCM 6th LOS		D

Notes

User approved volume balancing among the lanes for turning movement.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1300	190	40	1890	30	130	10	50	30	10	10
Future Volume (veh/h)	30	1300	190	40	1890	30	130	10	50	30	10	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.97	1.00		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	1354	198	42	1969	31	135	10	52	31	10	10
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	39	1653	239	54	1934	30	840	62	322	60	26	26
Arrive On Green	0.02	0.53	0.53	0.03	0.54	0.54	0.24	0.24	0.24	0.03	0.03	0.03
Sat Flow, veh/h	1781	3105	450	1781	3578	56	3456	255	1324	1781	780	780
Grp Volume(v), veh/h	31	769	783	42	974	1026	135	0	62	31	0	20
Grp Sat Flow(s),veh/h/ln	1781	1777	1778	1781	1777	1858	1728	0	1579	1781	0	1560
Q Serve(g_s), s	2.2	45.7	47.1	3.0	69.2	69.2	3.9	0.0	4.0	2.2	0.0	1.6
Cycle Q Clear(g_c), s	2.2	45.7	47.1	3.0	69.2	69.2	3.9	0.0	4.0	2.2	0.0	1.6
Prop In Lane	1.00		0.25	1.00		0.03	1.00		0.84	1.00		0.50
Lane Grp Cap(c), veh/h	39	946	946	54	960	1004	840	0	384	60	0	52
V/C Ratio(X)	0.79	0.81	0.83	0.78	1.01	1.02	0.16	0.00	0.16	0.52	0.00	0.38
Avail Cap(c_a), veh/h	60	946	946	78	960	1004	840	0	384	60	0	52
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.38	0.38	0.38	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	62.3	24.7	25.0	61.6	29.4	29.4	38.2	0.0	38.2	60.8	0.0	60.5
Incr Delay (d2), s/veh	16.7	7.6	8.3	6.4	21.6	23.2	0.4	0.0	0.9	28.6	0.0	19.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	20.6	21.4	1.5	33.9	35.9	1.7	0.0	1.6	1.5	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.0	32.3	33.3	68.0	51.0	52.6	38.6	0.0	39.1	89.4	0.0	80.3
LnGrp LOS	E	C	C	E	F	F	D	A	D	F	A	F
Approach Vol, veh/h		1583			2042			197			51	
Approach Delay, s/veh		33.7			52.1			38.7			85.8	
Approach LOS		C			D			D			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.3	74.1		9.2	7.2	75.2		36.4
Change Period (Y+Rc), s	4.4	* 6		4.9	4.4	6.0		5.3
Max Green Setting (Gmax), s	5.6	* 67		4.3	4.3	67.7		31.1
Max Q Clear Time (g_c+I1), s	5.0	49.1		4.2	4.2	71.2		6.0
Green Ext Time (p_c), s	0.0	15.2		0.0	0.0	0.0		0.5

Intersection Summary		
HCM 6th Ctrl Delay		44.4
HCM 6th LOS		D

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	1210	60	80	1770	240	50	30	50	180	50	70
Future Volume (veh/h)	110	1210	60	80	1770	240	50	30	50	180	50	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.96	0.99		0.96
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	118	1301	65	86	1903	258	54	32	54	194	54	75
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	142	2145	924	108	2077	894	239	130	219	276	148	205
Arrive On Green	0.08	0.60	0.60	0.06	0.58	0.58	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1781	3554	1531	1781	3554	1530	1249	610	1030	1297	693	962
Grp Volume(v), veh/h	118	1301	65	86	1903	258	54	0	86	194	0	129
Grp Sat Flow(s),veh/h/ln	1781	1777	1531	1781	1777	1530	1249	0	1640	1297	0	1655
Q Serve(g_s), s	8.4	29.3	2.2	6.1	61.3	10.8	4.9	0.0	5.6	18.7	0.0	8.5
Cycle Q Clear(g_c), s	8.4	29.3	2.2	6.1	61.3	10.8	13.5	0.0	5.6	24.3	0.0	8.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.63	1.00		0.58
Lane Grp Cap(c), veh/h	142	2145	924	108	2077	894	239	0	349	276	0	353
V/C Ratio(X)	0.83	0.61	0.07	0.80	0.92	0.29	0.23	0.00	0.25	0.70	0.00	0.37
Avail Cap(c_a), veh/h	148	2145	924	178	2077	894	260	0	377	294	0	375
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)	0.45	0.45	0.45	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.0	15.9	10.5	59.3	23.8	13.3	48.7	0.0	41.8	51.9	0.0	43.0
Incr Delay (d2), s/veh	14.8	0.6	0.1	5.0	7.8	0.8	0.2	0.0	0.1	5.6	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	11.7	0.8	2.9	26.6	3.9	1.6	0.0	2.3	6.5	0.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.9	16.4	10.6	64.3	31.6	14.1	48.9	0.0	42.0	57.5	0.0	43.2
LnGrp LOS	E	B	B	E	C	B	D	A	D	E	A	D
Approach Vol, veh/h		1484			2247			140			323	
Approach Delay, s/veh		20.7			30.9			44.6			51.8	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.2	83.3		32.6	14.6	80.8		32.6
Change Period (Y+Rc), s	4.4	* 6		5.3	4.4	6.0		* 5.3
Max Green Setting (Gmax), s	12.8	* 71		29.0	10.6	72.7		* 29
Max Q Clear Time (g_c+I1), s	10.1	31.3		26.3	10.4	63.3		15.5
Green Ext Time (p_c), s	0.0	25.9		0.2	0.0	9.1		0.3

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

Notes

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

Intersection	
Int Delay, s/veh	4.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	50	40	30	60	50
Future Vol, veh/h	30	50	40	30	60	50
Conflicting Peds, #/hr	10	10	0	10	10	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	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	60	48	36	72	60

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	290	86	0	0	94	0
Stage 1	76	-	-	-	-	-
Stage 2	214	-	-	-	-	-
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	701	973	-	-	1500	-
Stage 1	947	-	-	-	-	-
Stage 2	822	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	653	955	-	-	1486	-
Mov Cap-2 Maneuver	653	-	-	-	-	-
Stage 1	938	-	-	-	-	-
Stage 2	774	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	4.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	814	1486	-
HCM Lane V/C Ratio	-	-	0.118	0.049	-
HCM Control Delay (s)	-	-	10	7.5	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.2	-

Intersection	
Int Delay, s/veh	8.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	70	0	0	0	0	80
Future Vol, veh/h	70	0	0	0	0	80
Conflicting Peds, #/hr	10	0	0	10	10	10
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	84	0	0	0	0	96

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	11	0	-	0	189	21
Stage 1	-	-	-	-	11	-
Stage 2	-	-	-	-	178	-
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	1608	-	-	-	800	1056
Stage 1	-	-	-	-	1012	-
Stage 2	-	-	-	-	853	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1593	-	-	-	742	1036
Mov Cap-2 Maneuver	-	-	-	-	742	-
Stage 1	-	-	-	-	949	-
Stage 2	-	-	-	-	844	-

Approach	EB	WB	SB
HCM Control Delay, s	7.4	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1593	-	-	-	1036
HCM Lane V/C Ratio	0.053	-	-	-	0.093
HCM Control Delay (s)	7.4	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.3

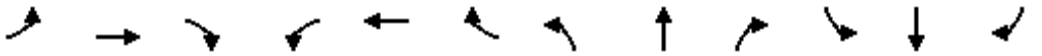
Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	30	40	120	60	10
Future Vol, veh/h	20	30	40	120	60	10
Conflicting Peds, #/hr	10	10	10	0	0	10
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	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	34	45	136	68	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	320	94	89	0	-	0
Stage 1	84	-	-	-	-	-
Stage 2	236	-	-	-	-	-
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	673	963	1506	-	-	-
Stage 1	939	-	-	-	-	-
Stage 2	803	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	638	945	1492	-	-	-
Mov Cap-2 Maneuver	638	-	-	-	-	-
Stage 1	899	-	-	-	-	-
Stage 2	795	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	1.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1492	-	792	-	-
HCM Lane V/C Ratio	0.03	-	0.072	-	-
HCM Control Delay (s)	7.5	0	9.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	540	40	790	430	20	60	80	970	20	40	30
Future Volume (veh/h)	60	540	40	790	430	20	60	80	970	20	40	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	581	43	849	462	22	65	86	935	22	43	32
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	84	754	56	941	1553	74	83	537	873	32	253	188
Arrive On Green	0.05	0.23	0.23	0.27	0.45	0.45	0.05	0.29	0.29	0.02	0.26	0.26
Sat Flow, veh/h	1781	3345	247	3456	3446	164	1781	1870	1538	1781	981	730
Grp Volume(v), veh/h	65	308	316	849	238	246	65	86	935	22	0	75
Grp Sat Flow(s),veh/h/ln	1781	1777	1815	1728	1777	1833	1781	1870	1538	1781	0	1711
Q Serve(g_s), s	3.9	17.5	17.6	25.6	9.2	9.2	3.9	3.7	31.0	1.3	0.0	3.7
Cycle Q Clear(g_c), s	3.9	17.5	17.6	25.6	9.2	9.2	3.9	3.7	31.0	1.3	0.0	3.7
Prop In Lane	1.00		0.14	1.00		0.09	1.00		1.00	1.00		0.43
Lane Grp Cap(c), veh/h	84	400	409	941	801	826	83	537	873	32	0	442
V/C Ratio(X)	0.78	0.77	0.77	0.90	0.30	0.30	0.78	0.16	1.07	0.69	0.00	0.17
Avail Cap(c_a), veh/h	198	461	471	2036	1327	1369	107	537	873	101	0	498
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	50.9	39.2	39.2	37.9	18.8	18.8	50.9	28.7	24.0	52.7	0.0	31.1
Incr Delay (d2), s/veh	5.6	7.9	7.9	1.4	0.3	0.3	17.7	0.2	51.3	9.4	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	8.5	8.7	10.8	3.8	3.9	2.1	1.7	33.0	0.7	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.5	47.0	47.1	39.3	19.1	19.1	68.6	28.9	75.3	62.2	0.0	31.3
LnGrp LOS	E	D	D	D	B	B	E	C	F	E	A	C
Approach Vol, veh/h		689			1333			1086			97	
Approach Delay, s/veh		47.9			32.0			71.2			38.3	
Approach LOS		D			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.3	36.7	33.8	31.1	9.5	33.6	9.5	55.4
Change Period (Y+Rc), s	4.4	5.7	4.4	6.8	4.4	* 5.7	4.4	* 6.8
Max Green Setting (Gmax), s	6.1	31.0	63.6	28.0	6.5	* 31	12.0	* 81
Max Q Clear Time (g_c+I1), s	3.3	33.0	27.6	19.6	5.9	5.7	5.9	11.2
Green Ext Time (p_c), s	0.0	0.0	1.8	3.4	0.0	0.5	0.0	5.4

Intersection Summary	
HCM 6th Ctrl Delay	48.9
HCM 6th LOS	D

Notes

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



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1280	280	180	1100	200	170
Future Volume (veh/h)	1280	280	180	1100	200	170
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	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	1391	304	196	1196	217	185
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1669	716	228	2285	813	373
Arrive On Green	0.47	0.47	0.13	0.64	0.24	0.24
Sat Flow, veh/h	3647	1524	1781	3647	3456	1585
Grp Volume(v), veh/h	1391	304	196	1196	217	185
Grp Sat Flow(s),veh/h/ln	1777	1524	1781	1777	1728	1585
Q Serve(g_s), s	33.3	12.9	10.5	17.7	5.0	9.9
Cycle Q Clear(g_c), s	33.3	12.9	10.5	17.7	5.0	9.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1669	716	228	2285	813	373
V/C Ratio(X)	0.83	0.42	0.86	0.52	0.27	0.50
Avail Cap(c_a), veh/h	1669	716	270	2411	813	373
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	22.6	17.2	41.7	9.4	30.5	32.4
Incr Delay (d2), s/veh	5.1	1.8	18.4	0.4	0.8	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.3	4.7	5.7	6.2	2.2	4.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	27.6	19.0	60.1	9.8	31.3	37.0
LnGrp LOS	C	B	E	A	C	D
Approach Vol, veh/h	1695			1392	402	
Approach Delay, s/veh	26.1			16.8	33.9	
Approach LOS	C			B	C	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	16.9	52.8			69.7	28.0
Change Period (Y+Rc), s	4.4	6.9			* 6.9	5.0
Max Green Setting (Gmax), s	14.8	45.9			* 66	23.0
Max Q Clear Time (g_c+I1), s	12.5	35.3			19.7	11.9
Green Ext Time (p_c), s	0.1	8.7			22.4	0.9

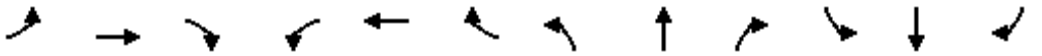
Intersection Summary	
HCM 6th Ctrl Delay	23.3
HCM 6th LOS	C

Notes

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

APPENDIX M

HORIZON YEAR 2050 (NO CONNECTION) WITH PROJECT INTERSECTION ANALYSIS CALCULATION SHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	1732	210	180	1697	10	460	30	70	10	20	60
Future Volume (veh/h)	40	1732	210	180	1697	10	460	30	70	10	20	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.96	1.00		0.88
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	1924	233	200	1886	11	535	0	78	11	22	67
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	57	2464	748	223	3015	18	670	0	285	32	64	73
Arrive On Green	0.03	0.48	0.48	0.12	0.58	0.58	0.19	0.00	0.19	0.05	0.05	0.05
Sat Flow, veh/h	1781	5106	1549	1781	5237	31	3563	0	1516	613	1226	1391
Grp Volume(v), veh/h	44	1924	233	200	1226	671	535	0	78	33	0	67
Grp Sat Flow(s),veh/h/ln	1781	1702	1549	1781	1702	1864	1781	0	1516	1840	0	1391
Q Serve(g_s), s	3.4	43.8	12.8	15.5	33.4	33.4	20.1	0.0	6.2	2.4	0.0	6.7
Cycle Q Clear(g_c), s	3.4	43.8	12.8	15.5	33.4	33.4	20.1	0.0	6.2	2.4	0.0	6.7
Prop In Lane	1.00		1.00	1.00		0.02	1.00		1.00	0.33		1.00
Lane Grp Cap(c), veh/h	57	2464	748	223	1960	1073	670	0	285	96	0	73
V/C Ratio(X)	0.78	0.78	0.31	0.90	0.63	0.63	0.80	0.00	0.27	0.34	0.00	0.92
Avail Cap(c_a), veh/h	97	2464	748	224	1960	1073	942	0	401	96	0	73
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	67.3	30.1	22.1	60.4	19.7	19.7	54.3	0.0	48.6	64.0	0.0	66.1
Incr Delay (d2), s/veh	8.2	2.5	1.1	33.3	1.5	2.8	2.1	0.0	0.2	0.8	0.0	78.6
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	1.7	18.3	5.0	9.1	13.4	15.1	9.2	0.0	2.4	1.2	0.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.4	32.6	23.1	93.7	21.2	22.5	56.4	0.0	48.8	64.8	0.0	144.7
LnGrp LOS	E	C	C	F	C	C	E	A	D	E	A	F
Approach Vol, veh/h		2201			2097			613			100	
Approach Delay, s/veh		32.5			28.5			55.5			118.4	
Approach LOS		C			C			E			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	21.9	73.6		12.2	8.9	86.6		32.3				
Change Period (Y+Rc), s	4.4	6.0		4.9	4.4	* 6		6.0				
Max Green Setting (Gmax), s	17.6	56.8		7.3	7.6	* 67		37.0				
Max Q Clear Time (g_c+I1), s	17.5	45.8		8.7	5.4	35.4		22.1				
Green Ext Time (p_c), s	0.0	9.8		0.0	0.0	22.9		1.1				

Intersection Summary		
HCM 6th Ctrl Delay		35.3
HCM 6th LOS		D

Notes

User approved volume balancing among the lanes for turning movement.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1690	112	10	1630	10	177	10	30	20	20	10
Future Volume (veh/h)	0	1690	112	10	1630	10	177	10	30	20	20	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.96	1.00		0.81
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	0	1878	124	11	1811	11	197	11	33	22	22	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	1	1990	130	18	2281	14	773	89	268	55	33	17
Arrive On Green	0.00	0.59	0.59	0.01	0.63	0.63	0.22	0.22	0.22	0.03	0.03	0.03
Sat Flow, veh/h	1781	3381	220	1781	3620	22	3456	399	1198	1781	1080	540
Grp Volume(v), veh/h	0	975	1027	11	888	934	197	0	44	22	0	33
Grp Sat Flow(s),veh/h/ln	1781	1777	1824	1781	1777	1865	1728	0	1598	1781	0	1620
Q Serve(g_s), s	0.0	70.1	74.1	0.9	51.7	52.0	6.6	0.0	3.1	1.7	0.0	2.8
Cycle Q Clear(g_c), s	0.0	70.1	74.1	0.9	51.7	52.0	6.6	0.0	3.1	1.7	0.0	2.8
Prop In Lane	1.00		0.12	1.00		0.01	1.00		0.75	1.00		0.33
Lane Grp Cap(c), veh/h	1	1046	1074	18	1119	1175	773	0	357	55	0	50
V/C Ratio(X)	0.00	0.93	0.96	0.62	0.79	0.79	0.25	0.00	0.12	0.40	0.00	0.66
Avail Cap(c_a), veh/h	51	1046	1074	52	1119	1175	773	0	357	55	0	50
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)	0.00	1.00	1.00	0.59	0.59	0.59	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	26.3	27.1	69.0	19.2	19.2	44.7	0.0	43.4	66.6	0.0	67.1
Incr Delay (d2), s/veh	0.0	15.7	18.7	7.5	3.5	3.4	0.8	0.0	0.7	20.6	0.0	52.8
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	0.0	32.9	36.4	0.4	21.5	22.6	2.9	0.0	1.3	1.1	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	41.9	45.8	76.6	22.7	22.6	45.5	0.0	44.1	87.1	0.0	119.9
LnGrp LOS	A	D	D	E	C	C	D	A	D	F	A	F
Approach Vol, veh/h		2002			1833			241			55	
Approach Delay, s/veh		43.9			22.9			45.3			106.8	
Approach LOS		D			C			D			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.8	88.4		9.2	0.0	94.2		36.6				
Change Period (Y+Rc), s	4.4	* 6		4.9	4.4	6.0		5.3				
Max Green Setting (Gmax), s	4.1	* 80		4.3	4.0	79.8		31.3				
Max Q Clear Time (g_c+I1), s	2.9	76.1		4.8	0.0	54.0		8.6				
Green Ext Time (p_c), s	0.0	3.8		0.0	0.0	23.2		0.5				

Intersection Summary	
HCM 6th Ctrl Delay	35.5
HCM 6th LOS	D

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	1660	30	33	1450	70	50	54	43	210	33	140
Future Volume (veh/h)	40	1660	30	33	1450	70	50	54	43	210	33	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	1930	35	38	1686	81	58	63	50	244	38	163
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	61	2167	934	49	2143	923	218	238	189	302	75	323
Arrive On Green	0.03	0.61	0.61	0.03	0.60	0.60	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1781	3554	1531	1781	3554	1531	1175	950	754	1269	300	1288
Grp Volume(v), veh/h	47	1930	35	38	1686	81	58	0	113	244	0	201
Grp Sat Flow(s),veh/h/ln	1781	1777	1531	1781	1777	1531	1175	0	1705	1269	0	1588
Q Serve(g_s), s	3.7	64.9	1.3	3.0	50.2	3.1	6.2	0.0	7.4	26.7	0.0	15.2
Cycle Q Clear(g_c), s	3.7	64.9	1.3	3.0	50.2	3.1	21.4	0.0	7.4	34.2	0.0	15.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.44	1.00		0.81
Lane Grp Cap(c), veh/h	61	2167	934	49	2143	923	218	0	427	302	0	398
V/C Ratio(X)	0.78	0.89	0.04	0.78	0.79	0.09	0.27	0.00	0.26	0.81	0.00	0.50
Avail Cap(c_a), veh/h	84	2167	934	66	2143	923	222	0	432	302	0	398
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)	0.24	0.24	0.24	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	67.1	23.3	10.9	67.7	21.0	11.6	54.2	0.0	42.1	55.8	0.0	45.0
Incr Delay (d2), s/veh	4.5	1.6	0.0	22.9	3.0	0.2	0.2	0.0	0.1	13.9	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	26.4	0.4	1.7	21.0	1.1	1.9	0.0	3.2	9.7	0.0	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.6	24.9	10.9	90.6	24.0	11.8	54.4	0.0	42.2	69.7	0.0	45.4
LnGrp LOS	E	C	B	F	C	B	D	A	D	E	A	D
Approach Vol, veh/h		2012			1805			171			445	
Approach Delay, s/veh		25.8			24.8			46.4			58.8	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.2	91.4		40.4	9.2	90.4		40.4
Change Period (Y+Rc), s	4.4	* 6		5.3	4.4	6.0		* 5.3
Max Green Setting (Gmax), s	5.3	* 84		35.1	6.6	82.6		* 36
Max Q Clear Time (g_c+I1), s	5.7	66.9		36.2	5.7	52.2		23.4
Green Ext Time (p_c), s	0.0	16.4		0.0	0.0	26.0		0.4

Intersection Summary	
HCM 6th Ctrl Delay	29.5
HCM 6th LOS	C

Notes

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

Intersection	
Int Delay, s/veh	4.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	42	53	64	34	43	33
Future Vol, veh/h	42	53	64	34	43	33
Conflicting Peds, #/hr	10	10	0	12	12	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	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	64	77	41	52	40

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	264	120	0	0	130	0
Stage 1	110	-	-	-	-	-
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	725	931	-	-	1455	-
Stage 1	915	-	-	-	-	-
Stage 2	874	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	684	912	-	-	1438	-
Mov Cap-2 Maneuver	684	-	-	-	-	-
Stage 1	905	-	-	-	-	-
Stage 2	834	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.3	0	4.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	795	1438	-
HCM Lane V/C Ratio	-	-	0.144	0.036	-
HCM Control Delay (s)	-	-	10.3	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.1	-

Intersection	
Int Delay, s/veh	6.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	72	3	11	26	6	69
Future Vol, veh/h	72	3	11	26	6	69
Conflicting Peds, #/hr	10	0	0	10	10	10
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	87	4	13	31	7	83

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	54	0	-	0	227	49
Stage 1	-	-	-	-	39	-
Stage 2	-	-	-	-	188	-
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	1551	-	-	-	761	1020
Stage 1	-	-	-	-	983	-
Stage 2	-	-	-	-	844	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1536	-	-	-	703	1001
Mov Cap-2 Maneuver	-	-	-	-	703	-
Stage 1	-	-	-	-	918	-
Stage 2	-	-	-	-	836	-

Approach	EB	WB	SB
HCM Control Delay, s	7.2	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1536	-	-	-	968
HCM Lane V/C Ratio	0.056	-	-	-	0.093
HCM Control Delay (s)	7.5	0	-	-	9.1
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.3

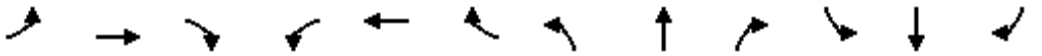
Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	32	33	23	63	111	26
Future Vol, veh/h	32	33	23	63	111	26
Conflicting Peds, #/hr	10	10	10	0	0	10
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	70	70	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	47	33	90	159	37

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	354	198	206	0	-	0
Stage 1	188	-	-	-	-	-
Stage 2	166	-	-	-	-	-
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	644	843	1365	-	-	-
Stage 1	844	-	-	-	-	-
Stage 2	863	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	615	827	1352	-	-	-
Mov Cap-2 Maneuver	615	-	-	-	-	-
Stage 1	814	-	-	-	-	-
Stage 2	854	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.9	2.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1352	-	707	-	-
HCM Lane V/C Ratio	0.024	-	0.131	-	-
HCM Control Delay (s)	7.7	0	10.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	480	30	660	430	21	40	44	990	24	108	22
Future Volume (veh/h)	31	480	30	660	430	21	40	44	990	24	108	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	527	33	725	473	23	44	48	976	26	119	24
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	43	740	46	818	1483	72	56	592	863	36	459	93
Arrive On Green	0.02	0.22	0.22	0.24	0.43	0.43	0.03	0.32	0.32	0.02	0.31	0.31
Sat Flow, veh/h	1781	3388	212	3456	3442	167	1781	1870	1540	1781	1502	303
Grp Volume(v), veh/h	34	276	284	725	244	252	44	48	976	26	0	143
Grp Sat Flow(s),veh/h/ln	1781	1777	1823	1728	1777	1832	1781	1870	1540	1781	0	1805
Q Serve(g_s), s	1.9	14.7	14.8	20.8	9.3	9.3	2.5	1.8	32.4	1.5	0.0	6.1
Cycle Q Clear(g_c), s	1.9	14.7	14.8	20.8	9.3	9.3	2.5	1.8	32.4	1.5	0.0	6.1
Prop In Lane	1.00		0.12	1.00		0.09	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	43	388	398	818	766	790	56	592	863	36	0	551
V/C Ratio(X)	0.79	0.71	0.71	0.89	0.32	0.32	0.79	0.08	1.13	0.72	0.00	0.26
Avail Cap(c_a), veh/h	123	486	498	2212	1517	1565	80	592	863	111	0	551
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	49.7	37.0	37.1	37.8	19.2	19.2	49.3	24.6	23.1	49.9	0.0	26.8
Incr Delay (d2), s/veh	11.2	4.7	4.7	1.3	0.4	0.4	17.2	0.3	73.5	9.3	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	6.8	7.0	8.8	3.8	4.0	1.4	0.9	36.7	0.8	0.0	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.9	41.8	41.8	39.1	19.6	19.6	66.5	24.8	96.6	59.2	0.0	28.0
LnGrp LOS	E	D	D	D	B	B	E	C	F	E	A	C
Approach Vol, veh/h		594			1221			1068			169	
Approach Delay, s/veh		42.9			31.2			92.1			32.8	
Approach LOS		D			C			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.5	38.1	28.7	29.2	7.6	37.0	6.9	51.0
Change Period (Y+Rc), s	4.4	5.7	4.4	6.8	4.4	* 5.7	4.4	* 6.8
Max Green Setting (Gmax), s	6.4	28.7	65.6	28.0	4.6	* 31	7.1	* 88
Max Q Clear Time (g_c+I1), s	3.5	34.4	22.8	16.8	4.5	8.1	3.9	11.3
Green Ext Time (p_c), s	0.0	0.0	1.5	3.7	0.0	0.9	0.0	5.6

Intersection Summary	
HCM 6th Ctrl Delay	54.9
HCM 6th LOS	D

Notes

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



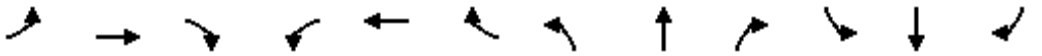
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1303	211	80	791	290	210
Future Volume (veh/h)	1303	211	80	791	290	210
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1372	222	84	833	305	221
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1876	806	108	2255	833	382
Arrive On Green	0.53	0.53	0.06	0.63	0.24	0.24
Sat Flow, veh/h	3647	1528	1781	3647	3456	1585
Grp Volume(v), veh/h	1372	222	84	833	305	221
Grp Sat Flow(s),veh/h/ln	1777	1528	1781	1777	1728	1585
Q Serve(g_s), s	28.3	7.7	4.4	10.7	7.0	11.7
Cycle Q Clear(g_c), s	28.3	7.7	4.4	10.7	7.0	11.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1876	806	108	2255	833	382
V/C Ratio(X)	0.73	0.28	0.78	0.37	0.37	0.58
Avail Cap(c_a), veh/h	1876	806	192	2468	833	382
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	17.3	12.4	44.2	8.3	30.2	32.0
Incr Delay (d2), s/veh	2.6	0.8	4.6	0.2	1.2	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.4	2.7	2.1	3.8	3.0	5.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.9	13.3	48.8	8.5	31.4	38.2
LnGrp LOS	B	B	D	A	C	D
Approach Vol, veh/h	1594			917	526	
Approach Delay, s/veh	19.0			12.2	34.3	
Approach LOS	B			B	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	10.2	57.3				67.5	28.0
Change Period (Y+Rc), s	4.4	6.9				* 6.9	5.0
Max Green Setting (Gmax), s	10.3	50.4				* 66	23.0
Max Q Clear Time (g_c+I1), s	6.4	30.3				12.7	13.7
Green Ext Time (p_c), s	0.0	14.4				14.0	1.2

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

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	1398	240	280	1793	10	320	30	180	10	30	50
Future Volume (veh/h)	110	1398	240	280	1793	10	320	30	180	10	30	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.96	1.00		0.89
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	124	1571	270	315	2015	11	384	0	202	11	34	56
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	136	2201	667	309	2766	15	626	0	267	24	75	75
Arrive On Green	0.08	0.43	0.43	0.17	0.53	0.53	0.18	0.00	0.18	0.05	0.05	0.05
Sat Flow, veh/h	1781	5106	1547	1781	5239	29	3563	0	1517	452	1396	1411
Grp Volume(v), veh/h	124	1571	270	315	1309	717	384	0	202	45	0	56
Grp Sat Flow(s),veh/h/ln	1781	1702	1547	1781	1702	1864	1781	0	1517	1848	0	1411
Q Serve(g_s), s	8.8	32.4	15.4	22.2	37.8	37.8	12.7	0.0	16.2	3.0	0.0	5.0
Cycle Q Clear(g_c), s	8.8	32.4	15.4	22.2	37.8	37.8	12.7	0.0	16.2	3.0	0.0	5.0
Prop In Lane	1.00		1.00	1.00		0.02	1.00		1.00	0.24		1.00
Lane Grp Cap(c), veh/h	136	2201	667	309	1797	984	626	0	267	99	0	75
V/C Ratio(X)	0.91	0.71	0.40	1.02	0.73	0.73	0.61	0.00	0.76	0.46	0.00	0.74
Avail Cap(c_a), veh/h	136	2201	667	309	1797	984	1030	0	439	120	0	91
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	58.7	29.9	25.1	52.9	23.2	23.2	48.7	0.0	50.2	58.8	0.0	59.7
Incr Delay (d2), s/veh	49.7	2.0	1.8	56.3	2.6	4.7	0.4	0.0	1.7	1.2	0.0	17.2
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	5.9	13.5	6.0	14.7	15.4	17.5	5.7	0.0	6.3	1.5	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	108.3	31.9	26.9	109.2	25.8	27.9	49.1	0.0	51.8	60.0	0.0	76.9
LnGrp LOS	F	C	C	F	C	C	D	A	D	E	A	E
Approach Vol, veh/h		1965			2341			586			101	
Approach Delay, s/veh		36.1			37.7			50.0			69.4	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	26.6	61.2		11.7	14.2	73.6		28.5				
Change Period (Y+Rc), s	4.4	6.0		4.9	4.4	* 6		6.0				
Max Green Setting (Gmax), s	22.2	39.2		8.3	9.8	* 52		37.0				
Max Q Clear Time (g_c+I1), s	24.2	34.4		7.0	10.8	39.8		18.2				
Green Ext Time (p_c), s	0.0	4.3		0.0	0.0	10.7		1.1				

Intersection Summary			
HCM 6th Ctrl Delay		39.1	
HCM 6th LOS		D	

Notes

User approved volume balancing among the lanes for turning movement.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1300	198	40	1890	30	133	10	50	30	10	10
Future Volume (veh/h)	30	1300	198	40	1890	30	133	10	50	30	10	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.97	1.00		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	1354	206	42	1969	31	139	10	52	31	10	10
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	39	1643	247	54	1934	30	840	62	322	60	26	26
Arrive On Green	0.02	0.53	0.53	0.03	0.54	0.54	0.24	0.24	0.24	0.03	0.03	0.03
Sat Flow, veh/h	1781	3087	465	1781	3578	56	3456	255	1324	1781	780	780
Grp Volume(v), veh/h	31	773	787	42	974	1026	139	0	62	31	0	20
Grp Sat Flow(s),veh/h/ln	1781	1777	1775	1781	1777	1858	1728	0	1579	1781	0	1560
Q Serve(g_s), s	2.2	46.1	47.7	3.0	69.2	69.2	4.1	0.0	4.0	2.2	0.0	1.6
Cycle Q Clear(g_c), s	2.2	46.1	47.7	3.0	69.2	69.2	4.1	0.0	4.0	2.2	0.0	1.6
Prop In Lane	1.00		0.26	1.00		0.03	1.00		0.84	1.00		0.50
Lane Grp Cap(c), veh/h	39	946	944	54	960	1004	840	0	384	60	0	52
V/C Ratio(X)	0.79	0.82	0.83	0.78	1.01	1.02	0.17	0.00	0.16	0.52	0.00	0.38
Avail Cap(c_a), veh/h	60	946	944	78	960	1004	840	0	384	60	0	52
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.37	0.37	0.37	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	62.3	24.8	25.2	61.6	29.4	29.4	38.2	0.0	38.2	60.8	0.0	60.5
Incr Delay (d2), s/veh	16.7	7.8	8.5	6.2	21.4	22.9	0.4	0.0	0.9	28.6	0.0	19.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	20.9	21.7	1.5	33.8	35.8	1.8	0.0	1.6	1.5	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.0	32.6	33.7	67.8	50.8	52.3	38.6	0.0	39.1	89.4	0.0	80.3
LnGrp LOS	E	C	C	E	F	F	D	A	D	F	A	F
Approach Vol, veh/h		1591			2042			201			51	
Approach Delay, s/veh		34.0			51.9			38.8			85.8	
Approach LOS		C			D			D			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.3	74.1		9.2	7.2	75.2		36.4
Change Period (Y+Rc), s	4.4	* 6		4.9	4.4	6.0		5.3
Max Green Setting (Gmax), s	5.6	* 67		4.3	4.3	67.7		31.1
Max Q Clear Time (g_c+I1), s	5.0	49.7		4.2	4.2	71.2		6.1
Green Ext Time (p_c), s	0.0	14.8		0.0	0.0	0.0		0.5

Intersection Summary		
HCM 6th Ctrl Delay		44.4
HCM 6th LOS		D

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	1210	60	95	1770	240	50	36	57	180	65	70
Future Volume (veh/h)	110	1210	60	95	1770	240	50	36	57	180	65	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.96	0.99		0.96
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	118	1301	65	102	1903	258	54	39	61	194	70	75
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	142	2089	899	126	2056	885	235	141	220	272	177	190
Arrive On Green	0.08	0.59	0.59	0.07	0.58	0.58	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1781	3554	1530	1781	3554	1530	1232	642	1004	1281	809	867
Grp Volume(v), veh/h	118	1301	65	102	1903	258	54	0	100	194	0	145
Grp Sat Flow(s),veh/h/ln	1781	1777	1530	1781	1777	1530	1232	0	1646	1281	0	1677
Q Serve(g_s), s	8.4	30.5	2.3	7.2	62.2	10.9	5.0	0.0	6.5	19.0	0.0	9.5
Cycle Q Clear(g_c), s	8.4	30.5	2.3	7.2	62.2	10.9	14.5	0.0	6.5	25.5	0.0	9.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.61	1.00		0.52
Lane Grp Cap(c), veh/h	142	2089	899	126	2056	885	235	0	361	272	0	367
V/C Ratio(X)	0.83	0.62	0.07	0.81	0.93	0.29	0.23	0.00	0.28	0.71	0.00	0.39
Avail Cap(c_a), veh/h	148	2089	899	207	2056	885	248	0	378	282	0	380
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)	0.45	0.45	0.45	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.0	17.2	11.4	58.6	24.5	13.7	48.9	0.0	41.6	52.1	0.0	42.7
Incr Delay (d2), s/veh	14.8	0.6	0.1	4.7	8.7	0.8	0.2	0.0	0.2	6.7	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	4.4	12.3	0.8	3.4	27.3	4.0	1.6	0.0	2.7	6.6	0.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.9	17.8	11.4	63.3	33.1	14.5	49.1	0.0	41.7	58.8	0.0	43.0
LnGrp LOS	E	B	B	E	C	B	D	A	D	E	A	D
Approach Vol, veh/h		1484			2263			154			339	
Approach Delay, s/veh		21.9			32.4			44.3			52.0	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.4	81.2		33.3	14.6	80.1		33.3
Change Period (Y+Rc), s	4.4	* 6		5.3	4.4	6.0		* 5.3
Max Green Setting (Gmax), s	14.9	* 69		29.0	10.6	72.7		* 29
Max Q Clear Time (g_c+I1), s	10.2	32.5		27.5	10.4	64.2		16.5
Green Ext Time (p_c), s	0.1	24.4		0.2	0.0	8.3		0.3

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

Notes

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

Intersection	
Int Delay, s/veh	5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	46	56	47	45	75	65
Future Vol, veh/h	46	56	47	45	75	65
Conflicting Peds, #/hr	10	10	0	10	10	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	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	55	67	57	54	90	78

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	362	104	0	0	121	0
Stage 1	94	-	-	-	-	-
Stage 2	268	-	-	-	-	-
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	637	951	-	-	1467	-
Stage 1	930	-	-	-	-	-
Stage 2	777	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	583	933	-	-	1453	-
Mov Cap-2 Maneuver	583	-	-	-	-	-
Stage 1	921	-	-	-	-	-
Stage 2	720	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.9	0	4.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	734	1453	-
HCM Lane V/C Ratio	-	-	0.167	0.062	-
HCM Control Delay (s)	-	-	10.9	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0.2	-

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	80	12	5	12	27	84
Future Vol, veh/h	80	12	5	12	27	84
Conflicting Peds, #/hr	10	0	0	10	10	10
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	96	14	6	14	33	101

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	30	0	-	0	239	33
Stage 1	-	-	-	-	23	-
Stage 2	-	-	-	-	216	-
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	1583	-	-	-	749	1041
Stage 1	-	-	-	-	1000	-
Stage 2	-	-	-	-	820	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1568	-	-	-	688	1021
Mov Cap-2 Maneuver	-	-	-	-	688	-
Stage 1	-	-	-	-	929	-
Stage 2	-	-	-	-	812	-

Approach	EB	WB	SB
HCM Control Delay, s	6.5	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1568	-	-	-	913
HCM Lane V/C Ratio	0.061	-	-	-	0.146
HCM Control Delay (s)	7.4	0	-	-	9.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.5

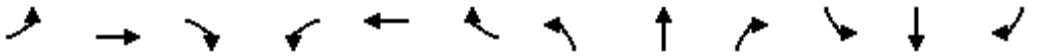
Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	36	54	132	65	35
Future Vol, veh/h	30	36	54	132	65	35
Conflicting Peds, #/hr	10	10	10	0	0	10
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	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	41	61	150	74	40

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	386	114	124	0	-	0
Stage 1	104	-	-	-	-	-
Stage 2	282	-	-	-	-	-
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	617	939	1463	-	-	-
Stage 1	920	-	-	-	-	-
Stage 2	766	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	577	921	1449	-	-	-
Mov Cap-2 Maneuver	577	-	-	-	-	-
Stage 1	868	-	-	-	-	-
Stage 2	758	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.5	2.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1449	-	725	-	-
HCM Lane V/C Ratio	0.042	-	0.103	-	-
HCM Control Delay (s)	7.6	0	10.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	540	40	790	430	25	60	99	970	22	48	31
Future Volume (veh/h)	62	540	40	790	430	25	60	99	970	22	48	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	67	581	43	849	462	27	65	106	935	24	52	33
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	86	754	56	941	1529	89	83	534	871	34	272	173
Arrive On Green	0.05	0.23	0.23	0.27	0.45	0.45	0.05	0.29	0.29	0.02	0.26	0.26
Sat Flow, veh/h	1781	3345	247	3456	3404	198	1781	1870	1538	1781	1055	669
Grp Volume(v), veh/h	67	308	316	849	240	249	65	106	935	24	0	85
Grp Sat Flow(s),veh/h/ln	1781	1777	1815	1728	1777	1825	1781	1870	1538	1781	0	1724
Q Serve(g_s), s	4.0	17.5	17.6	25.6	9.3	9.4	3.9	4.6	30.8	1.4	0.0	4.2
Cycle Q Clear(g_c), s	4.0	17.5	17.6	25.6	9.3	9.4	3.9	4.6	30.8	1.4	0.0	4.2
Prop In Lane	1.00		0.14	1.00		0.11	1.00		1.00	1.00		0.39
Lane Grp Cap(c), veh/h	86	401	409	941	798	820	83	534	871	34	0	444
V/C Ratio(X)	0.78	0.77	0.77	0.90	0.30	0.30	0.78	0.20	1.07	0.71	0.00	0.19
Avail Cap(c_a), veh/h	202	461	471	2039	1325	1361	107	534	871	104	0	502
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	50.7	39.1	39.2	37.8	18.9	18.9	50.8	29.2	24.1	52.6	0.0	31.2
Incr Delay (d2), s/veh	5.5	7.8	7.8	1.4	0.3	0.3	17.6	0.2	52.3	9.6	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	8.4	8.7	10.8	3.9	4.0	2.1	2.1	33.1	0.7	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.2	46.9	47.0	39.2	19.2	19.3	68.5	29.4	76.3	62.2	0.0	31.5
LnGrp LOS	E	D	D	D	B	B	E	C	F	E	A	C
Approach Vol, veh/h		691			1338			1106			109	
Approach Delay, s/veh		47.9			31.9			71.4			38.3	
Approach LOS		D			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.5	36.5	33.8	31.1	9.5	33.5	9.6	55.2
Change Period (Y+Rc), s	4.4	5.7	4.4	6.8	4.4	* 5.7	4.4	* 6.8
Max Green Setting (Gmax), s	6.3	30.8	63.6	28.0	6.5	* 31	12.2	* 80
Max Q Clear Time (g_c+I1), s	3.4	32.8	27.6	19.6	5.9	6.2	6.0	11.4
Green Ext Time (p_c), s	0.0	0.0	1.8	3.4	0.0	0.5	0.0	5.5

Intersection Summary	
HCM 6th Ctrl Delay	49.0
HCM 6th LOS	D

Notes

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



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1281	281	180	1103	202	170
Future Volume (veh/h)	1281	281	180	1103	202	170
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	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	1392	305	196	1199	220	185
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1669	716	228	2285	813	373
Arrive On Green	0.47	0.47	0.13	0.64	0.24	0.24
Sat Flow, veh/h	3647	1524	1781	3647	3456	1585
Grp Volume(v), veh/h	1392	305	196	1199	220	185
Grp Sat Flow(s),veh/h/ln	1777	1524	1781	1777	1728	1585
Q Serve(g_s), s	33.4	13.0	10.5	17.8	5.1	9.9
Cycle Q Clear(g_c), s	33.4	13.0	10.5	17.8	5.1	9.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1669	716	228	2285	813	373
V/C Ratio(X)	0.83	0.43	0.86	0.52	0.27	0.50
Avail Cap(c_a), veh/h	1669	716	270	2411	813	373
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	22.6	17.2	41.7	9.4	30.5	32.4
Incr Delay (d2), s/veh	5.1	1.9	18.4	0.4	0.8	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.4	4.8	5.7	6.3	2.2	4.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	27.7	19.0	60.1	9.8	31.3	37.0
LnGrp LOS	C	B	E	A	C	D
Approach Vol, veh/h	1697			1395	405	
Approach Delay, s/veh	26.1			16.8	33.9	
Approach LOS	C			B	C	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	16.9	52.8			69.7	28.0
Change Period (Y+Rc), s	4.4	6.9			* 6.9	5.0
Max Green Setting (Gmax), s	14.8	45.9			* 66	23.0
Max Q Clear Time (g_c+I1), s	12.5	35.4			19.8	11.9
Green Ext Time (p_c), s	0.1	8.7			22.5	0.9

Intersection Summary		
HCM 6th Ctrl Delay	23.3	
HCM 6th LOS	C	

Notes

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