APPENDIX C

Local Mobility Analysis

The Trails at Carmel Mountain Ranch –

Local Mobility Analysis

Prepared for:
New Urban West, Inc.

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FEHR PEERS

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Executive Summary

Fehr & Peers has performed a local mobility analysis (LMA) for The Trails at Carmel Mountain Ranch Project ("Project"). Applicable text, figures, and analysis were carried over from the draft *Transportation Impact Analysis The Trails at Carmel Mountain Ranch* for the Project by Lincsott, Law & Greenspan, Engineers (LLG) in January 2020. Review of the text and analysis was performed and the information was repackaged to reflect the City's draft LMA guidelines.

The Project is approximately 164.5 acres located east of Interstate 15 (I-15), south of Carmel Mountain Road, and north of Ted Williams Parkway in the Community of Carmel Mountain Ranch in the City of San Diego. Portions of the Project site are located within a Transit Priority Area (TPA) due to proximity to the Metropolitan Transit System (MTS) Sabre Springs/Peñasquitos Transit Station approximately 0.5 miles south of the Project Site.

The site previously functioned as the Carmel Mountain Ranch Country Club and associated non-contiguous 18-hole golf course, which closed permanently in the summer of 2018. The Project proposes the redevelopment of the defunct golf course with 1,200 apartments and townhomes and a mix of open space and recreational uses. Residential land uses would make up approximately 51.1 acres of the Project site and would range in density from 12.94 to 37.43 dwelling units per acre. Open space uses would make up 111.44 acres. The Project will include six miles of trails for walking and biking, trail amenities such as benches, signage, and kiosks, and picnic pavilions, playgrounds, and tot-lots. In addition, the Project includes a 12,000-square-foot pad for future development of a community art gallery/studio located near the existing Carmel Mountain Ranch library that would include art space, storage, and a small café/snack facility. The art gallery also includes one caretaker unit.

The Project requires a General Plan Amendment, Community Plan Amendment, Rezone, Master Planned Development Plan, Site Development Permit for Environmentally Sensitive Lands, and Vesting Tentative Map.

The Project is anticipated to generate approximately 8,282 ADT with 657 AM peak hour trips (141 inbound/516 outbound) and 772 PM peak hour trips (534 inbound/238 outbound). No trip credits were taken for the previous golf course land use or for walking, biking, and transit.

The Project is sited throughout the non-contiguous 18 holes of the former golf course. Eleven of the 18 holes (combined into nine "Units") will be developed with residences. Individual residential development sites will be accessed via private driveways to the existing street system surrounding the golf course. Nine Vehicular access points to the Project are proposed.

Per the City of San Diego's LMA guidelines, the following intersection improvements were identified as being needed to accommodate Project traffic under Opening Year (2025) Conditions and Horizon Year (2050) conditions:

Carmel Mountain Road/Rancho Carmel Drive – Implement a southbound right-turn overlap phase to reduce delay at the intersection. Prohibition of eastbound U-turns will limit access to the southern driveway of The Courtyard at Carmel Mountain Ranch; however, eastbound traffic can still access the shopping center from Rancho Carmel Drive.

Ted Williams Parkway/Pomerado Road (in City of Poway) – Implement southbound and eastbound right-turn overlap phases to reduce delay at the intersection.

Carmel Ridge Road/Ted Williams Parkway – Install a traffic signal to allow movements in all directions and to reduce delay at the intersection. Peak hour traffic signal warrants are met for this location.

Carmel Mountain Road/Camino Del Norte – Implement right-turn overlap phasing for the southbound right-turns.

Ted Williams Parkway/Shoal Creek Drive – If a traffic signal is installed at Carmel Ridge Road/Ted Williams Parkway, eastbound left turn queueing, which is expected to exceed capacity under No Project and With Project conditions, is improved to better than no project conditions. If the signal is <u>not</u> installed, the eastbound left turn lane should be lengthened to accommodate expected queue lengths, or the north/south signal phasing should be changed from split phasing to permitted lefts to provide longer green time to the eastbound left movement.

Additionally, Project driveway intersections will be designed to meet pedestrian accessibility standards, including curb ramps and crosswalks.

The Project is not anticipated to increase bicycle demand to warrant additional upgrades to existing or planned bicycle facilities. For pedestrians, there are no identified missing sidewalks within ½ mile of the Project. The project will include internal pedestrian facilities such as a public multi-use trail system, a trail staging area, and crosswalks on-site where trails meet vehicular traffic

No additional transit facilities are planned within the Community of Carmel Mountain Ranch. All MTS bus stops located nearest to the site provide at least the standard amenities., and no improvements are recommended.

1.0 Introduction

Fehr & Peers has prepared this local mobility analysis per the City of San Diego's Transportation Study Manual (TSM) (September 2020) to determine what vehicular mobility and multi-modal network improvements would be triggered by development of the Project. The data, analysis, and all figures shown in this study were developed by LLG as presented in their draft *Transportation Impact Analysis The Trails At Carmel Mountain Ranch* dated January 29, 2020). Fehr & Peers reviewed the study, completed some additional analysis, and repackaged the information into a format that follows the City's LMA guidelines.

The Project site previously functioned as the Carmel Mountain Ranch Country Club and associated non-contiguous 18-hole golf course, which closed permanently in the summer of 2018. The Project proposes the redevelopment of the golf course with 1,200 apartments and townhomes and a mix of open space and recreational uses. The Project is approximately 164.5 acres and is located east of Interstate 15 (I-15), south of Carmel Mountain Road, and north of Ted Williams Parkway in the Community of Carmel Mountain Ranch in the City of San Diego.

The Project requires a General Plan Amendment, Community Plan Amendment, Rezone, Tentative Map and Site Development Permit.

The report is organized as follows:

1. Introduction
2. Project Description
3. Study Requirements and Analysis Methodology
4. Existing Operations Conditions
5. Project Traffic
6. Opening Year (2025) Conditions
7. Horizon Year (2050) Conditions
8. Proposed Off-Site Intersection Improvements
9. Pedestrian Mobility
10. Bicycle Mobility
11. Transit Facilities
12. Site Access and Circulation
13. Systemic Safety Review

2.0 Project Description

Project Location

The Project is located east of Interstate 15 (I-15), south of Carmel Mountain Road, and north of Ted Williams Parkway in the Community of Carmel Mountain Ranch in the City of San Diego. The surrounding area consists of mostly residential development (single-family and multi-family). There are multi-family homes to the north of the Project site within the Carmel Terrace apartment complex, the Carmel Summit apartment complex, and the Jefferson at Carmel Mountain Ranch complex. Multi-family homes are also located to the east along Tivoli Park Row, Highland Ranch Road and Provencal Place. The portions of the site that will remain undeveloped are located adjacent to Interstate 15. Portions of the Project site are located within a Transit Priority Area (TPA) due to the Project's proximity to the Metropolitan Transit System (MTS) Sabre Springs/Peñasquitos Transit Station approximately 0.5 mile south of Units 5 and 6 of the Project site.

The Project site is also located near commercial uses and employment opportunities. The Carmel Mountain Plaza is north of the Project site and contains retail stores, commercial amenities, and office space. South of the Project site, adjacent to the Sabre Springs/Peñasquitos Transit Station, are existing office uses. In addition, a large commercial and industrial hub is located approximately six miles south of the Project site, on Scripps Poway Parkway east of Pomerado Road. Other commercial retail and employment opportunities are available within the 4S Ranch community located approximately five miles north of the Project site.

The Project site is located near four elementary schools, two middle schools, and one high school.

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

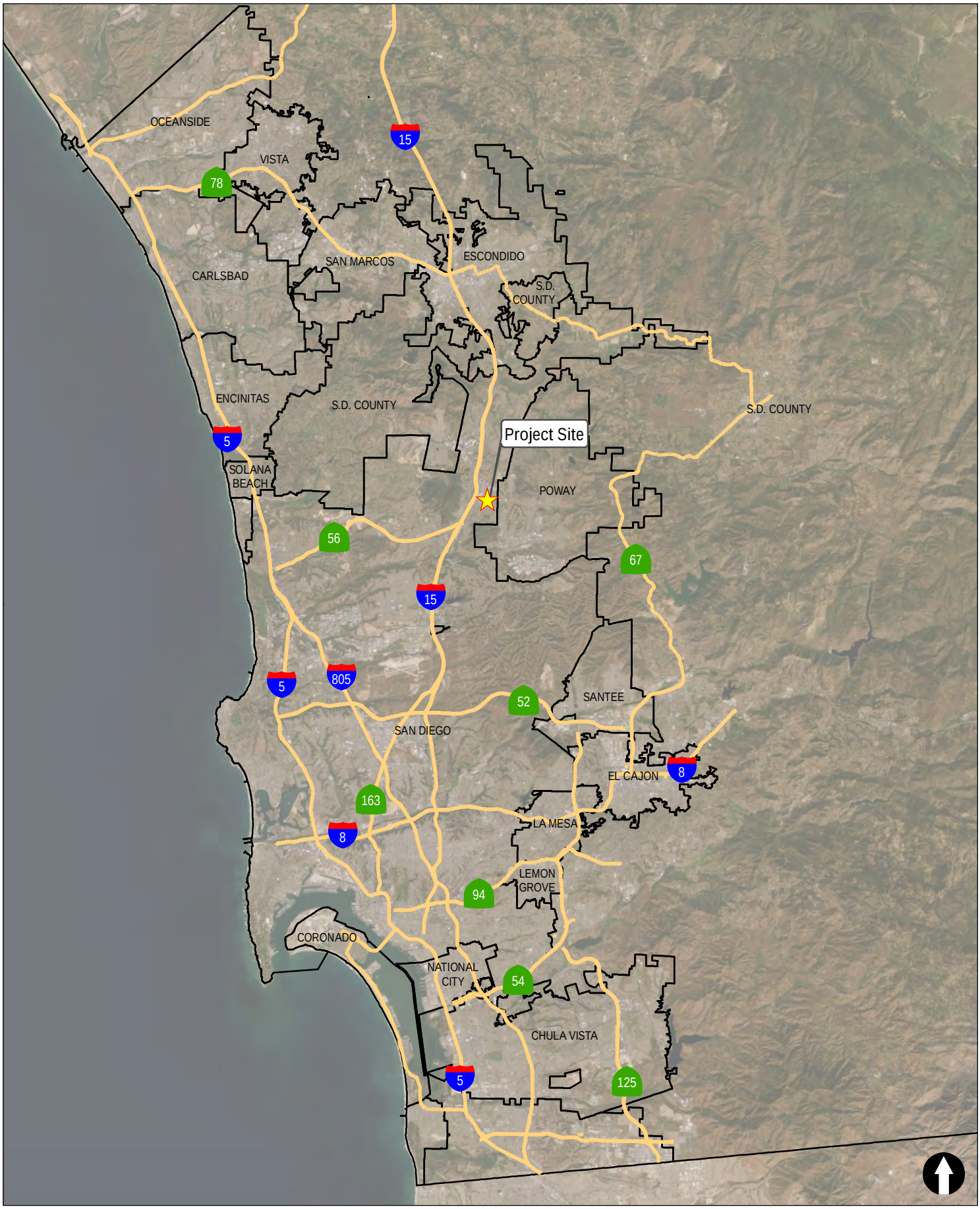


Figure 1

Vicinity Map

The Trails at Carmel Mountain Ranch

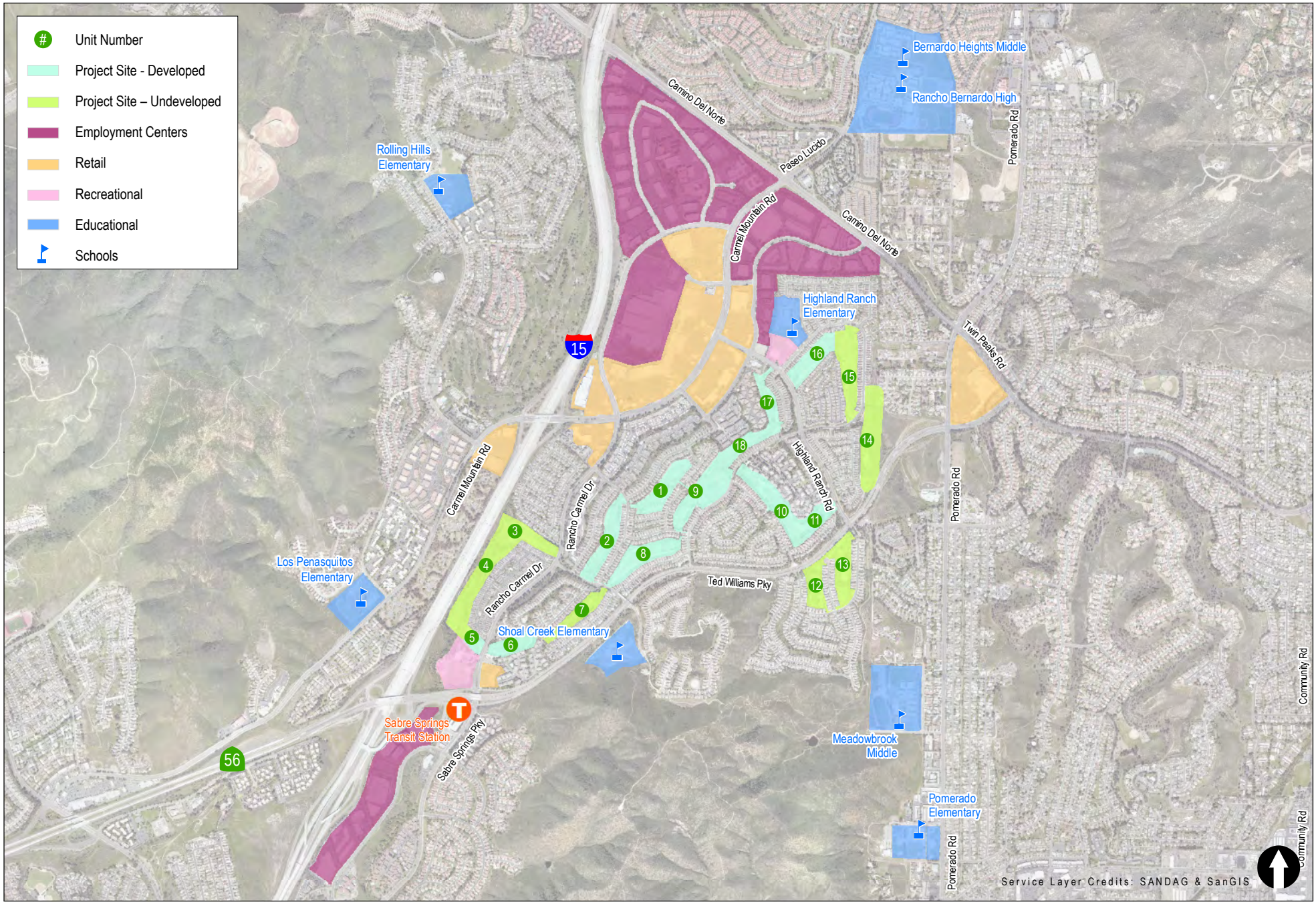


Figure 2

Project Area Map

The Trails at Carmel Mountain Ranch

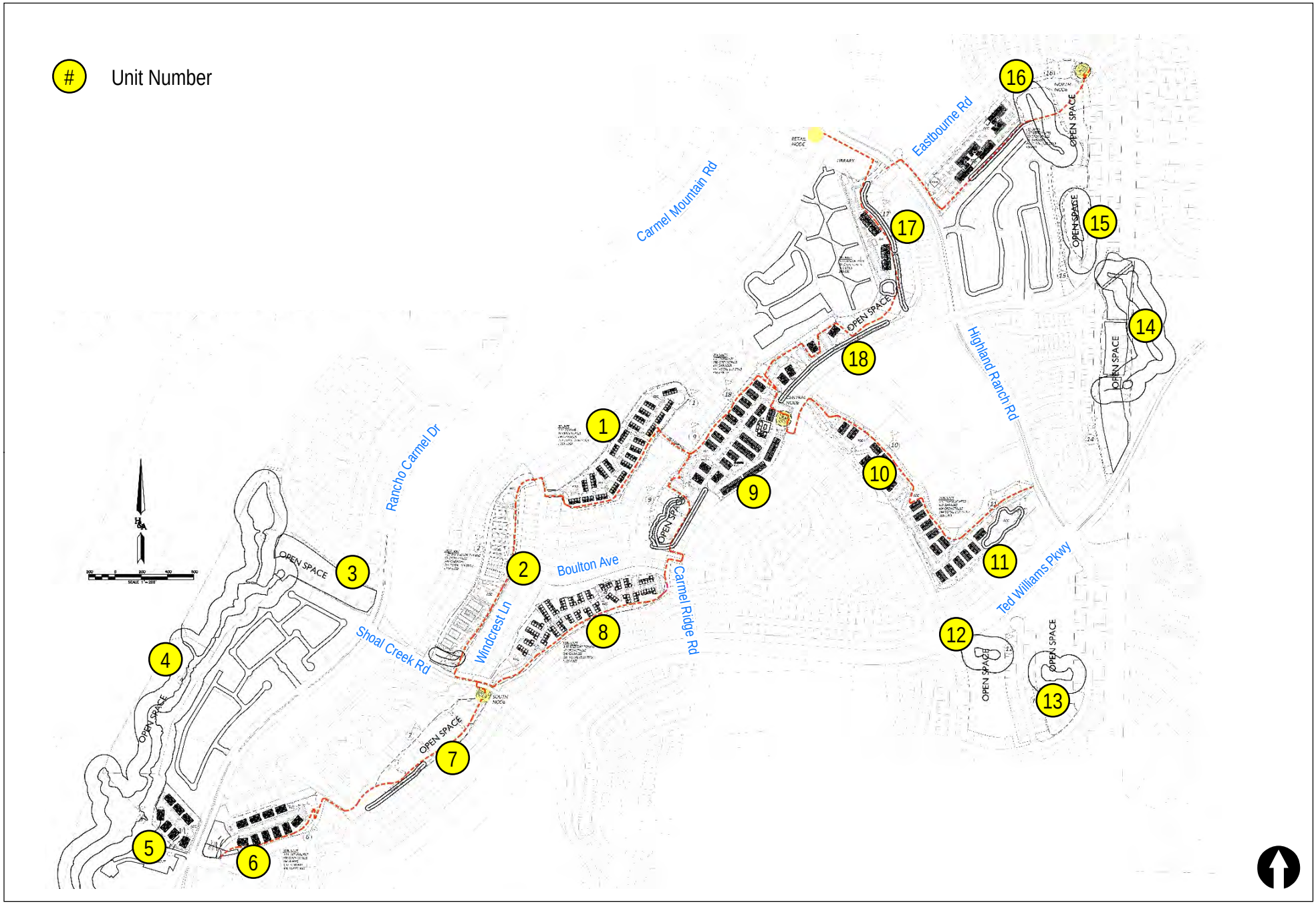


Figure 3

Conceptual Site Plan

The Trails at Carmel Mountain Ranch

Project Description

The Project proposes the redevelopment of the permanently closed Carmel Mountain Ranch Golf Course and Country Club. The Project requires a General Plan Amendment, Community Plan Amendment, Rezone, Master Planned Development Plan, Site Development Permit for Environmentally Sensitive Lands, and Vesting Tentative Map, to develop the existing golf course land use with a mix of residential uses, parks, trails, and other recreational amenities.

The Project is situated throughout the 164.38-acre non-contiguous 18 holes of the former golf course and would place residential development on 11 of 18 holes, including redevelopment of the clubhouse area. The new residential development would consist of 1,200 multi-family residences (apartments and townhomes) and would occur on approximately 51.1 acres. Project density will range from 12.94 to 37.43 dwelling units per acre.

Approximately 120 affordable multi-family units are proposed, as well as an interconnected trail system available to the public. In addition, the Project includes a 12,000-square-foot pad for future development of a community art gallery/studio located near the existing Carmel Mountain Ranch library that would include art space, storage, and a small café/snack facility. The art gallery also includes one caretaker unit. Planned recreational amenities would include picnic pavilions; playgrounds and tot-lots; trails for walking and biking; and trail amenities such as benches, signage, and kiosks. The units are numbered sequentially in a counterclockwise pattern generally coinciding with the hole numbers of the golf course starting with Unit 1 in the center of the development and correspond to the previous golf holes numbers. Holes 3, 4, 7, 12, 13, 14 and 15 will be open space. **Table 1** summarizes the proposed development.

Table 1: Residential Development Summary

Unit No.	Description	Net Acres	Density (Units/Acre)	Quantity (Units)	Golf Hole
1	Townhomes	5.1	12.94	66	1
2	Townhomes	4.16	20.91	87	2
5	Affordable Apartments	2.29	34.06	78	5
6	Mixed Market Rate & Affordable Apartments	3.42	37.43	128	6
8	Townhomes	6.9	14.20	98	8
9	Market Rate Apartments (holes 9&18)	11.1	27.03	300	9,18
10	Townhomes (holes 10&11)	10.07	19.86	200	10,11
16	Market Rate Apartments	4.75	25.89	123	16
17	Market Rate Apartments	3.29	36.47	120	17
Subtotal				1,200	

Source: New Urban West, 2020

Access and Circulation

The proposed Project's circulation system is designed to interconnect with the existing adjacent public street system and discourage cut-through automobile traffic. The Project's internal street network would consist entirely of private roadways. Roadways would be designed as complete streets that accommodate automobiles, bicycles, pedestrians, low-speed vehicles, neighborhood electric vehicles (NEVs), and golf carts. Internal roadways would consist of private drives with and without parking. All private drives would include a contiguous sidewalk along the street separated from the roadway by a five-foot-wide landscaped parkway. Motor courts would also be provided as a shared driveway (private drive) for two or more of the designated homes and common access roads would provide access from private drives to parking areas.

Vehicular Access

As stated above, the Project is sited throughout the non-contiguous 18 holes of the former golf course and entails the development of 11 of 18 holes into "Units" of development. Holes 9 and 18 are combined into Unit 9, and Holes 10 and 11 are combined into Unit 10. Individual developments will take access via driveways to the existing street system surrounding the golf course.

Individual access for each unit is briefly described below. A more detailed discussion of Project access is provided in the Site Access section of this report:

- Unit 1 (66 Townhomes): A full access unsignalized driveway is proposed on Windcrest Lane.
- Unit 2 (87 Townhomes): A full access unsignalized driveway is proposed on Shoal Creek Drive.
- Unit 5 (78 Affordable Apartments): A right-turn in/out only access is proposed on Carmel Mountain Road north of the Carmel Mountain Road/Provencal Place intersection.
- Unit 6 (128 Mixed Market Rate & Affordable Apartments): A right-turn in/out only access is proposed on Rancho Carmel Drive, north of the Provencal Place intersection.
- Unit 8 (987 Townhomes): A full access unsignalized driveway is proposed on Shoal Creek Drive.
- Unit 9 (300 Market Rate Apartments): A full access unsignalized driveway is proposed on Carmel Ridge Road.
- Unit 10 (200 Market Rate Apartments): A full access unsignalized driveway is proposed on Carmel Ridge Road.
- Unit 16 (123 Market Rate Apartments): A right-turn in/out only access is proposed on Highland Ranch Road.
- Unit 17 (120 Market Rate Apartments): A full access unsignalized driveway is proposed on Eastbourne Road. From there, Unit 17 trips would then utilize the signalized intersection at Highland Ranch Road/ Eastbourne Road.

Pedestrian and Bicycle Access

A multi-use trail system would circulate throughout the Project site to provide mobility and recreational opportunities for pedestrians and bicyclists. The trail system would consist of decomposed granite or compacted earth trails with some concrete trails that would be repurposed from the previous golf cart paths. Trails would connect to sidewalks along the proposed on-site roadways and along existing adjacent residential streets to maximize access and connectivity. Additionally, a trail staging area would provide bike racks, a trail map and rules kiosk, bike station, picnic tables, and shade areas. Trails would range from five to eight feet in width and all trails would be publicly accessible.

Transit Access

The San Diego Metropolitan Transit System (MTS) provides bus transit within the Project area. While there are no transit stops located within the Project or immediately adjacent to the project, local bus routes provide service to several bus stops along Carmel Mountain Road near the Project. Regional transit services including MTS Rapid and Express bus routes serve the Sabre Springs/Peñasquitos Transit Station, which is less than half a mile south of Units 5 and 6.

3.0 Study Requirements and Analysis Methodology

The following describes the study requirements and methodology based on the City's draft guidelines for completing an LMA.

The Project is inconsistent with the existing Community Plan and Zoning designation and the Project is forecast to generate more than 500 unadjusted daily driveway vehicle trips. Therefore, an LMA is required.

Pedestrian Facilities

Existing pedestrian facilities and basic deficiencies in the pedestrian network were documented within a half mile walking distance from every pedestrian access point to the Project site.

The Community of Carmel Mountain Ranch has been fully developed, as it relates to the master planned development outlined in the Carmel Mountain Ranch Community Plan. With development of Carmel Mountain Ranch, a "Bikeway and Trails" plan was provided that outlined the nonvehicular needs of the community. Pedestrian circulation has been master planned to link residences with community facilities, services and open space and to link neighborhoods to one another. The Community Plan does not specifically call for additional or wider sidewalks at locations within the Study Area.

Off-site improvements were determined based on the following from the City of San Diego ~~draft~~ Transportation Study Manual (TSM):

- Closing Sidewalk Gaps/Removing Obstructions
    - The project should construct sidewalks to close sidewalk gaps to the project site.
    - The project should remove sidewalk obstructions that constrain pedestrian access route to less than four feet adjacent to the project site.
    - The project should construct curb ramps/meet accessibility standards for any intersections adjacent to the project site.
- Accommodating Pedestrian Demand
    - The project should consider adding traffic calming and pedestrian-related signal timing changes (such as pedestrian hybrid beacons, leading pedestrian interval signal timing, etc.) to accommodate an increase in pedestrian demand on roadways and intersections adjacent to the project site.

Bicycle Facilities

Existing bicycle facilities and basic deficiencies in the bicycle network were documented within a half mile bicycling distance measured from the center of the intersections formed by each project driveway.

Off-site improvements were determined based on the following methods from the City of San Diego TSM:

- Accommodating Bicycle Demand
  - The project should construct (or reserve space for) any planned bicycle facility per the Community Plan or Bicycle Master Plan.
  - The project should consider upgrading adjacent bicycle facilities by adding upgraded treatments (such as green bike lane paint, buffers, etc. where appropriate) to accommodate an increase in bicycle demand.

Transit

The closest transit routes and stops to the project were identified. The condition of stop amenities was described and evaluated for all transit stops within a half mile walking distance of each pedestrian access point to the project.

Off-site improvements were determined based on the following from the City of San Diego TSM:

- Transit Priority Treatments/Improvements
  - The project should consider transit priority treatments when operational analysis determines a transit movement would experience LOS E or worse.
  - The project should consider transit priority treatments identified within the Community Plan for the study area.
- Proposed Transit Stops
  - The project should consider accommodating transit stops to serve existing or proposed transit services, including those identified in the Community Plan, RTIP, and/or RTP within the study area. The project should coordinate any identified transit stops with SANDAG, the Metropolitan Transit System (MTS), and/or the North County Transit District (NCTD).
- Transit Stop Amenities
  - The project should coordinate with MTS and/or the NCTD, as applicable, to determine additional or upgraded transit stop amenities.

Intersections

The Project will generate more than 2,400 daily final driveway trips. Therefore, the following methodology from the TSM was used to determine the study area for intersection analysis:

- All signalized intersections and signalized project driveways where the project will add 50 or more peak hour final primary (cumulative) trips to any turning movement at the intersection.
- All unsignalized intersections (side street stop controlled, all-way stop controlled, and roundabouts) and unsignalized project driveways where the project will add 50 or more peak hour final primary (cumulative) trips on any approach.
- All freeway ramp terminal intersections where the project adds 50 or more peak hour final primary (cumulative) (AM or PM) net new trips on any approach.

Traffic operations at intersections were analyzed using procedures consistent with the Highway Capacity Manual 6th Edition (HCM) published by the Transportation Research Board. The Synchro 10 analysis software was used to evaluate traffic operations at all study intersections. **Table 2** provides a description of each Level of Service grade and its corresponding delay for signalized and unsignalized intersections.

The City of San Diego TSM recommends intersection improvements if the following criteria are met for study intersections:

- Within a ½ mile path of travel of a Major Transit Stop: if the project causes an intersection to degrade to LOS F, or if the project adds traffic to an intersection already operating at LOS F.
- Outside of a ½ mile path of travel of a Major Transit Stop: if the project causes an intersection to degrade to LOS E or F, or if the project adds traffic to an intersection already operating at LOS E or F.

The TSM also provides criteria for when the applicant should consider adding or lengthening a turn lane. Vehicular queuing was evaluated using SimTraffic 10 software. The maximum queue was reported based on the average of ten (10), hour long simulation runs.

The Project is also required to make improvements to study intersections to preserve consistency with Community Plan/PFFP/IFS identified improvements.

One study intersection, Ted Williams Parkway/Pomerado Road, is located within the City of Poway. Poway uses the published SANTEC/ITE guidelines to determine whether intersections and roadway segments operate acceptably. LOS D is considered the lowest acceptable level of service for intersections or roadway segments in the City. If a project is already operating at LOS E or F under no project conditions, an increase in V/C of up to 0.02 or an increase in intersection delay of up to 2 seconds because of project traffic is allowable.

Table 2: Intersection Level of Service Criteria

Level of Service	Description	Signalized Delay (Seconds)	Unsignalized Delay (Seconds)
A	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.	≤ 10.0	≤ 10.0
B	Progression is good, cycle lengths are short, or both. More vehicles stop than with LOS A, causing higher levels of average delay.	> 10.0 to 20.0	> 10.0 to 15.0
C	Higher congestion may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level, though many still pass through the intersection without stopping.	> 20.0 to 35.0	> 15.0 to 25.0
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	> 35.0 to 55.0	> 25.0 to 35.0
E	This level is considered by many agencies 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.	> 55.0 to 80.0	> 35.0 to 50.0
F	This level is considered unacceptable with oversaturation, which is when arrival flow rates exceed the capacity of the intersection. This level may also occur at high V/C ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be contributing factors to such delay levels.	> 80.0	> 50.0

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

Roadway Segments

Because the Project is inconsistent with the Community Plan, roadway segments were analyzed if the Project was forecast to add 500 or more daily trips to the segment and the segment has improvements identified in the community plan or is not built to the community plan ultimate classification. **Appendix A** contains the ADT corresponding to each LOS grade for each street classification for the City of San Diego.

Off-site improvements were determined based on the following methods from the City of San Diego TSM for improvements identified in the community plan (including upgrading to ultimate classification) and planned new circulation element roadways:

- If the project adds greater than 50% of total daily vehicle trips on the segment, the project should consider implementing the improvement as identified in the community plan.
- If the project adds less than or equal to 50% of total daily vehicle trips on the segment, the project should evaluate its fair share towards the improvement.

The Project is also required to make improvements to roadways to preserve consistency with Community Plan/PFFP/IFS identified improvements.

Freeway Interchange Queueing

Vehicular queuing at freeway off-ramp intersections was evaluated using SimTraffic 10 software. The maximum queue was reported based on the average of ten (10), hour long simulation runs. Off-ramp queues were compared to total ramp storage to verify that no queues would spill back to the freeway mainline.

Study Scenarios

The following scenarios were evaluated for the Project:

- Existing Conditions
- Opening Year (2025) Without Project Conditions
- Opening Year (2025) With Project Conditions
- Horizon Year (2050) Without Project Conditions
- Horizon Year (2050) With Project Conditions

Study Periods

The morning and afternoon peak commute hours were analyzed for all study facilities. The peak hours were determined based on the collected traffic counts. Roadway and intersection counts were collected by LLG on Thursday February 7th, Tuesday September 17th, Tuesday October 1st, and Wednesday December 11th, 2019. **Appendix B** contains the traffic count data. **Appendix C** contains the signal timing data for the study intersections except for those under Caltrans' jurisdiction.

Study Area

The study area was based on the criteria identified in the TSM, 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 50 peak hour Project trips would travel in either direction to/from the Project site but was expanded upon request by the City.

The circulation system within Carmel Mountain Ranch, which makes up most of the study area, is built to its ultimate classification. There are no remaining local infrastructure projects as they relate to the transportation network. The City's LMA Guidelines only require that the Project contribute to improvements for roadway segments if improvements are identified in the community plan that have not

been implemented or if there are planned new circulation element roadways that the Project will add traffic to.

Using the above criteria along with input from City staff, the Project study area includes the following 27 intersections and 39 roadway segments:

Study Intersections

1. Carmel Mountain Road/Rancho Carmel Drive (South)
2. Carmel Mountain Road/Stoney Peak Drive
3. Carmel Mountain Road/Highland Ranch Road
4. Carmel Mountain Road/Conference Way
5. Rancho Carmel Drive/Windcrest Lane
6. Rancho Carmel Drive/Shoal Creek Drive
7. Rancho Carmel Drive/Provencal Place
8. Ted Williams Parkway/I-15 Northbound Ramps
9. Ted Williams Parkway/I-15 Southbound Ramps
10. Ted Williams Parkway/Rancho Carmel Drive
11. Ted Williams Parkway/Sabre Springs Parkway
12. Ted Williams Parkway/Shoal Creek Drive
13. Ted Williams Parkway/Highland Ranch Road
14. Ted Williams Parkway/Pomerado Road
15. Highland Ranch Road/Carmel Ridge Road
16. Highland Ranch Road/Eastbourne Road
17. Highland Ranch Road/World Trade Drive
18. Windcrest Lane/Seabridge Lane
19. Windcrest Lane/Boulton Avenue
20. Windcrest Lane/Shoal Creek Drive
21. Boulton Avenue/Carmel Ridge Road
22. Carmel Ridge Road/Ted Williams Parkway (right-in/right-out only)
23. Stoney Peak Drive/World Trade Drive
24. Carmel Mountain Road/I-15 NB Ramps
25. Carmel Mountain Road/I-15 SB Ramps
26. Carmel Mountain Road/Rancho Carmel Drive (North)
27. Carmel Mountain Road/Camino Del Norte

Study Roadway Segments

Ted Williams Parkway

1. I-15 to Rancho Carmel Drive
2. Rancho Carmel Drive to Shoal Creek Drive
3. Shoal Creek Drive to Carmel Ridge Road
4. Carmel Ridge Road to Highland Ranch Road

5. Highland Ranch Road to Pomerado Road
6. Pomerado Road to Twin Peaks Road

Rancho Carmel Drive

7. Carmel Mountain Express Drive to Ted Williams Parkway
8. Ted Williams Parkway to Provencal Place
9. Provencal Place to Shoal Creek Drive
10. Shoal Creek Drive to Windcrest Lane
11. Windcrest Lane to Carmel Mountain Road
12. Carmel Mountain Road to Shopping Center Driveways

Carmel Mountain Road

13. Penasquitos Drive to I-15
14. I-15 to Rancho Carmel Drive
15. Rancho Carmel Drive to Stoney Peak Drive
16. Stoney Peak Drive to Highland Ranch Road
17. Highland Ranch Road to Conference Way
18. Conference Way to Rancho Carmel Drive
19. Rancho Carmel Drive to Camino Del Norte

Highland Ranch Road

20. Carmel Mountain Road to World Trade Drive
21. World Trade Drive to Eastbourne Road
22. Eastbourne Road to Carmel Ridge Road
23. Carmel Ridge Road to World Trade Drive

Stoney Peak Drive

24. Carmel Mountain Road to World Trade Drive

World Trade Drive

25. Stoney Peak Drive to Highland Ranch Road
26. Highland Ranch Road to Conference Way

Pomerado Road

27. North of Ted Williams Parkway
28. South of Ted Williams Parkway

Shoal Creek Drive

29. Rancho Carmel Drive to Windcrest Lane
30. Windcrest Lane to Ted Williams Parkway

Windcrest Lane

31. Rancho Carmel Drive to Seabridge Lane
32. Seabridge Lane to Boulton Avenue
33. Boulton Avenue to Shoal Creek Drive

Boulton Avenue

34. Windcrest Lane to Carmel Ridge Road

Seabridge Lane

35. Windcrest Lane to Stoney Peak

Eastbourne Road

36. North of Highland Ranch Road
37. South of Highland Ranch Road

Carmel Ridge Road

38. Ted Williams Parkway to Boulton Avenue
39. Boulton Avenue to Highland Ranch Road

4.0 Existing Conditions

Effective evaluation of the traffic impacts associated with the proposed Project requires an understanding of the existing transportation system within the Project area.

Roadway Facilities

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

Ted Williams Parkway is classified on the Carmel Mountain Ranch Community Plan as a Six-Lane Expressway between the I-15 Ramps and Rancho Carmel Drive and a Six-Lane Primary Arterial east of Rancho Carmel Drive to the Community Plan boundary. It is currently built as a six-lane roadway divided by a raised center median from I-15 to Pomerado Road with a curb to curb width of 102 ft. The posted speed limit is 50 mph and on-street parking is prohibited on either side of the street. Class II Bike lanes and contiguous sidewalks are provided on both sides of the street from Rancho Carmel Drive to Pomerado Road. Bus stops are not provided within the Project area.

Rancho Carmel Drive is classified on the Carmel Mountain Ranch Community Plan as a Four-Lane Major Street from Ted Williams Parkway to Carmel Mountain Road. It is currently built as a four-lane roadway separated by a raised median with a curb to curb width of 76 ft. 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. Bus stops are not provided on either side of the street.

Carmel Mountain Road is classified on the Carmel Mountain Ranch Community Plan as a Six-Lane Primary Arterial and is currently built as a six-lane roadway with a curb to curb width that ranges from 98 ft to 102 ft. It generally has three travel lanes in each direction separated by a raised median from just west of I-15 to Camino Del Norte. The posted speed limit is 35 mph and parking is prohibited within Project area. Class II bike lanes and contiguous sidewalks are provided on both sides of the street. Bus stops are provided on Carmel Mountain Road at ~~the~~ Rancho Carmel Drive, Stoney Peak Drive, Highland Ranch Road, Conference Way, Rancho Carmel Drive (North), and Camino Del Norte intersections.

Highland Ranch Road is classified on the Carmel Mountain Ranch Community Plan as a Four-Lane Major Street. It is currently built as a four-lane roadway divided by a raised median with a curb to curb width of 76 ft from Carmel Mountain Road to Ted Williams Parkway. The posted limit is 40 mph and parking is prohibited within the Project area. Class II bike lanes and contiguous sidewalks are provided on both sides of this roadway. Bus stops are not provided on either side of the street.

Stoney Peak Drive is classified on the Carmel Mountain Ranch Community Plan as a Four-Lane Collector. It is currently built as a four-lane undivided roadway with a curb to curb width of 64 ft from Carmel Mountain Road to Seabridge Lane. The posted speed limit is 30 mph and parking is permitted on both

sides of the roadway within the Project area. Contiguous sidewalks are provided on both sides of this roadway. No bike lanes or bus stops are provided.

World Trade Drive is classified on the Carmel Mountain Ranch Community Plan as a Four-Lane Collector. It is currently built as a four-lane undivided roadway from Stoney Peak Drive to Highland Ranch Road. From Highland Ranch Road it narrows to a two-lane roadway with a two-way left-turn lane (TWLTL) to Conference Way. From Stoney Peak Drive to Conference Way, the curb to curb width is 64 ft. The posted speed limit is 30 mph and parking is permitted on both sides of the roadway intermittently within the Project area. Contiguous sidewalks are provided on both sides of this roadway. No bike lanes or bus stops are provided.

Pomerado Road is classified on the City of Poway Circulation Element as a Four-Lane Major Arterial. It is currently built as a four-lane roadway divided by a raised median north of Ted Williams Parkway to Twin Peaks Road. South of Ted Williams Parkway, it is built as a four-lane roadway divided by a TWLTL to Poway Road. From Twin Peaks Road to Poway Road, the curb to curb width ranges from 80 ft to 86 ft. The posted speed limit is 45 mph and parking is prohibited within Project area. Class II bike lanes and contiguous sidewalks are provided on both sides of the street. Bus stops are provided along Pomerado Road.

Shoal Creek Drive is shown as a Two-Lane Local Street on the Carmel Mountain Ranch Community Plan. Shoal Creek Drive serves as a primary access road for the existing residential land uses between Rancho Carmel Drive and Ted Williams Parkway. It is built as a two-lane road with a curb-to-curb width of 40 feet and functions as a Collector. No residential driveways access Shoal Creek Drive and the posted speed limit is 30 mph. Curbside parking is prohibited and contiguous sidewalks are provided. No bike lanes or bus stops are provided.

Windcrest Lane is shown as a Two-Lane Local Street on the Carmel Mountain Ranch Community Plan from Rancho Carmel Drive to Boulton Avenue. From Boulton Avenue to Shoal Creek Drive it is unclassified. It is currently built as a two-lane road with a curb-to-curb width of 40 feet between Rancho Carmel Drive and Seabridge Lane and functions as a Collector. No residential driveways access this portion of Windcrest Lane and on-street parking is permitted. South of Seabridge Lane to Shoal Creek Drive, the roadway maintains its 40-foot width, permitting on-street parking and the roadway is abutted by residential driveways. The posted speed limit is 25 mph and contiguous sidewalks are provided. Bike lanes or bus stops are not provided within the study area.

Boulton Avenue is shown as a Two-Lane Local Street on the Carmel Mountain Ranch Community Plan. The roadway is built to a two-lane 34-foot wide roadway, permitting on-street parking and is abutted by residential driveways. The posted speed limit is 25 mph and contiguous sidewalks are provided. No bike lanes or bus stops are provided.

Seabridge Lane is shown as a Two-Lane Local Street on the Carmel Mountain Ranch Community Plan. The roadway is built to a two-lane 40-foot wide roadway, permitting on-street parking and is abutted by

residential driveways. The posted speed limit is 25 mph and contiguous sidewalks are provided. Within the study area, bike lanes or bus stops are not provided.

Eastbourne Road is an unclassified roadway on the Carmel Mountain Ranch Community Plan. South of Highland Ranch Road, the roadway is built to a two-lane 34-foot wide roadway, permitting on-street parking and is abutted by residential driveways. There is no posted speed limit, but the prima facia 25 mph applies north of Highland Ranch Road. Eastbourne Road serves as the access road to Highland Ranch Elementary School, as well as residential land uses. Onstreet parking is permitted and the posted speed limit is 25 mph. Contiguous sidewalks are provided along the roadway. Bike lanes or bus stops are not provided within the study area.

Carmel Ridge Road is shown as a Two-Lane Local Street on the Carmel Mountain Ranch Community Plan. Carmel Ridge Road serves as a primary access road for the existing residential land uses between Highland Ranch Road and Ted Williams Parkway. It is built as a two-lane road with a curb-to-curb width of 40 feet permitting on-street parking and is abutted by residential driveways. Carmel Ridge Road functions as a Collector. The posted speed limit is 25 mph and contiguous sidewalks are provided. No bike lanes or bus stops are provided.

Intersection and Roadway Operations

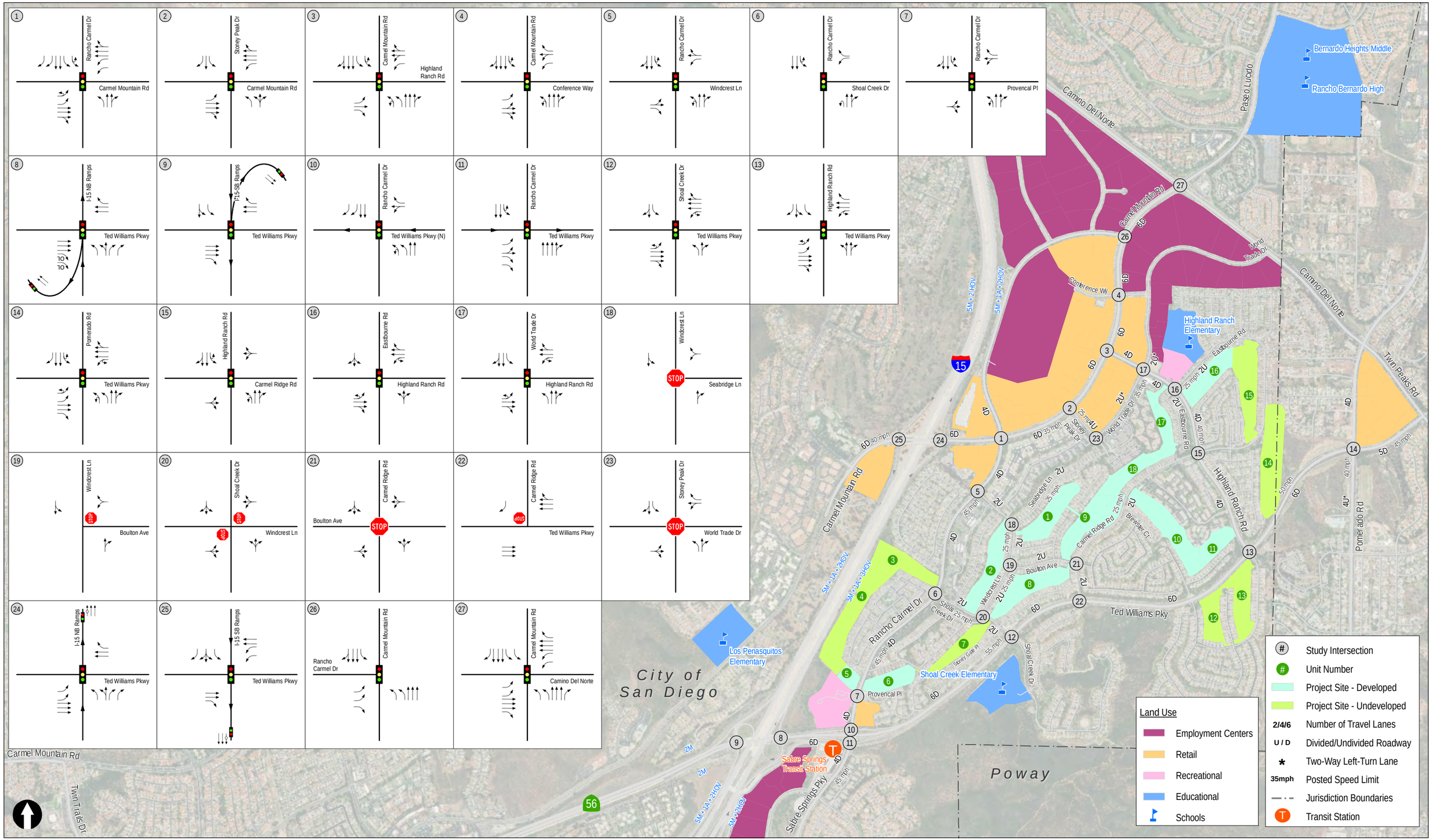
Figure 4 shows the existing intersection lane configurations at the study intersections. **Figure 5** shows the existing traffic volumes and LOS.

Table 3 summarizes the Existing intersection LOS operations. The following study area intersections were found to operate at LOS E or F:

1. Carmel Mountain Road/Rancho Carmel Drive – LOS E during the PM peak hour
22. Carmel Ridge Road / Ted Williams Parkway – LOS E in AM peak hour
27. Carmel Mountain Road / Camino Del Norte – LOS E in AM peak hour

Table 4 summarizes the Existing roadway segment operations. All roadway segments were found to operate acceptably.

Appendix D contains the Existing Conditions intersection analysis worksheets.



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Figure 4

Existing Lane Configurations

THE TRAILS AT CARMEL MOUNTAIN RANCH

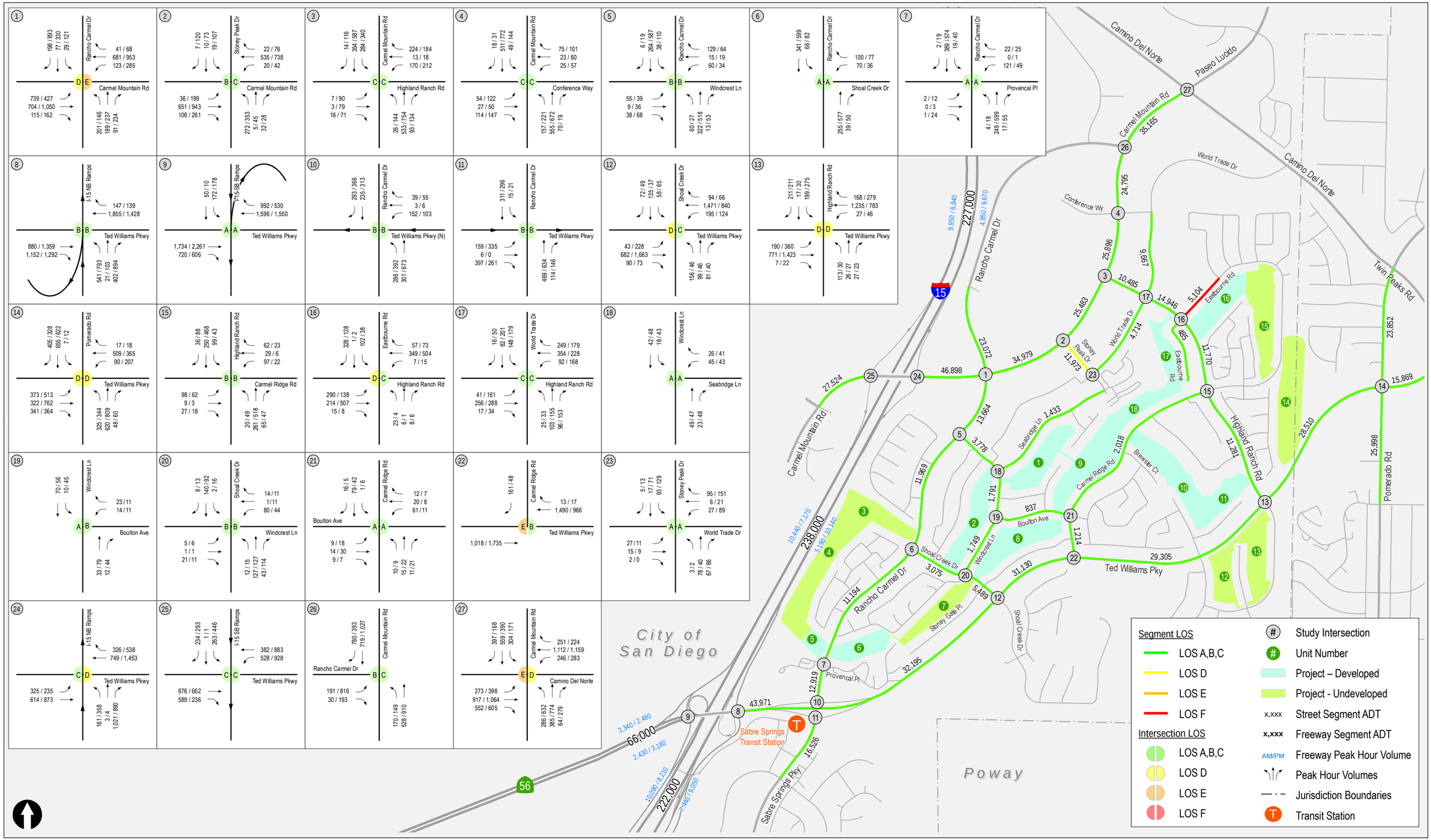


Figure 5

Existing Traffic Volumes and LOS

Table 3: Existing Intersection Level of Service

Intersection	Jurisdiction	Control	Peak Hour	Delay	LOS
1. Carmel Mountain Road/Rancho Carmel Drive (South)	San Diego	Signal	AM	35.4	D
			PM	**65.8**	**E**
2. Carmel Mountain Road/Stoney Peak Drive	San Diego	Signal	AM	15.6	B
			PM	25	C
3. Carmel Mountain Road/Highland Ranch Road	San Diego	Signal	AM	28	C
			PM	30.6	C
4. Carmel Mountain Road/Conference Way	San Diego	Signal	AM	28.1	C
			PM	27.7	C
5. Rancho Carmel Drive/Windcrest Lane	San Diego	Signal	AM	11.8	B
			PM	10.4	B
6. Rancho Carmel Drive/Shoal Creek Drive	San Diego	Signal	AM	7.7	A
			PM	6.8	A
7. Rancho Carmel Drive/Provencal Place	San Diego	Signal	AM	8.5	A
			PM	9.6	A
8. Ted Williams Parkway/I-15 Northbound Ramps	Caltrans	Signal	AM	16.8	B
			PM	16.9	B
9. Ted Williams Parkway/I-15 Southbound Ramps	Caltrans	Signal	AM	8	A
			PM	4.9	A
10. Ted Williams Parkway/Rancho Carmel Drive	San Diego	Signal	AM	17.6	B
			PM	15.8	B
11. Ted Williams Parkway/Sabre Spring Parkway	San Diego	Signal	AM	14.9	B
			PM	15.2	B
12. Ted Williams Parkway/Shoal Creek Drive	San Diego	Signal	AM	39.7	D
			PM	28	C
13. Ted Williams Parkway/Highland Ranch Road	San Diego	Signal	AM	46.9	D
			PM	47.1	D
14. Ted Williams Parkway/Pomerado Road	Poway	Signal	AM	40.5	D
			PM	46.8	D
15. Highland Ranch Road/Carmel Ridge Road	San Diego	Signal	AM	13.4	B
			PM	10.8	B
16. Highland Ranch Road/Eastborne Road	San Diego	Signal	AM	44.1	D
			PM	25.7	C
17. Highland Ranch Road/World Trade Drive	San Diego	Signal	AM	29.4	C
			PM	32.3	C
	San Diego	AWSC	AM	7.7	A

Intersection	Jurisdiction	Control	Peak Hour	Delay	LOS
18. Windcrest Lane/Seabridge Lane			PM	8.1	A
19. Windcrest Lane/Boulton Avenue	San Diego	Yield	AM	9.1	A
			PM	10.1	B
20. Windcrest Lane/Shoal Creek Drive	San Diego	SSSC	AM	13.7	B
			PM	12.8	B
21. Boulton Avenue/Carmel Ridge Road	San Diego	AWSC	AM	8.3	A
			PM	7.6	A
22. Carmel Ridge Road/Ted Williams Parkway (right-in/right-out only)	San Diego	SSSC	AM	**48**	**E**
			PM	14.9	B
23. Stoney Peak Drive/World Trade Drive	San Diego	AWSC	AM	9.1	A
			PM	9.7	A
24. Carmel Mountain Road/I-15 NB Ramps	Caltrans	Signal	AM	33	C
			PM	46.8	D
25. Carmel Mountain Road/I-15 SB Ramps	Caltrans	Signal	AM	26.9	C
			PM	26.1	C
26. Carmel Mountain Road/Rancho Carmel Drive (North)	San Diego	Signal	AM	17.1	B
			PM	24.4	C
27. Carmel Mountain Road/Camino Del Norte	San Diego	Signal	AM	**60.6**	**E**
			PM	48.9	D

Notes:
Calculated using methodologies consistent with HCM 6th Edition.
Unacceptable seconds of delay per vehicle and LOS highlighted in **bold**
Worst case movement reported for side street stop-controlled intersections.
AWSC = All Way Stop Control
SSSC = Side Street Stop Control
Source: LLG and Fehr & Peers, 2020

Table 4: Existing Roadway Level of Service

Roadway Segment	Jurisdiction	Lanes	Classification	Capacity	ADT	LOS
Ted Williams Parkway						
1. I-15 to Rancho Carmel Drive	San Diego	6 Lanes	Expressway	80,000	43,971	C
2. Rancho Carmel Drive to Shoal Creek Drive	San Diego	6 Lanes	Prime Arterial	60,000	32,195	B
3. Shoal Creek Drive to Carmel Ridge Road	San Diego	6 Lanes	Prime Arterial	60,000	31,130	B
4. Carmel Ridge Road to Highland Ranch Road	San Diego	6 Lanes	Prime Arterial	60,000	29,305	B
5. Highland Ranch Road to Pomerado Road	Poway	6 Lanes	Prime Arterial	63,000	28,510	B
6. Pomerado Road to Twin Peaks Road	Poway	6 Lanes	Major Arterial	50,000	15,869	A
Rancho Carmel Drive						
7. Carmel Mountain Express Drive to Ted Williams Parkway	San Diego	4 Lanes	Major Arterial	40,000	16,526	B
8. Ted Williams Parkway to Provencal Place	San Diego	4 Lanes	Major Arterial	40,000	12,919	A
9. Provencal Place to Shoal Creek Drive	San Diego	4 Lanes	Major Arterial	40,000	11,194	A
10. Shoal Creek Drive to Windcrest Lane	San Diego	4 Lanes	Major Arterial	40,000	11,969	A
11. Windcrest Lane to Carmel Mountain Road	San Diego	4 Lanes	Major Arterial	40,000	13,664	A
12. Carmel Mountain Road to Shopping Center Driveways	San Diego	4 Lanes	Major Arterial	40,000	23,072	C
Carmel Mountain Road						
13. Penasquitos Drive to I-15	San Diego	6 Lanes	Prime Arterial	50,000	27,524	B
14. I-15 to Rancho Carmel Drive	San Diego	6 Lanes	Prime Arterial	60,000	46,898	C
15. Rancho Carmel Drive to Stoney Peak Drive	San Diego	6 Lanes	Prime Arterial	60,000	34,979	B
16. Stoney Peak Drive to Highland Ranch Road	San Diego	6 Lanes	Prime Arterial	60,000	25,483	B
17. Highland Ranch Road to Conference Way	San Diego	6 Lanes	Prime Arterial	60,000	25,896	B
18. Conference Way to Rancho Carmel Drive	San Diego	6 Lanes	Prime Arterial	60,000	24,795	B
19. Rancho Carmel Drive to Camino Del Norte	San Diego	6 Lanes	Prime Arterial	60,000	35,165	C
Highland Ranch Road						
20. Carmel Mountain Road to World Trade Drive	San Diego	4 Lanes	Major Arterial	40,000	10,485	A
21. World Trade Drive to Eastbourne Road	San Diego	4 Lanes	Major Arterial	40,000	14,946	A
22. Eastbourne Road to Carmel Ridge Road	San Diego	4 Lanes	Major Arterial	40,000	11,770	A
23. Carmel Ridge Road to World Trade Drive	San Diego	4 Lanes	Major Arterial	40,000	11,281	A
Stoney Peak Drive						
24. Carmel Mountain Road to World Trade Drive	San Diego	4 Lanes	Collector	15,000	11,973	D
World Trade Drive						
25. Stoney Peak Drive to Highland Ranch Road	San Diego	4 Lanes	Collector	15,000	4,714	A

Roadway Segment	Jurisdiction	Lanes	Classification	Capacity	ADT	LOS
26. Highland Ranch Road to Conference Way	San Diego	4 Lanes	Collector (with two-way left turn lane)	30,000	9,667	A
Pomerado Road						
27. North of Ted Williams Parkway	Poway		Major Arterial	50,000	23,852	B
28. 2South of Ted Williams Parkway	Poway		Major Arterial	50,000	25,998	B
Shoal Creek Drive						
29. Rancho Carmel Drive to Windcrest Lane	San Diego	2 Lanes	Collector (with no fronting property)	10,000	3,075	A
30. Windcrest Lane to Ted Williams Parkway	San Diego	2 Lanes	Collector (with no fronting property)	10,000	5,489	A
Windcrest Lane						
31. Rancho Carmel Drive to Seabridge Lane	San Diego	2 Lanes	Collector	10,000	3,778	A
32. Seabridge Lane to Boulton Avenue	San Diego		Unclassified	2,200	1,791	C+
33. Boulton Avenue to Shoal Creek Drive	San Diego		Unclassified	2,200	1,749	C+
Boulton Avenue						
34. Windcrest Lane to Carmel Ridge Road	San Diego		Unclassified	2,200	837	C+
Seabridge Lane						
35. Windcrest Lane to Stoney Peak	San Diego		Unclassified	2,200	1,433	C+
Eastbourne Road						
36. North of Highland Ranch Road	San Diego		Unclassified	2,200	5,104	C-
37. South of Highland Ranch Road	San Diego		Unclassified	2,200	485	C+
Carmel Ridge Road						
38. Ted Williams Parkway to Boulton Avenue	San Diego	2 Lanes	Collector	8,000	1,214	A
39. Boulton Avenue to Highland Ranch Road	San Diego	2 Lanes	Collector	8,000	2,018	A

Notes:
LOS Determined consistent with City of San Diego guidelines.
Unacceptable LOS highlighted in **bold**
Source: LLG, 2020.

Freeway Interchange Queueing Analysis

Table 5 shows the off-ramp queues at the I-15 ramp terminal intersections. The longest maximum queue of the lanes provided on a given off-ramp was reported. No queues exceed the ramp storage.

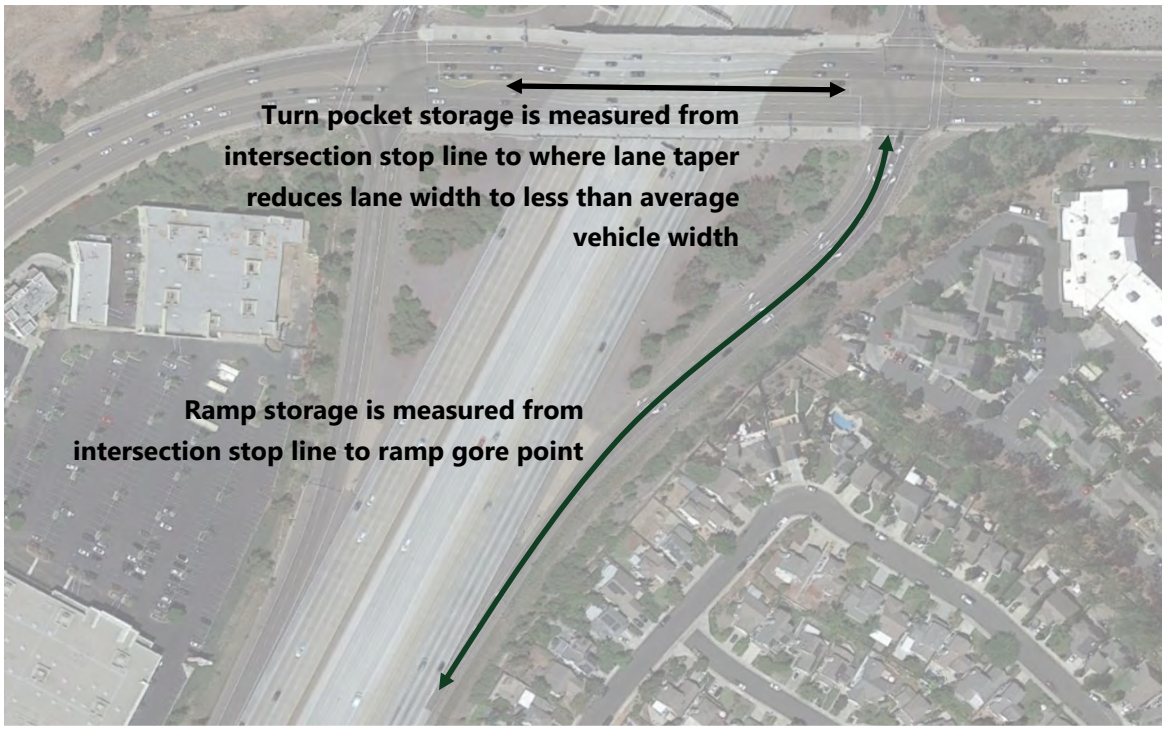
The diagram below shows how freeway ramp storage and turn pocket storage were measured for queueing analysis.

Appendix D contains the Existing Conditions queueing analysis worksheets.

Table 5: Existing Ramp Queues

Ramp	Storage (feet)	Peak Hour	Maximum Queue (feet)	Exceeds Storage?
Ted Williams Parkway Northbound Off-Ramp	1,500	AM	369	No
		PM	525	No
Ted Williams Parkway Southbound Off-Ramp	1,500	AM	284	No
		PM	217	No
Carmel Mountain Road Northbound Off-Ramp	1,000	AM	312	No
		PM	352	No
Carmel Mountain Road Southbound Off-Ramp	1,400	AM	217	No
		PM	302	No

Source: Fehr & Peers, 2020, based on SimTraffic analysis



5.0 Project Traffic

Trip Generation

The Project trip generation was calculated using driveway rates published in the City of San Diego Municipal Code Trip Generation Manual (revised May 2003). The applicable rates from this manual are "Multiple Dwelling Unit: Under 20 Dwelling Units/Acre", and "Multiple Dwelling Unit: Over 20 Dwelling Units/Acre"

The City's "multiple dwelling unit" rates are based on density; therefore, the applicable rates based on the City's density ranges (under 20 units/acre and over 20 units/acre) were used in the calculation of the trip generation for each individual unit.

The project also includes a 12,000-square-foot pad for future development of a community art gallery/studio located near the existing Carmel Mountain Ranch library that would include art space, storage, and a small café/snack facility. The art gallery also includes one caretaker unit. Trips for the community art gallery/studio spaces were generated using the Institute of Transportation Engineers (ITE)Trip Generation Manual 10th Edition. Land Use Code 495 "Recreational Community Center" was used to generate trips. The ITE Trip Generation Manual description for Recreational Community Center fits the intent of the community art space in that it is for recreational use by the local community. The space would also include a small café, which is also included in the ITE description for Recreational Community Center. Data from the ITE Trip Generation Manual was used for this use because the City's Trip Generation Manual does not include a similar use. Trips for the caretaker unit were generated based on the City's Manual (Multiple Dwelling Unit: Under 20 Dwelling Units/Acre).

As discussed in the Project Description section of this report, portions of the Project site are located within a Transit Priority Area (TPA) due to its proximity to the MTS Sabre Springs/Peñasquitos Transit Station approximately 0.5 mile south of the Project site (about ¼ mile walking distance from Units 5 and 6).

The Project site is also located close to schools, a library, a recreation center/community park, and a variety of commercial uses and employment opportunities.

The total project trip generation analysis does not reflect potential reductions that would likely occur due to proximity to transit, commercial uses, and affordable housing.

Table 6 presents a summary of the development's estimated trip generation based on the land use rates described above, with no reductions taken for proximity to transit and employment/retail opportunities. The total ADT for the entire Project is 8,282 ADT, with 657 total AM peak hour trips (141 inbound/516 outbound) and 772 total PM peak hour trips (534 inbound/238 outbound).

Table 6: Project Trip Generation

Unit Number/Product Type	Units	Trip Generation Rates							Trip Generation Estimates						
		Daily Rate (per Unit)	AM Peak Hour			PM Peak Hour			Daily	AM Peak Hour			PM Peak Hour		
			% of Daily	% In	% Out	% of Daily	% In	% Out		Total	In	Out	Total	In	Out
1. Townhomes	66	8	0.08	0.20	0.80	0.10	0.70	0.30	528	42	8	34	53	37	16
2. Townhomes	87	6	0.08	0.20	0.80	0.09	0.70	0.30	522	42	8	34	47	33	14
5. Affordable Apartment	78	6	0.08	0.20	0.80	0.09	0.70	0.30	468	37	7	30	42	29	13
6. Mixed Market Rate & Affordable Apartment	128	6	0.08	0.20	0.80	0.09	0.70	0.30	768	61	12	49	69	48	21
8. Townhomes	98	8	0.08	0.20	0.80	0.10	0.70	0.30	784	63	13	50	78	55	23
9. Market Rate Apartment	300	6	0.08	0.20	0.80	0.09	0.70	0.30	1,800	144	29	115	162	113	49
10. Townhomes	200	8	0.08	0.20	0.80	0.10	0.70	0.30	1,600	128	26	102	160	112	48
16. Market Rate Apartment	123	6	0.08	0.20	0.80	0.09	0.70	0.30	738	59	12	47	66	46	20
17. Market Rate Apartment	120	6	0.08	0.20	0.80	0.09	0.70	0.30	720	58	12	46	65	46	19
17. Art Studio/Café[1]	12 ksf	28.82	0.06	0.66	0.34	0.08	0.47	0.53	346	22	14	8	29	14	15
17. Caretaker Unit[2]	1	8	0.06	0.20	0.80	0.10	0.70	0.30	8	1	0	1	1	1	0
TOTAL RES UNITS	***1,201***								***8,282***	***657***	***141***	***516***	***772***	***534***	***238***

Source: LLG and Fehr & Peers, 2020

[1] Trip generation based on ITE Trip Generation Manual 10th Edition Code 495 Recreational Community Center. The café is an accessory use to the art studio. The Recreational Community Center land use accounts for inclusion of food services (restaurant, snack bar, etc.)

[2] Trip generation based on City of San Diego trip generation rate for Multiple Dwelling Unit Under 20 Dwelling Units per Acre.

Trip Distribution and Assignment

In order to develop the Project trip distribution for a project exceeding 2,400 ADT, a computerized SANDAG model was used. The Project trip distribution was developed based on a SANDAG Series 13 Select Zone Assignment (SZA) for the forecast Year 2020 (representing existing on-the-ground conditions). As previously mentioned, the Project comprises various non-contiguous development areas within the former golf course. The SZA provided a local and regional distribution for the area as a whole. However, each individual unit was distributed and assigned independently, which may have generated alternative routes within the study area depending on the location of that unit's access driveway. The SZA was used to determine the general distribution origin and destination points on the street system (i.e. freeway trips, arterial trips). A copy of the SZA is provided in **Appendix E**.

With each developed unit having separate access points and alternative routes to the street system, the summation of distribution percentages on the primary roadways may differ from that shown on the SZA, although the cordon percentages are the same for each unit.

Figure 6 shows the general distribution percentages on the study area street system and shows the total Project traffic volumes assigned to the study area street system. Traffic distribution and assignment for individual units can be found in **Appendix E**.

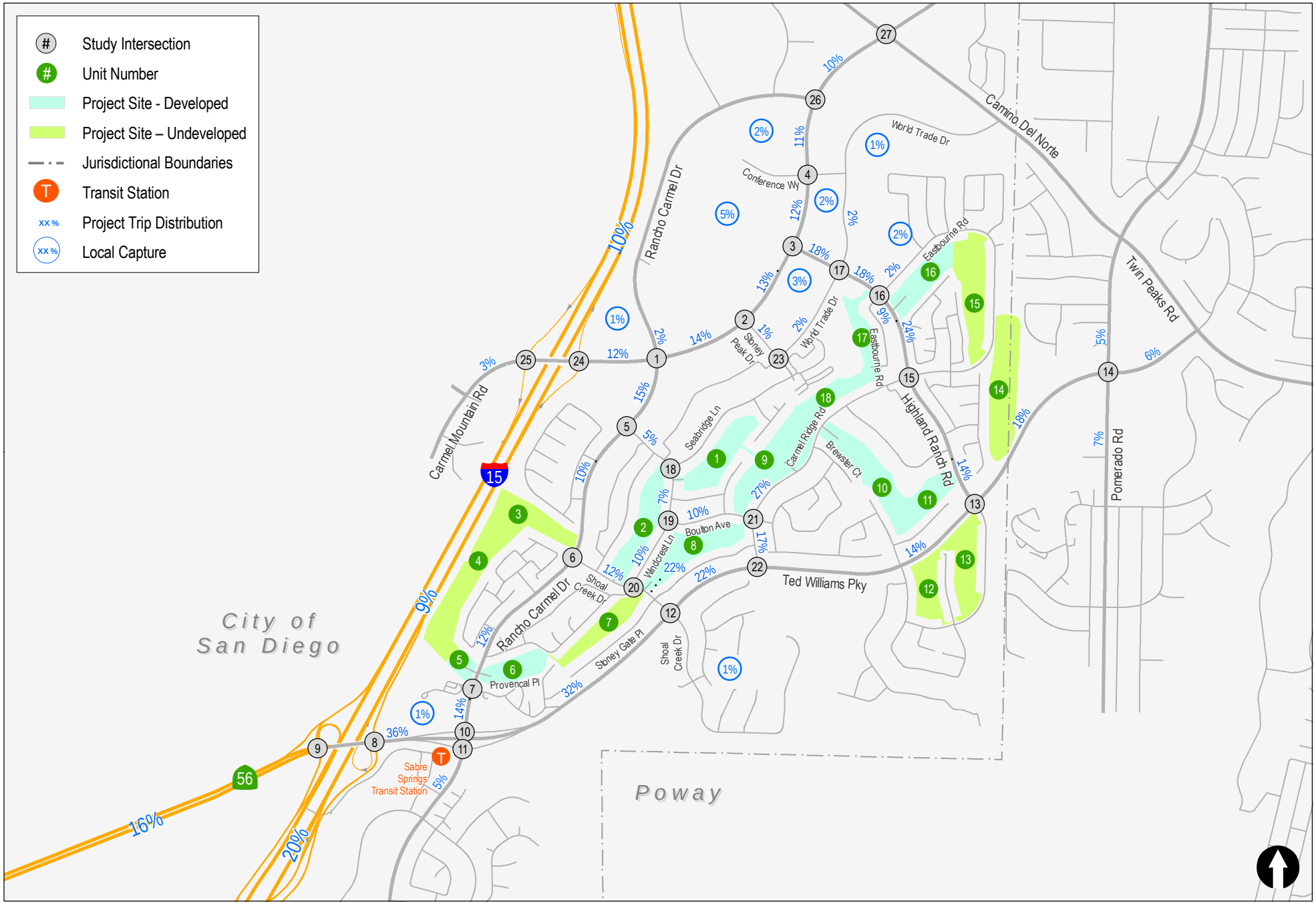


Figure 6a

Trip Distribution

The Trails at Carmel Mountain Ranch

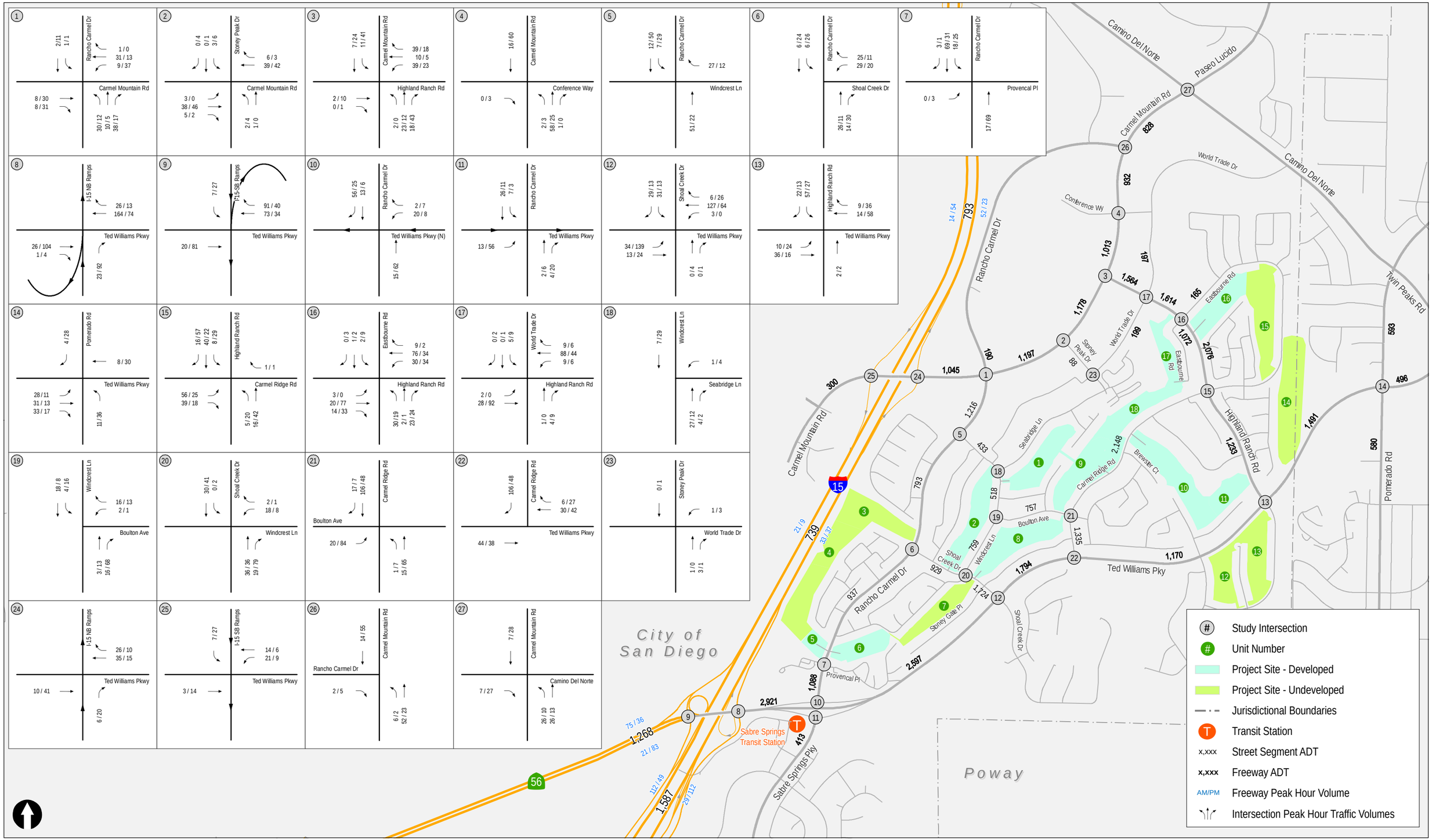


Figure 6b

Trip Assignment

6.0 Opening Year (2025) Conditions

Opening Year Traffic Volumes

For purposes of this analysis, it was assumed the Project would be constructed and fully operational by 2025. This timeframe represents Opening Year (2025) Conditions. By Opening Year, it would be expected that ambient growth would occur within the study area due to other developments projects. Therefore, the 2025 traffic volumes reflect these other projects in the study area that are expected to be constructed and occupied between the date of existing data collection (2019) and the time of the Project's opening year. Web based information from the City of San Diego and Poway were used to identify relevant, pending 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 2025.

Based on this research, 11 other projects were identified that are planned nearby that could add ~~to~~ traffic to study area intersections and street segments. Traffic generated by these projects was added to the existing traffic volumes to develop the Opening Year (2025) Without Project conditions. Project traffic was added to the Opening Year (2025) Without Project volumes to arrive at the Opening Year (2025) With Project conditions.

Table 7 provides a summary of the project trip generation for the nearby projects. **Figure 7** shows the locations of the nearby projects and **Figure 8** shows the trip assignment for the nearby projects. **Figure 9** shows the Opening Year (2025) Without Project traffic volumes. Detailed descriptions of these projects are provided in **Appendix F**.

No transportation network changes are anticipated or assumed to occur in the near-term. Opening Year (2025) Conditions analysis uses the Existing Conditions transportation network.

->

Table 7: Nearby Development Projects Summary

Name	Size	PTS #	Daily	AM		PM		Status
				In	Out	In	Out	
Pacific Village	601 Mixed Residential Units	470158	1,796	29	115	114	49	Approved and Under Construction
The Junipers	536 Age-Qualified Residential Units	586670	2,144	43	64	90	60	Under Review
24-Hour Fitness	33,618 SF Health Club	610554	1,345	32	22	73	48	Approved 6/5/19 and Under Construction
Park & Ride Development (Alante)	50 Multi-Family Residential Units	648597	300	5	19	19	8	Approved 9/29/20
Black Mountain Ranch North Village (Subarea 1)	Master Planned Community	550005	1,892	39	114	134	56	Approved 11/1/07
The Farm in Poway	160 Residential Units plus amenity non-residential	NA	2,524	62	107	159	78	Under Review
Aria Estates	7 Residential Units	NA	70	2	4	5	2	Under Review
Villa de Vida	54 Affordable Residential Units	NA	432	7	28	31	13	Approved and Under Construction
Outpost	Retail/Restaurant, Residential, Fitness	NA	4,196	99	87	221	193	Approved and Under Construction
Chick-fil-A	6,500 SF Restaurant	NA	1,107	35	35	35	35	Under Review
Poway Commons	Residential & Mixed Use	NA	4,136	91	120	230	184	Approved March 2019
NET NEW TRIPS			***19,942***	***444***	***715***	***1,111***	***726***	

Source: LLG, 2020.

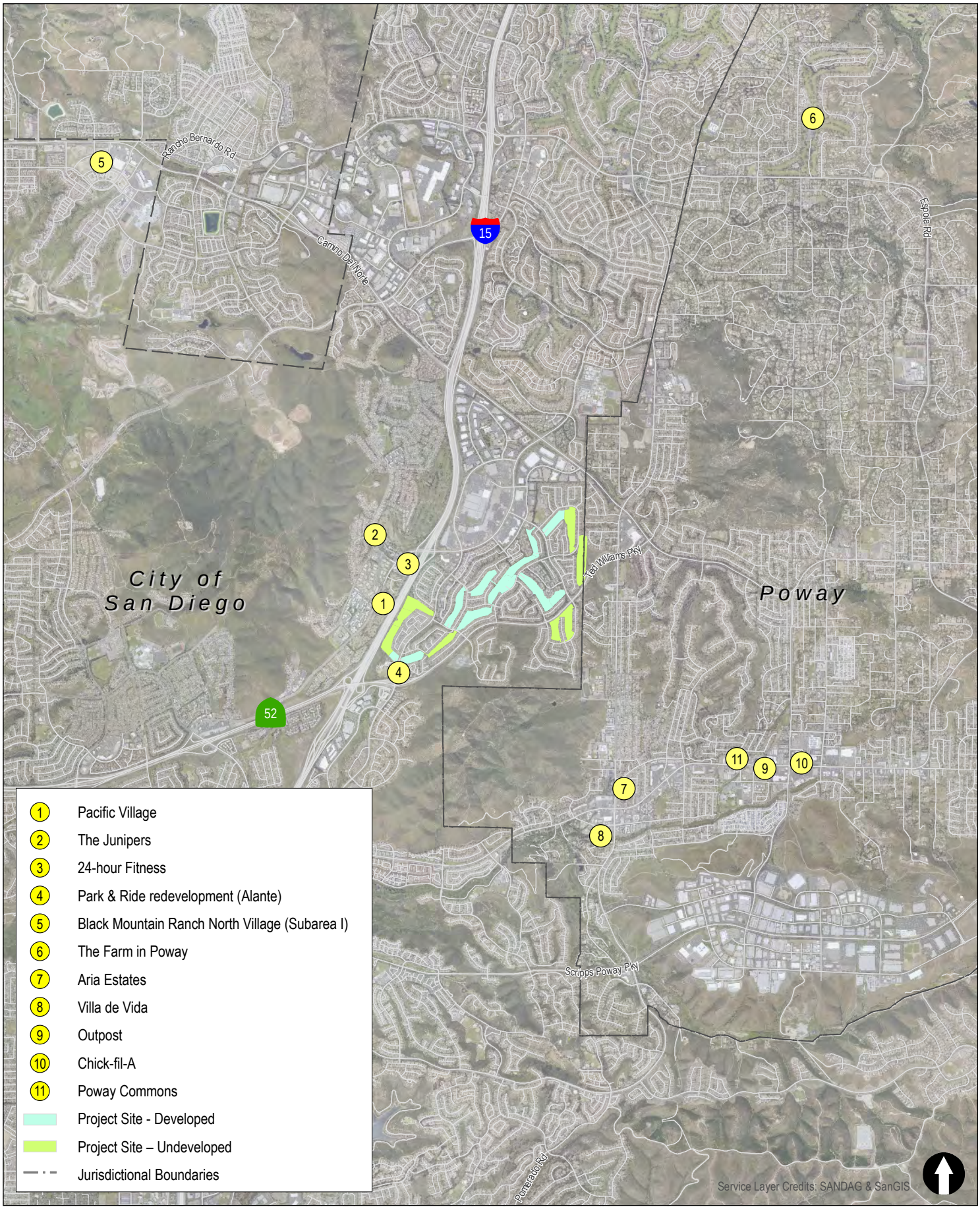


Figure 7

Locations of Nearby Development Projects

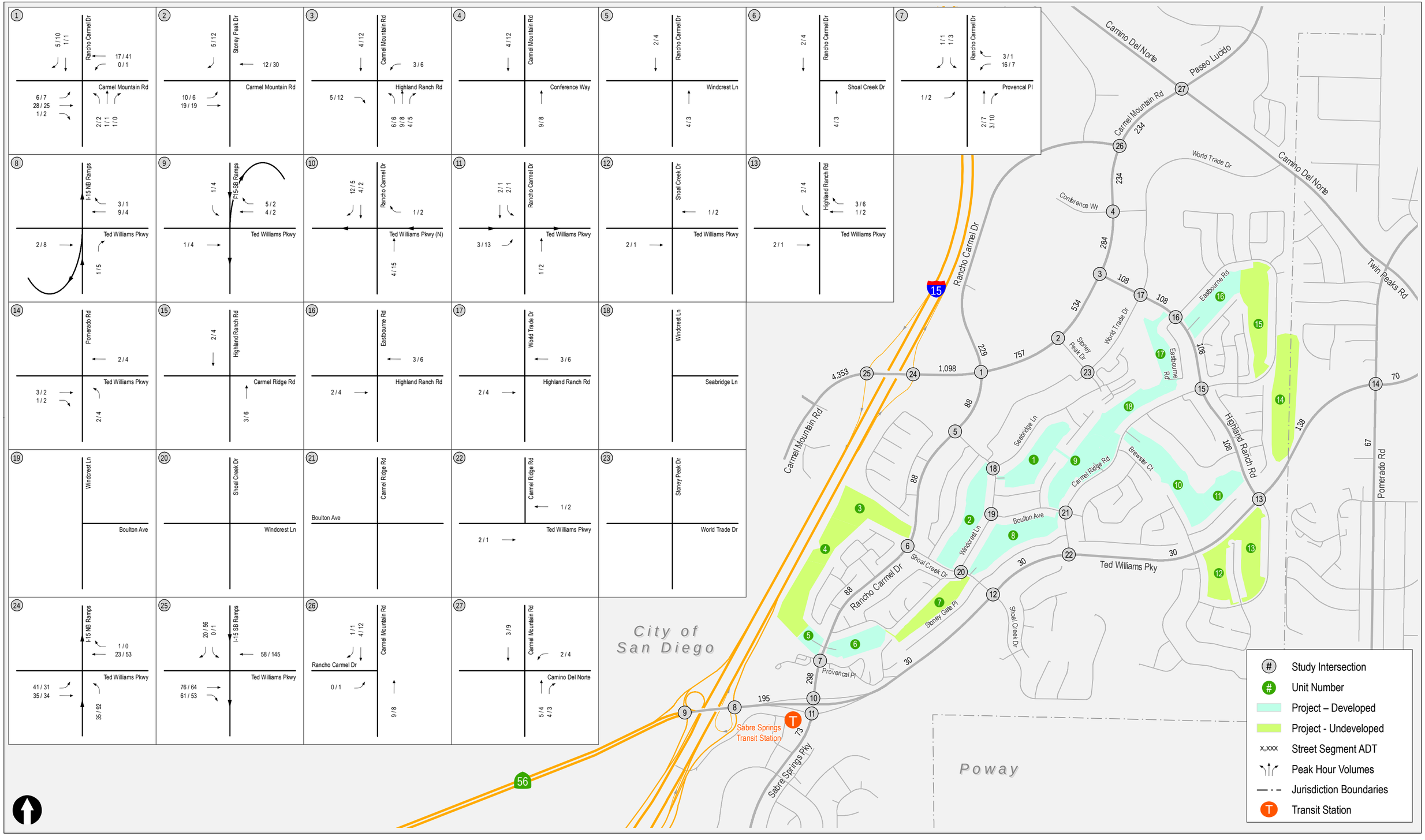


Figure 8

Trip Assignment for Nearby Development Projects

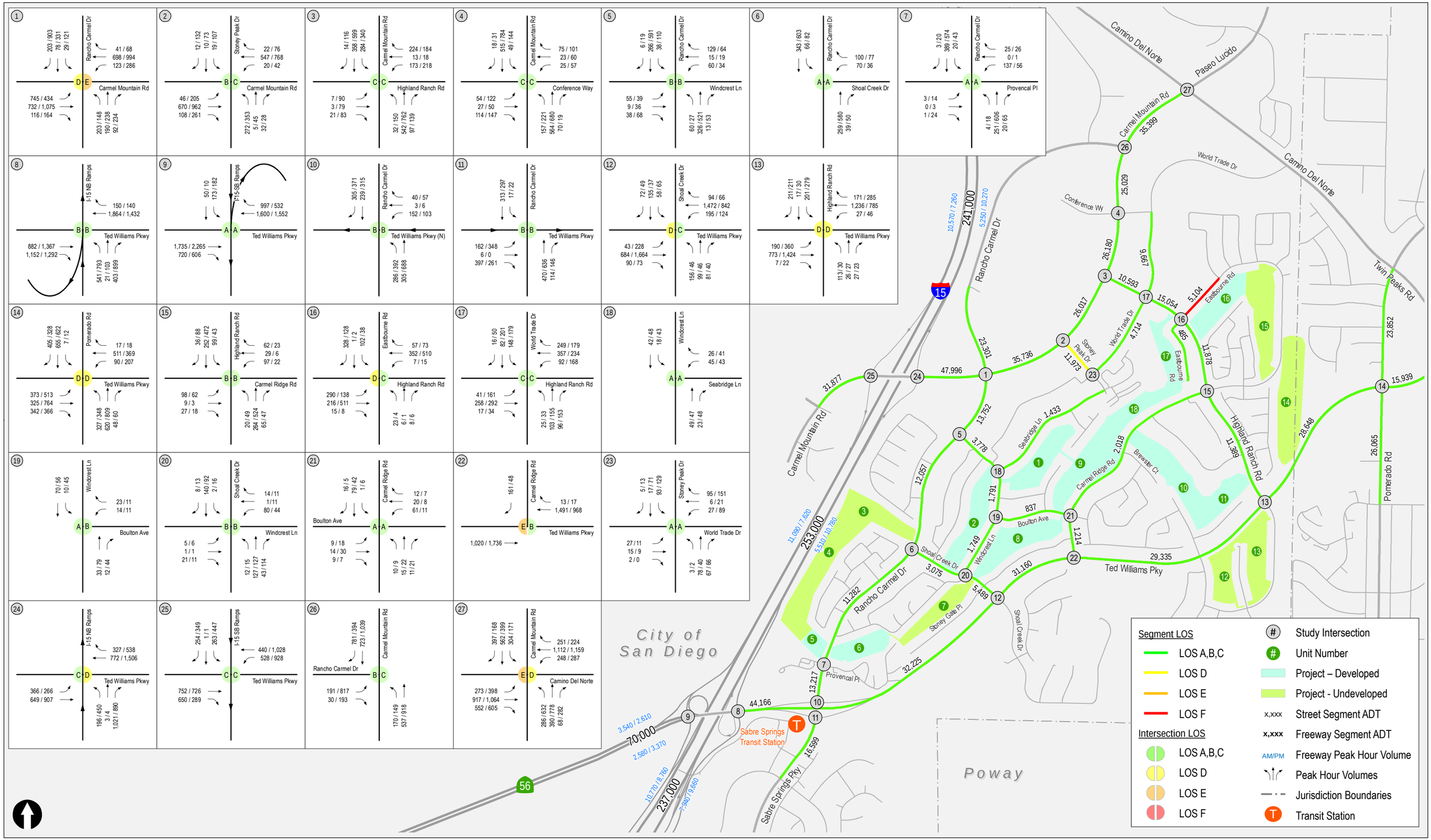


Figure 9

Opening Year (2025) Without Project Traffic Volumes and LOS

Opening Year (2025) Intersection and Roadway Operations

Figure 10 shows traffic volumes and LOS in the study area under Opening Year (2025) With Project conditions. **Table 8** summarizes the Opening Year (2025) intersection operations.

The following study area intersections were calculated to operate at LOS E or F under Without Project conditions:

- 1. Carmel Mountain Road/Rancho Carmel Drive – LOS E during the PM peak hour
- 22. Carmel Ridge Road/Ted Williams Parkway – LOS E during the AM peak hour
- 27. Carmel Mountain Road/Camino Del Norte – LOS E during the AM peak hour

The following study intersections were calculated to operate at LOS E or F under With Project conditions:

- 1. Carmel Mountain Road/Rancho Carmel Drive – LOS E during the PM peak hour
- 22. Carmel Ridge Road/Ted Williams Parkway – LOS F during the AM peak hour
- 27. Carmel Mountain Road/Camino Del Norte – LOS E during the AM peak hour

Based on the improvement criteria, Intersections 1 and 27 would require signal improvements as a result of the addition of Project traffic, and Intersection 22 would require a signal to be installed. A roundabout is not considered to be a viable improvement for the Carmel Ridge Road/Ted Williams Parkway intersection since Ted Williams is a six-lane arterial with high volumes and a steep slope to the south of the intersection.

Appendix D contains the Opening Year (2025) intersection analysis worksheets.

Table 9 summarizes the Opening Year (2025) and Opening Year (2025) Plus Project segment operations. No roadway segments were determined to need improvements per the City's criteria.

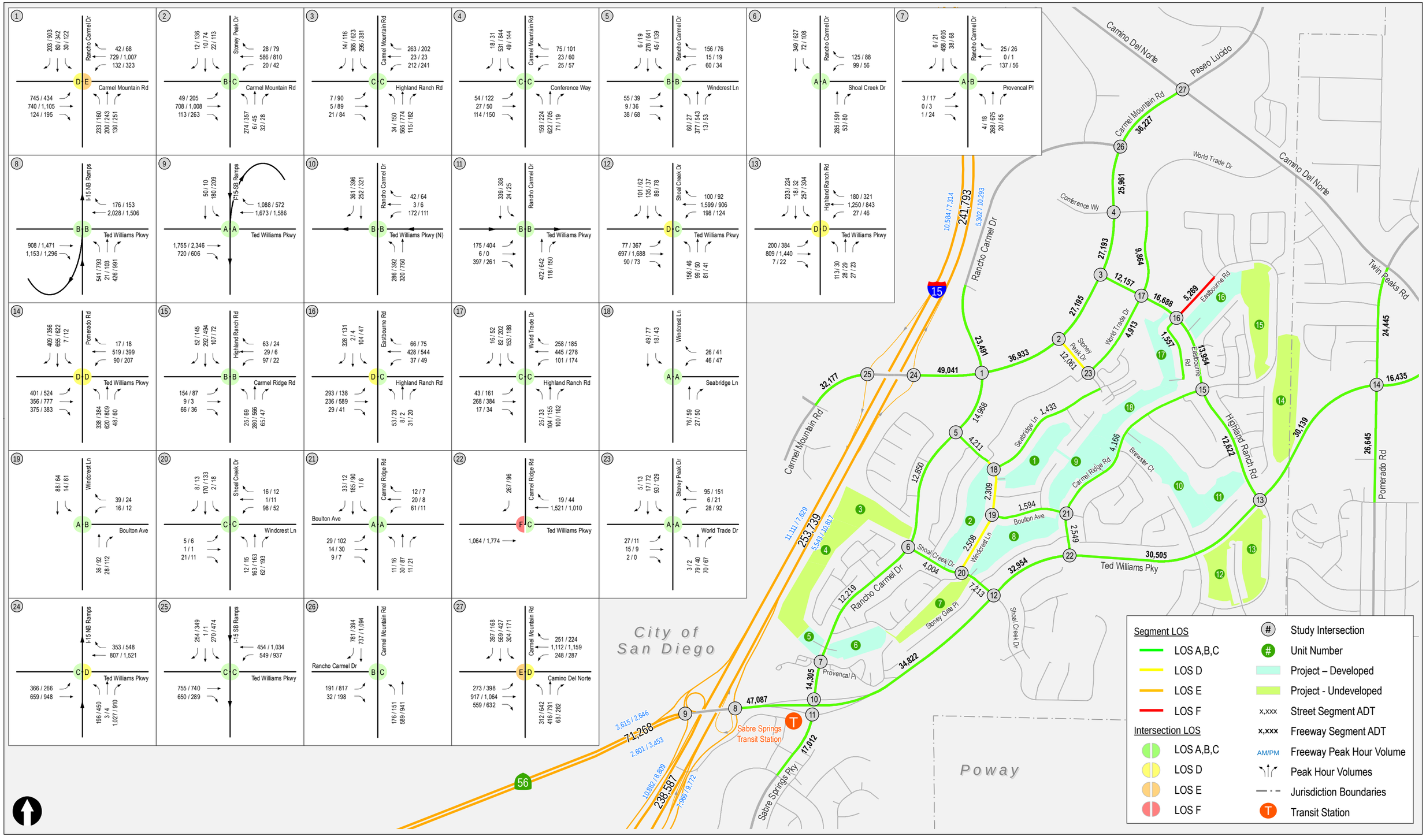


Figure 10

Opening Year (2025) With Project Traffic Volumes and LOS

Table 8: Opening Year (2025) Intersection Level of Service

Intersection	Jurisdiction	Control	Peak Hour	Without Project		With Project		Change
				Delay	LOS	Delay	LOS	
1. Carmel Mountain Road/Rancho Carmel Drive (South)	San Diego	Signal	AM	35.5	D	37.2	D	1.7
			PM	**67.3**	**E**	**69**	**E**	1.7
2. Carmel Mountain Road/Stoney Peak Drive	San Diego	Signal	AM	15.8	B	15.6	B	-0.2
			PM	25.6	C	25.6	C	0
3. Carmel Mountain Road/Highland Ranch Road	San Diego	Signal	AM	28.3	C	30	C	1.7
			PM	31	C	32.5	C	1.5
4. Carmel Mountain Road/Conference Way	San Diego	Signal	AM	28	C	27.2	C	-0.8
			PM	27.5	C	27.2	C	-0.3
5. Rancho Carmel Drive/Windcrest Lane	San Diego	Signal	AM	11.8	B	12.4	B	0.6
			PM	10.4	B	11	B	0.6
6. Rancho Carmel Drive/Shoal Creek Drive	San Diego	Signal	AM	7.7	A	8.5	A	0.8
			PM	6.8	A	7.6	A	0.8
7. Rancho Carmel Drive/Provencal Place	San Diego	Signal	AM	8.8	A	9.0	A	0.2
			PM	9.7	A	10.5	B	0.8
8. Ted Williams Parkway/I-15 Northbound Ramps	Caltrans	Signal	AM	16.9	B	18.3	B	1.4
			PM	16.9	B	18.5	B	1.6
9. Ted Williams Parkway/I-15 Southbound Ramps	Caltrans	Signal	AM	8.1	A	8.3	A	0.2
			PM	5	A	5.5	A	0.5
10. Ted Williams Parkway/Rancho Carmel Drive	San Diego	Signal	AM	17.5	B	17.6	B	0.1
			PM	15.4	B	15.3	B	-0.1
11. Ted Williams Parkway/Sabre Spring Parkway	San Diego	Signal	AM	14.9	B	15	B	0.1
			PM	15.4	B	15.8	B	0.4
12. Ted Williams Parkway/Shoal Creek Drive	San Diego	Signal	AM	39.7	D	49.8	D	10.1
			PM	28	C	33.9	C	5.9
13. Ted Williams Parkway/Highland Ranch Road	San Diego	Signal	AM	47	D	49.2	D	2.2
			PM	47.4	D	54.6	D	7.2
14. Ted Williams Parkway/Pomerado Road	Poway	Signal	AM	40.7	D	45.3	D	4.6
			PM	47	D	52	D	5
15. Highland Ranch Road/Carmel Ridge Road	San Diego	Signal	AM	13.4	B	15.1	B	1.7
			PM	10.8	B	13	B	2.2
16. Highland Ranch Road/Eastbourne Road	San Diego	Signal	AM	44.1	D	47.7	D	3.6
			PM	25.8	C	27.3	C	1.5
	San Diego	Signal	AM	29.4	C	30.8	C	1.4

Intersection	Jurisdiction	Control	Peak Hour	Without Project		With Project		Change
				Delay	LOS	Delay	LOS	
17. Highland Ranch Road/World Trade Drive			PM	32.3	C	33.1	C	0.8
18. Windcrest Lane/Seabridge Lane	San Diego	AWSC	AM	7.6	A	7.7	A	0.1
			PM	7.9	A	8.2	A	0.3
19. Windcrest Lane/Boulton Avenue	San Diego	Yield	AM	9.1	A	9.3	A	0.2
			PM	10.1	B	10.5	B	0.4
20. Windcrest Lane/Shoal Creek Drive	San Diego	SSSC	AM	13.7	B	16.4	C	2.7
			PM	12.8	B	15.3	C	2.5
21. Boulton Avenue/Carmel Ridge Road	San Diego	AWSC	AM	8	A	9.3	A	1.3
			PM	7.5	A	8.9	A	1.4
22. Carmel Ridge Road/Ted Williams Parkway (right-in/right-out only)	San Diego	MSSC	AM	**48**	**E**	**179**	**F**	131
			PM	14.9	B	17.6	C	2.7
23. Stoney Peak Drive/World Trade Drive	San Diego	AWSC	AM	9.1	A	9.1	A	0
			PM	9.7	A	9.8	A	0.1
24. Carmel Mountain Road/I-15 NB Ramps	Caltrans	Signal	AM	33.2	C	34.7	C	1.5
			PM	52.4	D	54	D	1.6
25. Carmel Mountain Road/I-15 SB Ramps	Caltrans	Signal	AM	30.1	C	30.9	C	0.8
			PM	26.5	C	27	C	0.5
26. Carmel Mountain Road/Rancho Carmel Drive (North)	San Diego	Signal	AM	17.1	B	16.9	B	-0.2
			PM	24.4	C	24.5	C	0.1
27. Carmel Mountain Road/Camino Del Norte	San Diego	Signal	AM	**60.6**	**E**	**62.6**	**E**	2
			PM	49.2	D	51.8	D	2.6

Notes:
Calculated using methodologies consistent with HCM 6th Edition.
Unacceptable seconds of delay per vehicle and LOS highlighted in **bold**
Worst case movement reported for side street stop-controlled intersections.
AWSC = All Way Stop Control
SSSC = Side Street Stop Control
Source: LLG, 2020.

Table 9: Opening Year (2025) Roadway Level of Service

Roadway Segment	Jurisdiction	Lanes	Classification	Capacity	2025 No Project		2025 With Project		Change
					ADT	LOS	ADT	LOS	
Ted Williams Parkway									
1. I-15 to Rancho Carmel Drive	San Diego	6 Lanes	Expressway	80,000	44,166	C	47,087	C	2,921
2. Rancho Carmel Drive to Shoal Creek Drive	San Diego	6 Lanes	Prime Arterial	60,000	32,225	B	34,822	B	2,597
3. Shoal Creek Drive to Carmel Ridge Road	San Diego	6 Lanes	Prime Arterial	60,000	31,160	B	32,954	B	1,794
4. Carmel Ridge Road to Highland Ranch Road	San Diego	6 Lanes	Prime Arterial	60,000	29,335	B	30,505	B	1,170
5. Highland Ranch Road to Pomerado Road	Poway	6 Lanes	Prime Arterial	63,000	28,648	B	30,139	B	1,491
6. Pomerado Road to Twin Peaks Road	Poway	6 Lanes	Major Arterial	50,000	15,939	A	16,435	A	496
Rancho Carmel Drive									
7. Carmel Mountain Express Drive to Ted Williams Parkway	San Diego	4 Lanes	Major Arterial	40,000	16,599	B	17,012	B	413
8. Ted Williams Parkway to Provencal Place	San Diego	4 Lanes	Major Arterial	40,000	13,217	A	14,305	A	1,088
9. Provencal Place to Shoal Creek Drive	San Diego	4 Lanes	Major Arterial	40,000	11,282	A	12,219	A	937
10. Shoal Creek Drive to Windcrest Lane	San Diego	4 Lanes	Major Arterial	40,000	12,057	A	12,850	A	793
11. Windcrest Lane to Carmel Mountain Road	San Diego	4 Lanes	Major Arterial	40,000	13,752	A	14,968	B	1,216
12. Carmel Mountain Road to Shopping Center Driveways	San Diego	4 Lanes	Major Arterial	40,000	23,301	C	23,491	C	190
Carmel Mountain Road									
13. Penasquitos Drive to I-15	San Diego	6 Lanes	Prime Arterial	50,000	31,877	C	32,177	C	300
14. I-15 to Rancho Carmel Drive	San Diego	6 Lanes	Prime Arterial	60,000	47,996	C	49,041	C	1,045
15. Rancho Carmel Drive to Stoney Peak Drive	San Diego	6 Lanes	Prime Arterial	60,000	35,736	C	36,933	C	1,197
16. Stoney Peak Drive to Highland Ranch Road	San Diego	6 Lanes	Prime Arterial	60,000	26,017	B	27,195	B	1,178
17. Highland Ranch Road to Conference Way	San Diego	6 Lanes	Prime Arterial	60,000	26,180	B	27,193	B	1,013
18. Conference Way to Rancho Carmel Drive	San Diego	6 Lanes	Prime Arterial	60,000	25,029	B	25,961	B	932
19. Rancho Carmel Drive to Camino Del Norte	San Diego	6 Lanes	Prime Arterial	60,000	35,399	C	36,227	C	828

Roadway Segment	Jurisdiction	Lanes	Classification	Capacity	2025 No Project		2025 With Project		Change
					ADT	LOS	ADT	LOS	
Highland Ranch Road									
20. Carmel Mountain Road to World Trade Drive	San Diego	4 Lanes	Major Arterial	40,000	10,593	A	12,157	A	1,564
21. World Trade Drive to Eastbourne Road	San Diego	4 Lanes	Major Arterial	40,000	15,054	B	16,668	B	1,614
22. Eastbourne Road to Carmel Ridge Road	San Diego	4 Lanes	Major Arterial	40,000	11,878	A	13,954	A	2,076
23. Carmel Ridge Road to World Trade Drive	San Diego	4 Lanes	Major Arterial	40,000	11,389	A	12,622	A	1,233
Stoney Peak Drive									
24. Carmel Mountain Road to World Trade Drive	San Diego	4 Lanes	Collector	15,000	11,973	D	12,061	D	88
World Trade Drive									
25. Stoney Peak Drive to Highland Ranch Road	San Diego	4 Lanes	Collector	15,000	4,714	A	4,913	A	199
26. Highland Ranch Road to Conference Way	San Diego	4 Lanes	Collector (with two-way left turn lane)	30,000	9,667	A	9,864	A	197
Pomerado Road									
27. North of Ted Williams Parkway	Poway		Major Arterial	50,000	23,852	B	24,445	B	593
28. 2South of Ted Williams Parkway	Poway		Major Arterial	50,000	26,065	B	26,645	C	580
Shoal Creek Drive									
29. Rancho Carmel Drive to Windcrest Lane	San Diego	2 Lanes	Collector (with no fronting property)	10,000	3,075	A	4,004	B	929
30. Windcrest Lane to Ted Williams Parkway	San Diego	2 Lanes	Collector (with no fronting property)	10,000	5,489	B	7,213	C	1,724
Windcrest Lane									
31. Rancho Carmel Drive to Seabridge Lane	San Diego	2 Lanes	Collector	10,000	3,778	A	4,211	B	433
32. Seabridge Lane to Boulton Avenue	San Diego		Unclassified	2,200	1,791	C+	2,309	C-	518
33. Boulton Avenue to Shoal Creek Drive	San Diego		Unclassified	2,200	1,749	C+	2,508	C-	759
Boulton Avenue									

Roadway Segment	Jurisdiction	Lanes	Classification	Capacity	2025 No Project		2025 With Project		Change
					ADT	LOS	ADT	LOS	
34. Windcrest Lane to Carmel Ridge Road	San Diego		Unclassified	2,200	837	C+	1,594	C+	757
Seabridge Lane									
35. Windcrest Lane to Stoney Peak	San Diego		Unclassified	2,200	1,433	C+	1,433	C+	-
Eastbourne Road									
36. North of Highland Ranch Road	San Diego		Unclassified	2,200	5,104	C-	5,269	C-	165
37. South of Highland Ranch Road	San Diego		Unclassified	2,200	485	C+	1,557	C+	1,072
Carmel Ridge Road									
38. Ted Williams Parkway to Boulton Avenue	San Diego	2 Lanes	Collector	8,000	1,214	A	2,549	B	1,335
39. Boulton Avenue to Highland Ranch Road	San Diego	2 Lanes	Collector	8,000	2,018	A	4,166	C	2,148

Notes:
LOS Determined consistent with City of San Diego guidelines.
Unacceptable LOS highlighted in **bold**
Source: Fehr & Peers, 2020.

Opening Year (2025) Freeway Interchange Queueing Analysis

Table 10 shows the off-ramp queues at the I-15 ramp terminal intersections. No queues exceed the ramp storage. **Appendix D** contains the queue analysis worksheets.

Table 10: Opening Year (2025) Ramp Queues

Ramp	Storage (feet)	Peak Hour	Without Project		With Project	
			Maximum Queue (feet)	Exceeds Storage?	Maximum Queue (feet)	Exceeds Storage?
Ted Williams Parkway Northbound Off-Ramp	1,500	AM	236	No	373	No
		PM	377	No	574	No
Ted Williams Parkway Southbound Off-Ramp	1,500	AM	199	No	280	No
		PM	224	No	240	No
Carmel Mountain Road Northbound Off-Ramp	1,000	AM	248	No	334	No
		PM	381	No	395	No
Carmel Mountain Road Southbound Off-Ramp	1,400	AM	177	No	222	No
		PM	321	No	310	No

Source: Fehr & Peers, 2020, based on SimTraffic analysis

Opening Year (2025) Intersection Queueing Analysis

Table 11 shows queues for turning movements with more than 50 Project trips during at least one peak hour where queue storage is only provided for within a turn pocket or dedicated turn lane. The eastbound left-turn queue at Ted Williams Parkway/Shoal Creek Drive exceeds storage capacity under Opening Year (2025) Without Project and With Project conditions. Given that this location is projected to have a left turn peak hour traffic volume above 300 vehicles (the point at which the City suggests evaluating if a dual-left turn lane could be constructed), we reviewed improvement options. Our review of the intersection revealed that adding dual-lefts within the existing curb-to-curb width of the roadway is not feasible since Shoal Creek Drive has only one receiving lane. An alternative option is to optimize the signal timing at this location. We evaluated adjusting the signal timing by holding the signal cycle length constant but adjusting green times for each movement, and by changing the north and southbound movements to be permitted rather than split phasing, which reduced vehicle queuing.

However, if a full access signal is installed at Carmel Ridge Road/Ted Williams Parkway, as described in the proposed Off-Site Intersection Improvements section, queue spillback is reduced due to eastbound left turn traffic shifting to the Carmel Ridge Road/Ted Williams Parkway intersection. If a signal is constructed, queuing at the Ted Williams Parkway/Shoal Creek Drive intersection is reduced to better than pre-project

conditions (as described in Section 8 Project Improvements). **Appendix D** contains the queue analysis worksheets.

Table 11: Opening Year (2025) Turn Pocket Queues

Turning Movement	Storage (feet)	Peak Hour	Without Project		With Project	
			Maximum Queue (feet)	Exceeds Storage?	Maximum Queue (feet)	Exceeds Storage?
Ted Williams Parkway/Rancho Carmel Drive Southbound Right Turn	260	AM	86	No	178	No
		PM	205	No	210	No
Ted Williams Parkway/Sabre Springs Parkway Eastbound Left Turn	430	AM	105	No	172	No
		PM	264	No	323	No
Ted Williams Parkway/Shoal Creek Drive Eastbound Left Turn	230	AM	71	No	179	No
		PM	**292**	**Yes**	**631**	**Yes**

Source: Fehr & Peers, 2020, based on SimTraffic

7.0 Horizon Year (2050) Conditions

Given that the Project requires a Community Plan Amendment, the City requires the horizon year analysis of Community Plan Buildout Year 2050 conditions. The following summarizes the assumptions and methods used to assess Horizon Year (2050) conditions.

Horizon Network Conditions

The Project is located in the Community of Carmel Mountain Ranch. Based on research conducted, the circulation system within Carmel Mountain Ranch, which makes up most of the study area, is built to its ultimate classification. There are no remaining local infrastructure projects as they relate to the transportation network.

A review of the SANDAG 2050 Regional Transportation Plan (RTP) shows improvements proposed for I-15 and SR-56 in the future. An I-15 northbound to SR-56 westbound connector ramp is identified as a future project, as is the widening of SR-56 from four (4) lanes to six (6) lanes west of I-15.

Both of these improvements are shown to be constructed in the SANDAG Series 12 forecast model by the Year 2050. In addition, the SANDAG 2050 RTP shows that completion of the widening of SR-56 would occur by the Year 2040 and the northbound to westbound connector ramp from I-15 to SR-56 would be completed by Year 2050. However, based on the Project Study Report funded by the City of San Diego through development fees, the funding for the six-lane improvements to SR- 56 is not yet identified. The I-15 connector to SR-56 is also not funded. Therefore, no improvements over existing on-the-ground conditions were assumed in the Horizon Year (2050) analyses of study area intersections, streets segments, and freeway segments and on-ramps included in this report.

Horizon Year (2050) Traffic Volumes

The Horizon Year (2050) volumes were obtained from the SANDAG Series 12 Year 2050 forecast traffic model to forecast the roadway segment baseline traffic volumes representing the Horizon Year (2050) Without Project conditions.

An average compound annual growth rate was developed by comparing the Series 12 Year 2008 (base year) volumes to the Series 12 Year 2050 forecast volumes on individual study area roadway segments. The growth rates were then applied to the Existing (2019) traffic volumes used in this study for a period of 31 years to arrive at Horizon Year (2050) Without Project traffic volumes.

The peak hour turning movement volumes at an intersection were estimated from future ADT volumes using the relationship between existing peak hour turning movements and the existing ADT volumes. This same relationship can be assumed to generally continue in the future.

The increase in traffic with the proposed Project was then added to the baseline Year 2050 traffic volumes to arrive at Horizon Year (2050) With Project conditions.

Table 12 shows the forecast 2050 ADT by intersection leg used to forecast the Horizon Year (2050) Without Project turning movement volumes.

Appendix G provides additional documentation for the traffic volume forecast methodology and calculations.

Table 12: ADT Forecasts by Intersection Leg

Intersection	Direction	Leg	Existing ADT	2008 ADT	2050 ADT	Annual Growth Factor[1]	Forecast 2050 ADT
1. Carmel Mountain Road/Rancho Carmel Drive (South)	Sb	North	20,900	23,100	30,300	0.70%	26300
	Wb	East	27,400	34,400	44,400	0.70%	34000
	Nb	South	13,700	16,500	20,500	0.60%	16400
	Eb	West	39,200	42,500	51,100	0.50%	45500
2. Carmel Mountain Road/Stoney Peak Drive	Sb	North	4,500	5,000	5,700	0.30%	5000
	Wb	East	20,100	33,600	42,900	0.70%	24700
	Nb	South	7,800	6,800	7,600	0.30%	8600
	Eb	West	26,400	34,400	44,400	0.70%	32700
3. Carmel Mountain Road/Highland Ranch Road	Sb	North	21,800	29,900	38,300	0.70%	26900
	Wb	East	11,000	9,500	11,800	0.60%	13200
	Nb	South	19,300	33,600	42,900	0.70%	23700
	Eb	West	3,700	23,400	27,100	0.40%	4200
4. Carmel Mountain Road/Conference Way	Sb	North	19,400	20,600	26,900	0.70%	24300
	Wb	East	4,400	5,300	5,500	0.10%	4600
	Nb	South	20,800	26,900	35,000	0.70%	26000
	Eb	West	6,400	6,400	6,800	0.10%	6800
5. Rancho Carmel Drive/Windcrest Lane	Sb	North	13,400	16,500	20,000	0.50%	15700
	Wb	East	3,600	3,700	3,750	0.00%	3700
	Nb	South	12,800	10,100	12,100	0.50%	14900
	Eb	West	2,400	6,400	6,450	0.00%	2500
6. Rancho Carmel Drive/Shoal Creek Drive	Sb	North	13,100	10,300	12,300	0.50%	15200
	Wb	East	3,300	3,800	3,850	0.00%	3400
	Nb	South	12,300	15,100	18,500	0.50%	14600
	Eb	West	-	-	-	0.00%	0
	Sb	North	12,200	15,500	19,000	0.50%	14500
	Wb	East	2,200	5,000	5,500	0.20%	2400

Intersection	Direction	Leg	Existing ADT	2008 ADT	2050 ADT	Annual Growth Factor[1]	Forecast 2050 ADT
7. Rancho Carmel Drive/Provencal Place	Nb	South	13,100	16,400	20,000	0.50%	15400
	Eb	West	500	600	600	0.00%	500
8. Ted Williams Parkway/I-15 Northbound Ramps	Sb	North	2,600	5,100	7,500	1.10%	3700
	Wb	East	44,400	36,200	48,000	0.80%	56500
	Nb	South	32,500	24,100	26,400	0.20%	34900
	Eb	West	58,100	45,900	60,100	0.70%	73000
9. Ted Williams Parkway/I-15 Southbound Ramps	Sb	North	12,100	13,000	18,000	0.90%	16100
	Wb	East	56,300	45,900	60,100	0.70%	70700
	Nb	South	8,700	14,200	15,100	0.20%	9200
	Eb	West	52,900	54,400	67,200	0.60%	63000
10. Ted Williams Parkway/Rancho Carmel Drive	Sb	North	14,200	16,400	23,100	1.00%	19200
	Wb	East	2,200	1,800	2,200	0.50%	2600
	Nb	South	15,300	15,600	16,000	0.10%	15600
	Eb	West	8,400	12,200	15,800	0.70%	10500
11. Ted Williams Parkway/Sabre Spring Parkway[2]	Sb	North	15,400	15,600	16,000	0.10%	15700
	Wb	East	1,900	1,300	1,400	0.20%	2100
	Nb	South	15,000	18,000	19,200	0.20%	15800
	Eb	West	7,200	7,000	8,500	0.50%	8500
12. Ted Williams Parkway/Shoal Creek Drive	Sb	North	6,200	5,200	5,250	0.00%	6300
	Wb	East	33,600	24,900	28,300	0.30%	37200
	Nb	South	7,000	2,900	2,950	0.00%	7100
	Eb	West	33,800	25,400	32,200	0.60%	41200
13. Ted Williams Parkway/Highland Ranch Road	Sb	North	12,500	11,100	13,300	0.50%	14500
	Wb	East	32,900	30,400	37,200	0.50%	38800
	Nb	South	2,500	2,500	2,550	0.00%	2600
	Eb	West	33,500	23,700	26,700	0.30%	36800
14. Ted Williams Parkway/Pomerado Road	Sb	North	27,400	30,600	37,100	0.50%	32100
	Wb	East	15,100	13,600	15,400	0.30%	16700
	Nb	South	28,000	29,200	35,500	0.50%	32900
	Eb	West	30,900	30,400	37,200	0.50%	36500
15. Highland Ranch Road/Carmel Ridge Road	Sb	North	12,600	12,500	15,000	0.50%	14600
	Wb	East	3,200	3,200	3,250	0.00%	3300
	Nb	South	11,500	10,700	12,900	0.50%	13400

Intersection	Direction	Leg	Existing ADT	2008 ADT	2050 ADT	Annual Growth Factor[1]	Forecast 2050 ADT
	Eb	West	2,800	1,200	1,250	0.10%	2900
16. Highland Ranch Road/Eastbourne Road	Sb	North	7,300	6,600	6,650	0.00%	7400
	Wb	East	11,800	12,500	15,000	0.50%	13700
	Nb	South	600	600	650	0.20%	700
	Eb	West	15,700	14,100	17,000	0.50%	18300
17. Highland Ranch Road/World Trade Drive	Sb	North	9,800	8,700	10,700	0.50%	11700
	Wb	East	14,900	14,100	17,000	0.50%	17400
	Nb	South	7,200	5,700	7,100	0.60%	8700
	Eb	West	9,400	9,500	11,800	0.60%	11300
18. Windcrest Lane/Seabridge Lane	Sb	North	2,000	3,700	3,750	0.00%	2100
	Wb	East	1,800	2,400	2,450	0.00%	1900
	Nb	South	2,200	300	350	0.40%	2500
	Eb	West	-	-	-	0.00%	0
19. Windcrest Lane/Boulton Avenue	Sb	North	2,000	300	350	0.40%	2300
	Wb	East	1,100	300	350	0.40%	1300
	Nb	South	2,000	2,000	2,050	0.10%	2100
	Eb	West	-	-	-	0.00%	0
20. Windcrest Lane/Shoal Creek Drive	Sb	North	3,500	3,800	3,850	0.00%	3600
	Wb	East	2,100	2,100	2,150	0.10%	2200
	Nb	South	5,200	5,200	5,250	0.00%	5300
	Eb	West	700	1,100	1,150	0.10%	800
21. Boulton Avenue/Carmel Ridge Road	Sb	North	1,500	300	350	0.40%	1700
	Wb	East	1,300	1,300	1,350	0.10%	1400
	Nb	South	1,900	1,900	1,950	0.10%	2000
	Eb	West	1,000	300	350	0.40%	1200
22. Carmel Ridge Road/Ted Williams Parkway (right-in/right-out only)	Sb	North	1,500	1,500	1,550	0.10%	1600
	Wb	East	32,700	24,900	28,300	0.30%	36200
	Nb	South	-	-	-	0.00%	0
	Eb	West	33,900	24,900	28,300	0.30%	37500
23. Stoney Peak Drive/World Trade Drive	Sb	North	4,600	6,800	7,600	0.30%	5100
	Wb	East	4,800	4,900	6,400	0.70%	6100
	Nb	South	2,900	5,500	6,400	0.40%	3300
	Eb	West	700	800	1,000	0.60%	900
	Sb	North	8,900	7,200	8,300	0.40%	10000

Intersection	Direction	Leg	Existing ADT	2008 ADT	2050 ADT	Annual Growth Factor[1]	Forecast 2050 ADT
24. Carmel Mountain Road/I-15 NB Ramps	Wb	East	40,400	42,500	51,100	0.50%	46900
	Nb	South	15,200	12,200	15,000	0.50%	18000
	Eb	West	29,800	35,200	41,200	0.40%	33800
25. Carmel Mountain Road/I-15 SB Ramps	Sb	North	7,700	6,900	7,800	0.30%	8500
	Wb	East	29,800	35,200	41,200	0.40%	33800
	Nb	South	14,300	14,700	15,500	0.10%	14900
	Eb	West	24,700	27,800	33,100	0.50%	28500
26. Carmel Mountain Road/Rancho Carmel Drive (North)	Sb	North	33,500	34,900	45,000	0.70%	41500
	Wb	East	1	1	1	0.00%	100
	Nb	South	23,300	20,600	26,900	0.70%	29200
	Eb	West	17,000	12,200	16,000	0.70%	21400
27. Carmel Mountain Road/Camino Del Norte	Sb	North	26,800	33,000	35,500	0.20%	28400
	Wb	East	38,000	31,500	40,900	0.70%	47400
	Nb	South	31,600	34,900	45,000	0.70%	39100
	Eb	West	47,300	44,900	58,100	0.70%	58800

[1] Annual Growth Factor = (2050 ADT/2008 ADT)^(1/42)-1
[2] Example Forecast: 2050 ADT = 2019 ADT*(1+Annual Growth Factor)^(31) = 7200*(1+0.005)^(31) = 8500
Source: Fehr & Peers, 2020, based on Synchro analysis files provided by LLG

Horizon Year (2050) Intersection and Roadway Operations

Figure 11 depicts the Horizon Year (Year 2050) Without Project traffic volumes and LOS results. **Figure 12** depicts the Horizon Year (Year 2050) With Project traffic volumes and LOS results.

Table 13 summarizes the Horizon Year (2050) intersection operations.

The following study area intersections were calculated to operate at LOS E or F under Horizon (Year 2050) Without Project conditions:

- 1. Carmel Mountain Road/Rancho Carmel Drive – LOS F during the PM peak hour
- 14. Ted Williams Parkway/Pomerado Road – LOS E/E during the AM/PM peak hours
- 22. Carmel Ridge Road/Ted Williams Parkway – LOS E during the AM peak hour
- 27. Carmel Mountain Road/Camino Del Norte – LOS E/E during the AM/PM peak hours

The following study intersections were calculated to operate at LOS E or F under Horizon (Year 2050) With Project conditions:

- 1. Carmel Mountain Road/Rancho Carmel Drive – LOS F during the PM peak hour
- 14. Ted Williams Parkway/Pomerado Road – LOS E/E during the AM/PM peak hours
- 22. Carmel Ridge Road/Ted Williams Parkway – LOS F during the AM peak hour
- 27. Carmel Mountain Road/Camino Del Norte – LOS E/E during the AM/PM peak hours

Based on the improvement criteria, Intersections 1, 14, and 27 require signal improvements as a result of the addition of Project traffic. A new signal would be needed at Intersection 22. Signal Improvements are needed for the intersections to operate at or better than Without Project under Horizon Year (2050) With Project conditions.

Appendix D contains the Horizon Year (2050) intersection analysis worksheets.

Table 14 summarizes the Horizon Year (2050) and Horizon Year (2050) Plus Project segment operations. No roadway segments were identified as needing improvements per the City's criteria. There are three segments that operate at LOS E without and with the project, and the project's contribution to these segments is less than 2% of total daily traffic. All study roadways are built to their ultimate capacity per the Carmel Mountain Ranch Community Plan. As such, per the TSM guidelines, no roadway segment improvements/widenings need to be contributed to by the project.

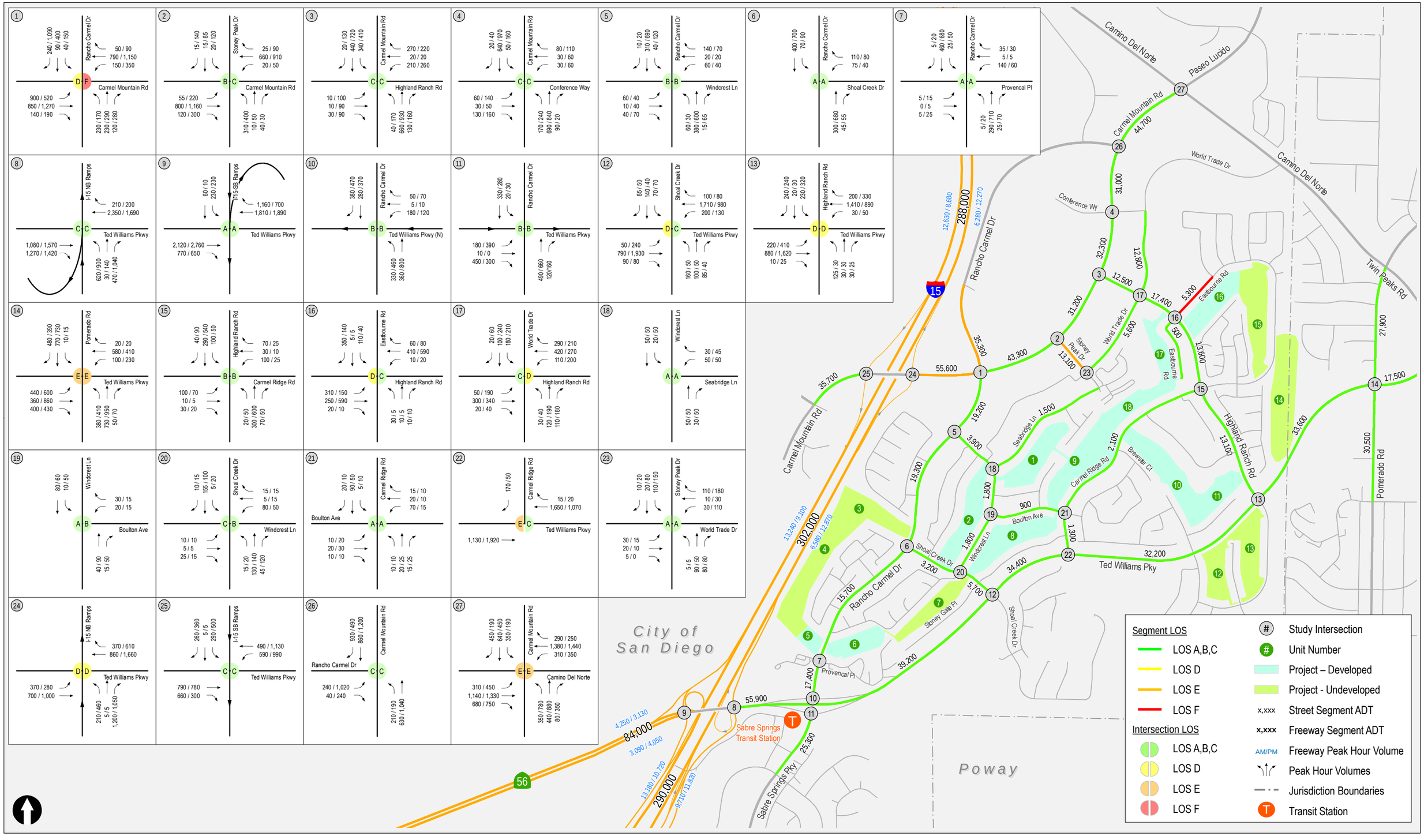


Figure 11

Horizon Year (2050) Without Project Traffic Volumes and LOS

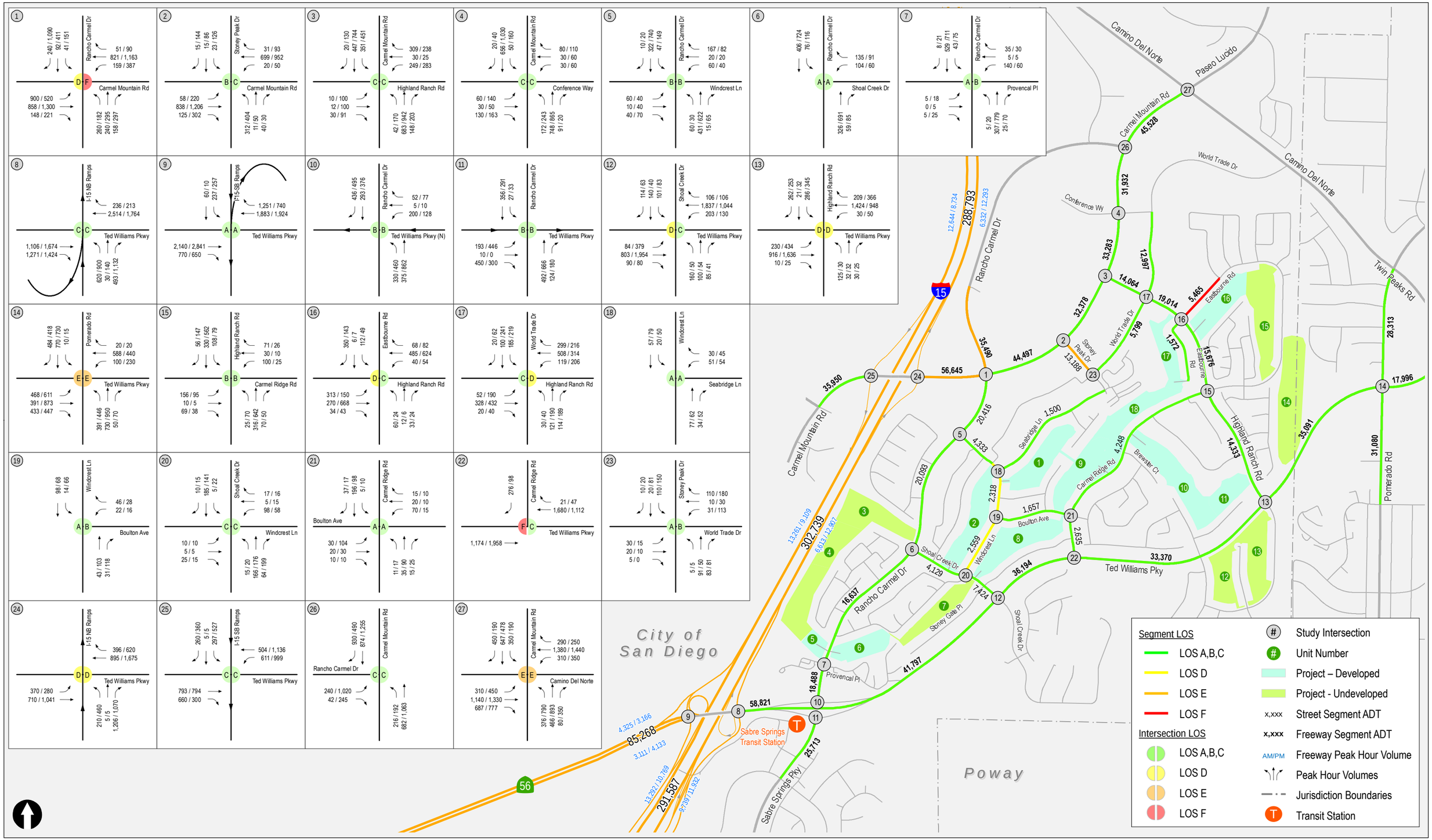


Figure 12

Horizon Year (2050) With Project Traffic Volumes and LOS

Table 13: Horizon Year (2050) Intersection Level of Service

Intersection	Jurisdiction	Control	Peak Hour	Without Project		With Project		Change
				Delay	LOS	Delay	LOS	
1. Carmel Mountain Road/Rancho Carmel Drive (South)	San Diego	Signal	AM	38.2	D	41.1	D	2.9
			PM	**89.5**	**F**	**92.2**	**F**	2.7
2. Carmel Mountain Road/Stoney Peak Drive	San Diego	Signal	AM	15.7	B	15.5	B	-0.2
			PM	20.1	C	20.3	C	0.2
3. Carmel Mountain Road/Highland Ranch Road	San Diego	Signal	AM	29.9	C	31.6	C	1.7
			PM	30.8	C	32.2	C	1.4
4. Carmel Mountain Road/Conference Way	San Diego	Signal	AM	30.9	C	30.1	C	-0.8
			PM	29.3	C	29.1	C	-0.2
5. Rancho Carmel Drive/Windcrest Lane	San Diego	Signal	AM	11.1	B	11.6	B	0.5
			PM	10.7	B	11.4	B	0.7
6. Rancho Carmel Drive/Shoal Creek Drive	San Diego	Signal	AM	7.5	A	8.2	A	0.7
			PM	7.1	A	8.1	A	1
7. Rancho Carmel Drive/Provencal Place	San Diego	Signal	AM	9.1	A	9.3	A	0.2
			PM	10	A	10.4	B	0.5
8. Ted Williams Parkway/I-15 Northbound Ramps	Caltrans	Signal	AM	24.7	C	33.4	C	8.7
			PM	21.2	C	25.9	C	4.7
9. Ted Williams Parkway/I-15 Southbound Ramps	Caltrans	Signal	AM	8.6	A	8.8	A	0.2
			PM	6.1	A	6.7	A	0.6
10. Ted Williams Parkway/Rancho Carmel Drive	San Diego	Signal	AM	17.9	B	18.1	B	0.2
			PM	16.1	B	16	B	-0.1
11. Ted Williams Parkway/Sabre Spring Parkway	San Diego	Signal	AM	15.7	B	15.7	B	0
			PM	16.2	B	16.6	B	0.4
12. Ted Williams Parkway/Shoal Creek Drive	San Diego	Signal	AM	39.3	D	50.4	D	11.1
			PM	28.2	C	33.8	C	5.6
13. Ted Williams Parkway/Highland Ranch Road	San Diego	Signal	AM	41.8	D	48.3	D	6.5
			PM	41.5	D	46.5	D	5
14. Ted Williams Parkway/Pomerado Road	Poway	Signal	AM	**56**	**E**	**60.3**	**E**	4.3
			PM	**64.7**	**E**	**69.6**	**E**	4.9
15. Highland Ranch Road/Carmel Ridge Road	San Diego	Signal	AM	13.9	B	15.5	B	1.6
			PM	10.7	B	12.6	B	1.9
16. Highland Ranch Road/Eastbourne Road	San Diego	Signal	AM	44.3	D	47.3	D	3
			PM	25.4	C	27	C	1.6
	San Diego	Signal	AM	29.8	C	31	C	1.2

Intersection	Jurisdiction	Control	Peak Hour	Without Project		With Project		Change
				Delay	LOS	Delay	LOS	
17. Highland Ranch Road/World Trade Drive			PM	35	D	36.2	D	1.2
18. Windcrest Lane/Seabridge Lane	San Diego	AWSC	AM	7.6	A	7.8	A	0.2
			PM	8	A	8.2	A	0.2
19. Windcrest Lane/Boulton Avenue	San Diego	Yield	AM	9.3	A	9.5	A	0.2
			PM	10.3	B	10.9	B	0.6
20. Windcrest Lane/Shoal Creek Drive	San Diego	SSSC	AM	16.4	C	21.5	C	5.1
			PM	13	B	15.4	C	2.4
21. Boulton Avenue/Carmel Ridge Road	San Diego	AWSC	AM	8	A	9.1	A	1.1
			PM	7.6	A	9	A	1.4
22. Carmel Ridge Road/Ted Williams Parkway (right-in/right-out only)	San Diego	SSSC	AM	**48.5**	**E**	**160.9**	**F**	112.4
			PM	15.6	C	18.3	C	2.7
23. Stoney Peak Drive/World Trade Drive	San Diego	AWSC	AM	9.6	A	9.7	A	0.1
			PM	10	A	10.1	B	0.1
24. Carmel Mountain Road/I-15 NB Ramps	Caltrans	Signal	AM	40.8	D	43.8	D	3
			PM	45.2	D	48.2	D	3
25. Carmel Mountain Road/I-15 SB Ramps	Caltrans	Signal	AM	28.9	C	29.6	C	0.7
			PM	30.7	C	31.2	C	0.5
26. Carmel Mountain Road/Rancho Carmel Drive (North)	San Diego	Signal	AM	20.3	C	20.1	C	-0.2
			PM	28	C	28	C	0
27. Carmel Mountain Road/Camino Del Norte	San Diego	Signal	AM	**67.4**	**E**	**69**	**E**	1.6
			PM	**61.4**	**E**	**63.2**	**E**	1.8

Notes:
Calculated using methodologies consistent with HCM 6th Edition.
Unacceptable seconds of delay per vehicle and LOS highlighted in **bold**
Worst case movement reported for side street stop-controlled intersections.
AWSC = All Way Stop Control
SSSC = Side Street Stop Control
Source: LLG, 2020.

Table 14: Horizon Year (2050) Roadway Level of Service

Roadway Segment	Jurisdiction	Lanes	Classification	Capacity	2050 No Project		2050 With Project		Change
					ADT	LOS	ADT	LOS	
Ted Williams Parkway									
1. I-15 to Rancho Carmel Drive	San Diego	6 Lanes	Expressway	80,000	55,900	C	58,821	C	2,921
2. Rancho Carmel Drive to Shoal Creek Drive	San Diego	6 Lanes	Prime Arterial	60,000	39,200	C	41,797	C	2,597
3. Shoal Creek Drive to Carmel Ridge Road	San Diego	6 Lanes	Prime Arterial	60,000	34,400	B	36,194	C	1,794
4. Carmel Ridge Road to Highland Ranch Road	San Diego	6 Lanes	Prime Arterial	60,000	32,200	B	33,370	B	1,170
5. Highland Ranch Road to Pomerado Road	Poway	6 Lanes	Prime Arterial	63,000	33,600	B	35,091	B	1,491
6. Pomerado Road to Twin Peaks Road	Poway	6 Lanes	Major Arterial	50,000	17,500	A	17,996	A	496
Rancho Carmel Drive									
7. Carmel Mountain Express Drive to Ted Williams Parkway	San Diego	4 Lanes	Major Arterial	40,000	25,300	C	25,713	C	413
8. Ted Williams Parkway to Provencal Place	San Diego	4 Lanes	Major Arterial	40,000	17,400	B	18,488	B	1,088
9. Provencal Place to Shoal Creek Drive	San Diego	4 Lanes	Major Arterial	40,000	15,700	B	16,637	B	937
10. Shoal Creek Drive to Windcrest Lane	San Diego	4 Lanes	Major Arterial	40,000	19,300	B	20,093	B	793
11. Windcrest Lane to Carmel Mountain Road	San Diego	4 Lanes	Major Arterial	40,000	19,200	B	20,416	B	1,216
12. Carmel Mountain Road to Shopping Center Driveways	San Diego	4 Lanes	Major Arterial	40,000	35,300	E	35,490	E	190
Carmel Mountain Road									
13. Penasquitos Drive to I-15	San Diego	6 Lanes	Prime Arterial	50,000	35,700	C	35,950	C	250
14. I-15 to Rancho Carmel Drive	San Diego	6 Lanes	Prime Arterial	60,000	55,600	E	56,645	E	1,045
15. Rancho Carmel Drive to Stoney Peak Drive	San Diego	6 Lanes	Prime Arterial	60,000	43,300	C	44,497	C	1,197
16. Stoney Peak Drive to Highland Ranch Road	San Diego	6 Lanes	Prime Arterial	60,000	31,200	B	32,378	B	1,178

Roadway Segment	Jurisdiction	Lanes	Classification	Capacity	2050 No Project		2050 With Project		Change
					ADT	LOS	ADT	LOS	
17. Highland Ranch Road to Conference Way	San Diego	6 Lanes	Prime Arterial	60,000	32,300	B	33,283	B	983
18. Conference Way to Rancho Carmel Drive	San Diego	6 Lanes	Prime Arterial	60,000	3,100	B	31,932	B	28,832
19. Rancho Carmel Drive to Camino Del Norte	San Diego	6 Lanes	Prime Arterial	60,000	44,700	C	45,528	C	828
Highland Ranch Road									
20. Carmel Mountain Road to World Trade Drive	San Diego	4 Lanes	Major Arterial	40,000	12,500	A	14,064	A	1,564
21. World Trade Drive to Eastbourne Road	San Diego	4 Lanes	Major Arterial	40,000	17,400	B	19,014	B	1,614
22. Eastbourne Road to Carmel Ridge Road	San Diego	4 Lanes	Major Arterial	40,000	13,600	A	15,676	B	2,076
23. Carmel Ridge Road to World Trade Drive	San Diego	4 Lanes	Major Arterial	40,000	13,100	A	14,333	A	1,233
Stoney Peak Drive									
24. Carmel Mountain Road to World Trade Drive	San Diego	4 Lanes	Collector	15,000	13,100	E	13,188	E	88
World Trade Drive									
25. Stoney Peak Drive to Highland Ranch Road	San Diego	4 Lanes	Collector	15,000	5,600	B	5,799	B	199
26. Highland Ranch Road to Conference Way	San Diego	4 Lanes	Collector (with two-way left turn lane)	30,000	12,800	B	12,997	B	197
Pomerado Road									
27. North of Ted Williams Parkway	Poway		Major Arterial	50,000	27,900	C	28,313	C	413
28. South of Ted Williams Parkway	Poway		Major Arterial	50,000	30,500	C	31,080	C	580
Shoal Creek Drive									
29. Rancho Carmel Drive to Windcrest Lane	San Diego	2 Lanes	Collector (with no fronting property)	10,000	3,200	A	4,129	B	929
30. Windcrest Lane to Ted Williams Parkway	San Diego	2 Lanes	Collector (with no fronting property)	10,000	5,700	C	7,424	C	1,724
Windcrest Lane									
31. Rancho Carmel Drive to Seabridge Lane	San Diego	2 Lanes	Collector	10,000	3,900	A	4,333	B	433

Roadway Segment	Jurisdiction	Lanes	Classification	Capacity	2050 No Project		2050 With Project		Change
					ADT	LOS	ADT	LOS	
32. Seabridge Lane to Boulton Avenue	San Diego		Unclassified	2,200	1,800	C+	2,318	C-	518
33. Boulton Avenue to Shoal Creek Drive	San Diego		Unclassified	2,200	1,800	C+	2,559	C-	759
Boulton Avenue									
34. Windcrest Lane to Carmel Ridge Road	San Diego		Unclassified	2,200	900	C+	1,657	C+	757
Seabridge Lane									
35. Windcrest Lane to Stoney Peak	San Diego		Unclassified	2,200	1,500	C+	1,500	C+	-
Eastbourne Road									
36. North of Highland Ranch Road	San Diego		Unclassified	2,200	5,300	C-	5,465	C-	165
37. South of Highland Ranch Road	San Diego		Unclassified	2,200	500	C+	1,572	C+	1,072
Carmel Ridge Road									
38. Ted Williams Parkway to Boulton Avenue	San Diego	2 Lanes	Collector	8,000	1,300	A	2,635	B	1,335
39. Boulton Avenue to Highland Ranch Road	San Diego	2 Lanes	Collector	8,000	2,100	A	4,248	C	2,148

Notes:
LOS Determined consistent with City of San Diego guidelines.
Unacceptable LOS highlighted in **bold**
Source: Fehr & Peers, 2020.

Horizon Year (2050) Freeway Interchange Queueing Analysis

Table 15 shows the off-ramp queues at the I-15 ramp terminal intersections. No queues exceed the ramp storage. **Appendix D** contains the queue analysis worksheets.

Table 15: Horizon Year (2050) Ramp Queues

Ramp	Storage (feet)	Peak Hour	Without Project		With Project	
			Maximum Queue (feet)	Exceeds Storage?	Maximum Queue (feet)	Exceeds Storage?
Ted Williams Parkway Northbound Off-Ramp	1,500	AM	562	No	503	No
		PM	738	No	890	No
Ted Williams Parkway Southbound Off-Ramp	1,500	AM	302	No	324	No
		PM	243	No	252	No
Carmel Mountain Road Northbound Off-Ramp	1,000	AM	362	No	362	No
		PM	640	No	751	No
Carmel Mountain Road Southbound Off-Ramp	1,400	AM	228	No	240	No
		PM	398	No	398	No

Source: Fehr & Peers, 2020, based on SimTraffic analysis

Horizon Year (2050) Intersection Queueing Analysis

Table 16 shows queues for turning movements with more than 50 Project trips during at least one peak hour where queue storage is only provided for within a turn pocket or dedicated turn lane. The eastbound left-turn queue at Ted Williams Parkway/Shoal Creek Drive exceeds storage capacity under Horizon Year (2050) Without Project and With Project conditions. Given that this location is projected to have a left turn peak hour traffic volume above 300 vehicles (the point at which the City suggests evaluating if a dual-left turn lane could be constructed), we reviewed improvement options. Our review of the intersection revealed that adding dual-lefts within the existing curb-to-curb width of the roadway is not feasible since Shoal Creek Drive has only one receiving lane. An alternative option is to optimize the signal timing at this location. We evaluated adjusting the signal timing by holding the signal cycle length constant but adjusting green times for each movement, and by changing the north and southbound movements to be permitted rather than split phasing, which would reduce queuing.

However, if a full access signal is installed at Carmel Ridge Road/Ted Williams Parkway, as described in the proposed Off-Site Intersection Improvements section, queue spillback is reduced from occurring 40% to 4% of the time and vehicle queues reduce to better than pre-project conditions (as described in Section 8 Project Improvements). **Appendix D** contains the queue analysis worksheets.

Table 16: Horizon Year (2050) Turn Pocket Queues

Turning Movement	Storage (feet)	Peak Hour	Without Project		With Project	
			Maximum Queue (feet)	Exceeds Storage?	Maximum Queue (feet)	Exceeds Storage?
Ted Williams Parkway/Rancho Carmel Drive Southbound Right Turn	260	AM	183	No	199	No
		PM	252	No	254	No
Ted Williams Parkway/Sabre Springs Parkway Eastbound Left Turn	430	AM	177	No	172	No
		PM	291	No	337	No
Ted Williams Parkway/Shoal Creek Drive Eastbound Left Turn	230	AM	116	No	225	No
		PM	**288**	**Yes**	**656**	**Yes**

Source: Fehr & Peers, 2020, based on SimTraffic analysis

8.0 Proposed Off-Site Intersection Improvements

The City of San Diego requires that improvements be considered at intersections and roadways with poor operations with the addition of Project traffic. These were identified in previous sections of this report. The following improvements are recommended to be provided by project to improve operations at these locations. Intersection operations resulting from these improvements are shown in **Table 17** for Opening Year (2025) improvements and **Table 18** for Horizon Year (2050) improvements.

1. Carmel Mountain Road/Rancho Carmel Drive (South) – Carmel Mountain Road and Rancho Carmel Drive are built to their ultimate classifications per the Carmel Mountain Ranch Community Plan. This intersection operates at LOS E during the PM peak hour under Opening Year (2025) With and Without Project conditions and LOS F during the PM peak hour under Horizon Year (2050) With and Without Project conditions. The Project contributes to the delay increase at the intersection. Operations at the intersection can be improved to better than Without Project conditions by adding a southbound right-turn overlap phase during the eastbound left-turn phase. Prohibition of eastbound U-turns will limit access to the southern driveway of The Courtyard at Carmel Mountain Ranch; however, eastbound traffic can still access the shopping center from Rancho Carmel Drive.

12. Ted Williams Parkway/Shoal Creek Drive – With the implementation of a signal at Carmel Ridge Road/Ted Williams Parkway (discussed below), queueing for the eastbound left turn Shoal Creek Drive/Ted Williams improves to No Project conditions in both the AM and PM peak hours. The eastbound left turn queue would be reduced by 378 feet under Horizon Year Plus Project conditions as a result of a shift in eastbound left turn traffic from Shoal Creek Drive/Ted Williams Parkway to Carmel Ridge Road/Ted Williams Parkway.

14. Ted Williams Parkway/Pomerado Road – Ted Williams Parkway is built to its ultimate classification per the Carmel Mountain Ranch Community Plan and City of Poway General Plan. The intersection operates at LOS E under Opening Year (2025) With and Without Project conditions and Horizon Year (2050) With and Without Project conditions. The Project contributes to the delay increase during both the AM and PM peak periods. Operations at the intersection can be improved to better than Without Project conditions with the addition of southbound and eastbound right turn overlap phases. The Ted Williams Parkway/Pomerado Road intersection lies within the City of Poway's jurisdiction. The applicant coordinate with the City of Poway in implementing the proposed mitigation.

22. Carmel Ridge Road/Ted Williams Parkway – The intersection of Carmel Ridge Road at Ted Williams Parkway is configured to provide westbound right-turn in and southbound right-turn out only movements. The southbound right-turn turn operates at LOS E during the AM peak hour under Opening Year (2025) With Project conditions and at LOS F Horizon Year (2050) With Project conditions due to the

heavy westbound through movement along Ted Williams Parkway and the addition of traffic to the southbound right turn. The Carmel Ridge Road intersection is approximately 1,380 feet east of the Shoal Creek Drive signalized intersection and 3,200 feet west of the signalized Highland Ranch Road intersection. Given these distances meet City of San Diego design standards for signalized intersection spacing along a major roadway (1,200 feet), it is recommended the Project install a traffic signal and allow full movements in all directions. The intersection also meets the peak hour signal warrant for the AM peak hour under Opening Year (2025) With Project conditions. The signal warrants are provided in **Appendix H**. Installation of a traffic signal reduces delay to better than Without Project conditions. A cycle length of 120 seconds for the intersection was used for the delay reduction measure analysis. Installation of this signal improves queueing for the eastbound left turn Shoal Creek Drive/Ted Williams Parkway (discussed above).

27. Carmel Mountain Road/Camino Del Norte – The addition of Project traffic at the intersection of Carmel Mountain Road and Camino Del Norte results in an increase in delay of less than two seconds under Opening Year (2025) conditions and Horizon Year (2050) conditions. The intersection operates at LOS E under Without and With Project conditions. Delay can be reduced to better than Without Project conditions by implementing right-turn overlap phases for the southbound right-turns.

Table 17: Opening Year (2025) Improvements

Intersection	Jurisdiction	Control	Peak Hour	Without Project		With Project		With Improvements	
				Delay	LOS	Delay	LOS	Delay	LOS
Addition of Right Turn Overlap Phasing									
1. Carmel Mountain Road/Rancho Carmel Drive (South)	San Diego	Signal	AM	34.4	C	35.9	D	-	-
			PM	**63.3**	**E**	**65.1**	**E**	51.3	D
27. Carmel Mountain Road/Camino Del Norte	San Diego	Signal	AM	**60.6**	**E**	**62.6**	**E**	58.7	D
			PM	49.2	D	51.8	D	-	-
Traffic Signal Installation									
22. Carmel Ridge Road/Ted Williams Parkway (right-in/right-out only)	San Diego	SSSC	AM	34.9	D	**99.1**	**F**	15.6	B
			PM	14.6	B	16.9	C	8.5	A

Notes:
Calculated using methodologies consistent with HCM 6th Edition.
Unacceptable seconds of delay per vehicle and LOS highlighted in **bold**
Worst case movement reported for side street stop-controlled intersections.
AWSC = All Way Stop Control
SSSC = Side Street Stop Control
Source: LLG, 2020 and Fehr & Peers, 2020

Table 18: Horizon Year (2050) Improvements

Intersection	Jurisdiction	Control	Peak Hour	Without Project		With Project		With Improvements	
				Delay	LOS	Delay	LOS	Delay	LOS
Addition of Right Turn Overlap Phasing									
1. Carmel Mountain Road/Rancho Carmel Drive (South)	San Diego	Signal	AM	38.2	D	41.1	D	-	-
			PM	**89.5**	**F**	**92.2**	**F**	**64.9**	**E**
14. Ted Williams Parkway/Pomerado Road	Poway	Signal	AM	**56**	**E**	**60.3**	**E**	43.8	D
			PM	**64.7**	**E**	**69.6**	**E**	**57.8**	**E**
27. Carmel Mountain Road/Camino Del Norte	San Diego	Signal	AM	**67.4**	**E**	**69**	**E**	**64.7**	**E**
			PM	**61.4**	**E**	**63.2**	**E**	**60.9**	**E**
Traffic Signal Installation at Carmel Ridge Road/Ted Williams Parkway									
22. Carmel Ridge Road/Ted Williams Parkway (right-in/right-out only)	San Diego	SSSC	AM	**48.5**	**E**	**160.9**	**F**	14.3	B
			PM	15.6	C	18.3	C	8.2	A

Notes:
Calculated using methodologies consistent with HCM 6th Edition.
Unacceptable seconds of delay per vehicle and LOS highlighted in **bold**
Worst case movement reported for side street stop-controlled intersections.
AWSC = All Way Stop Control
SSSC = Side Street Stop Control
Source: LLG, 2020 and Fehr & Peers, 2020

Table 19: With Project Improvements Turn Pocket Queues

Ramp	Storage (feet)	Peak Hour	Without Improvements		With Improvements		Change
			No Project Maximum Queue (feet)	With Project Maximum Queue (feet)	With Project Maximum Queue (feet)	Exceeds Storage?	
2025							
Ted Williams Parkway/Shoal Creek Drive Eastbound Left Turn	230	AM	71	179	90	No	-89
		PM	**292**	**631**	**296**	**Yes**	-335
Ted Williams Parkway/Carmel Ridge Road Eastbound Left Turn	200	AM	-	-	71	No	-
		PM	-	-	124	No	-
2050							
Ted Williams Parkway/Shoal Creek Drive Eastbound Left Turn	230	AM	116	225	97	No	-128
		PM	**288**	**656**	**278**	**Yes**	-378
Ted Williams Parkway/Carmel Ridge Road Eastbound Left Turn	200	AM	-	-	78	No	**-**
		PM	**-**	**-**	130	No	**-**

Source: Fehr & Peers, 2020, based on SimTraffic analysis

9.0 Pedestrian Mobility

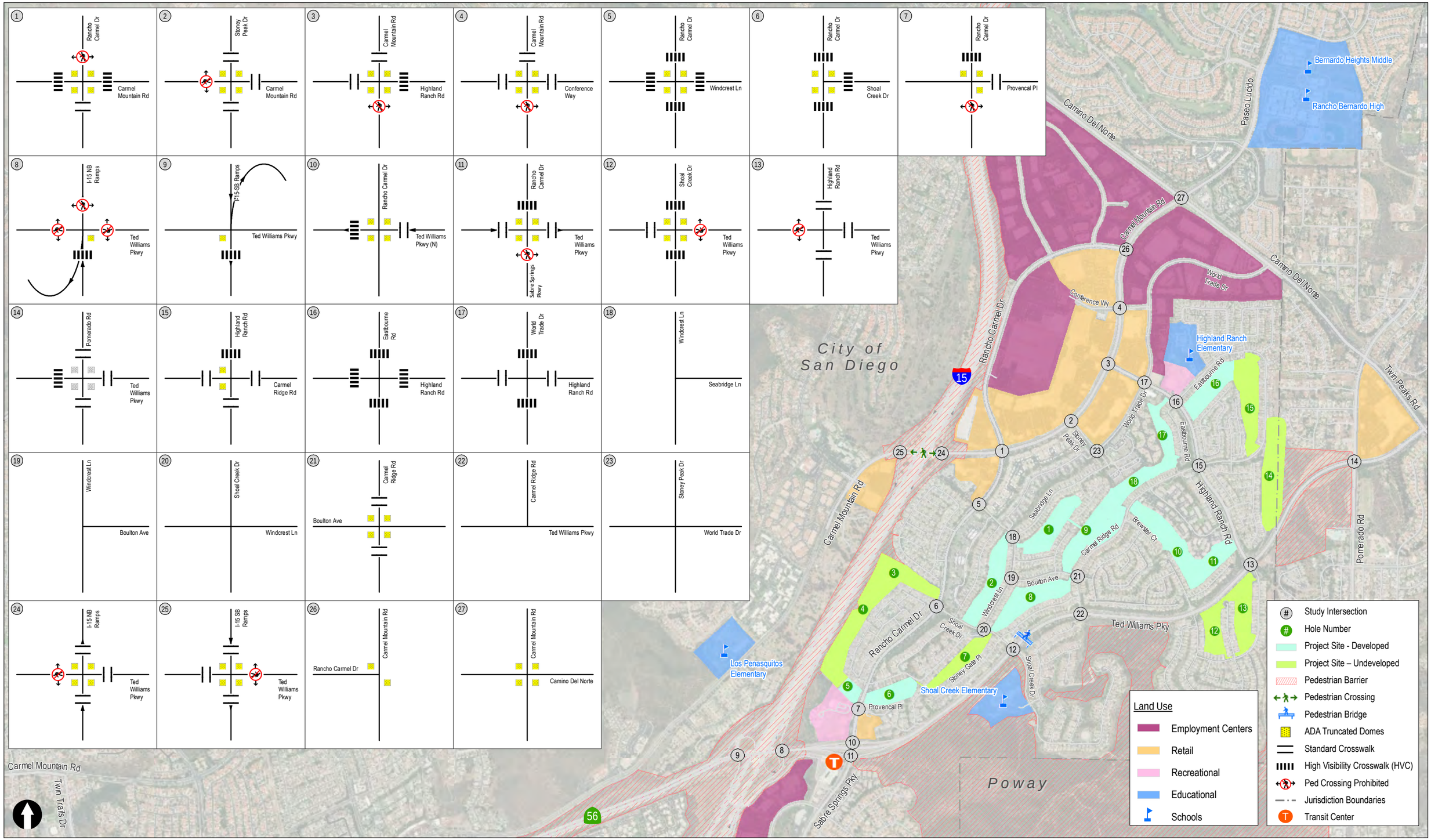
This section provides an overview of pedestrian connectivity within the study area. Existing pedestrian facilities and project improvements are summarized below.

Pedestrian Conditions

The Community of Carmel Mountain Ranch has been fully developed, as it relates to the master planned development outlined in the Carmel Mountain Ranch Community Plan. With development of Carmel Mountain Ranch, a "Bikeway and Trails" plan was provided that outlined the nonvehicular needs of the community. Pedestrian circulation has been master planned to link residences with community facilities, services and open space and to link neighborhoods to one another. A hiking/equestrian trail was provided in the natural open space in the southern portion of the community to provide a connection between proposed trails in the City of Poway and Peñasquitos Canyon. The trail is approximately 15 feet wide and is unpaved.

Pedestrian circulation throughout the study area is mainly provided by contiguous sidewalks. The former golf cart path traverses the site and is utilized as a pedestrian pathway for many existing residents in the area. A pedestrian network inventory was conducted within a ½ mile of the Project, and there is one missing sidewalk section on Tradition Street. The sidewalk appears to not have been constructed on the north side of Tradition Street for the short 350-foot segment because it is adjacent to a steep slope and no homes or destinations are adjacent to the segment due to the grade. However, there is sidewalk on the south side of the street, providing pedestrian connectivity for residents. There are no other missing sidewalks or pedestrian obstacles within ½ mile of the Project.

Figure 13 shows the existing pedestrian network at study intersections.



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Figure 13

Existing Pedestrian Network

Existing Pedestrian Activity

Existing pedestrian activity was documented at each intersection in the Project study area during the commuter AM/PM peak hours consistent with vehicular volume data collection on Thursday, February 7, Tuesday, September 17, Tuesday, October 1, and Wednesday December 11, 2019., Existing pedestrian activity at study intersections was tabulated for both AM and PM peak hours and categorized as low, medium, or high activity. **Figure 14** shows the existing pedestrian activity in and around the study area for each of the peak hours.

The following intersections were observed as "high" pedestrian activity (having more than 30 pedestrians in an hour) locations within the area

- 7. Rancho Carmel Drive/Provencal Place (PM peak Hour)
- 16. Highland Ranch Road/Eastbourne Road (AM & PM peak hours)
- 17. Highland Ranch Road/World Trade Drive (AM & PM peak hours)
- 23. Stoney Peak Drive/World Trade Drive (AM peak hour)

Figure 15 shows the ½-mile walkshed from the Project (inclusive of the center point of all Project units) and the missing sidewalks within the walkshed. As shown, there is no sidewalk along an approximately 350-foot segment on the north side of Tradition Street, west of Essence Road. Aside from this location there are no sidewalk gaps within a ½-mile walk. There are no existing curb ramp deficiencies along public roadways adjacent to the Project site.

Proposed Pedestrian Improvements

The Project will only affect existing pedestrian facilities at proposed project driveways and access points. All project access points will be designed in accordance with City standards to provide safe, effective, and ADA compliant pedestrian crossings and connections to internal Project facilities. There are no additional proposed pedestrian improvements along public roadways. Pedestrian-related facilities internal to the Project Site are summarized in **Section 12**.

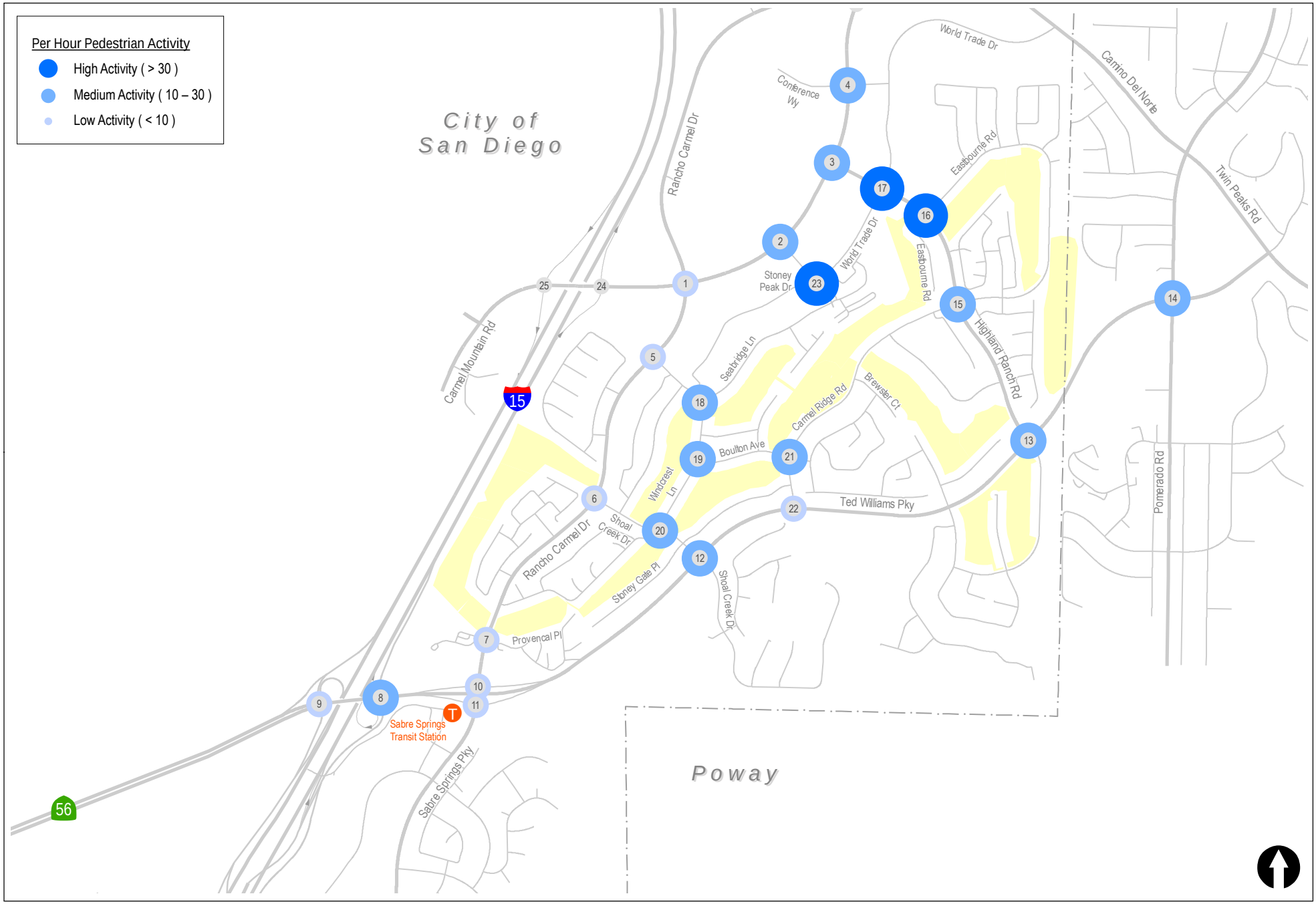


Figure 14a

Existing Pedestrian Activity (AM Peak Hour)

(Page 1 of 2)

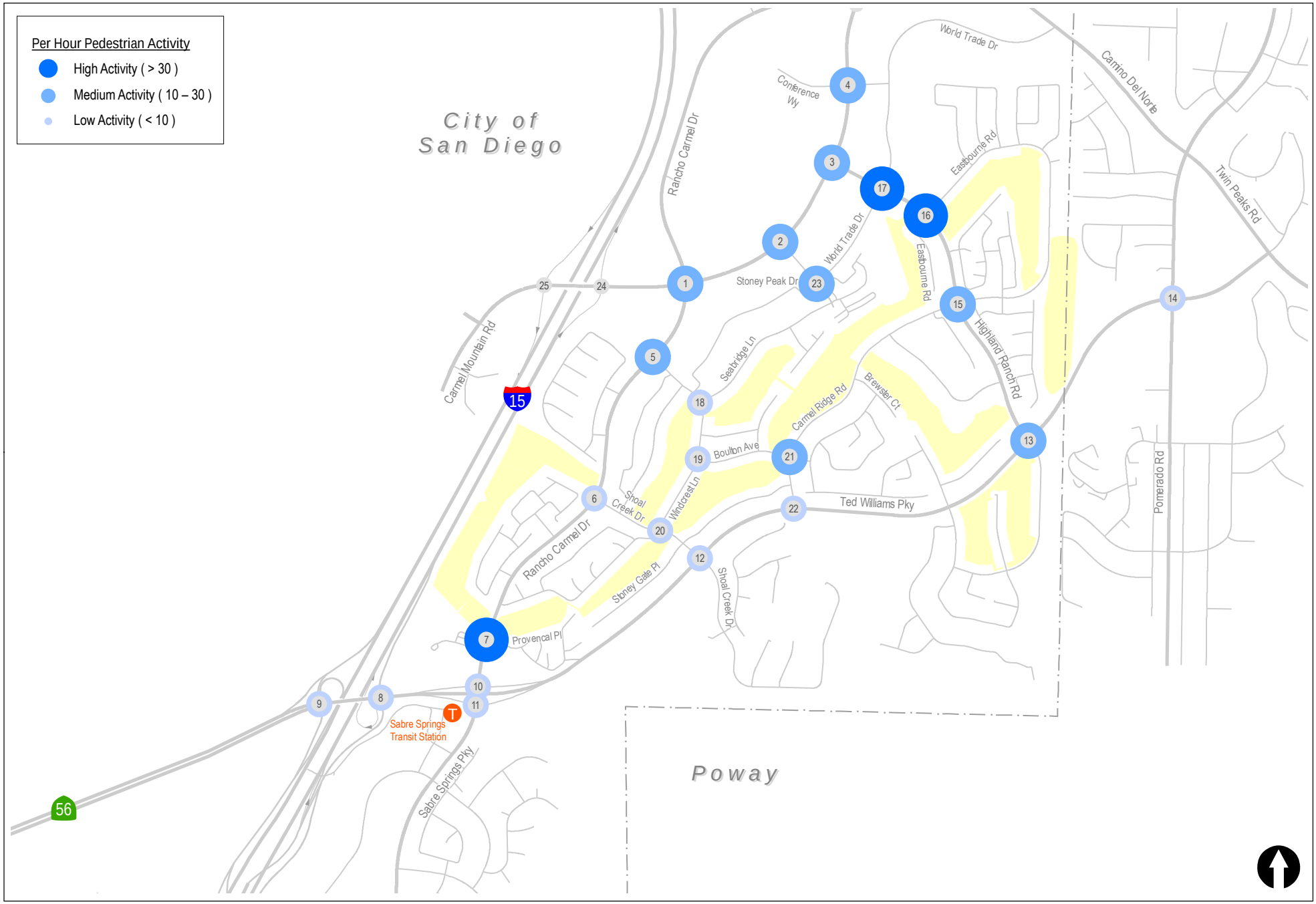
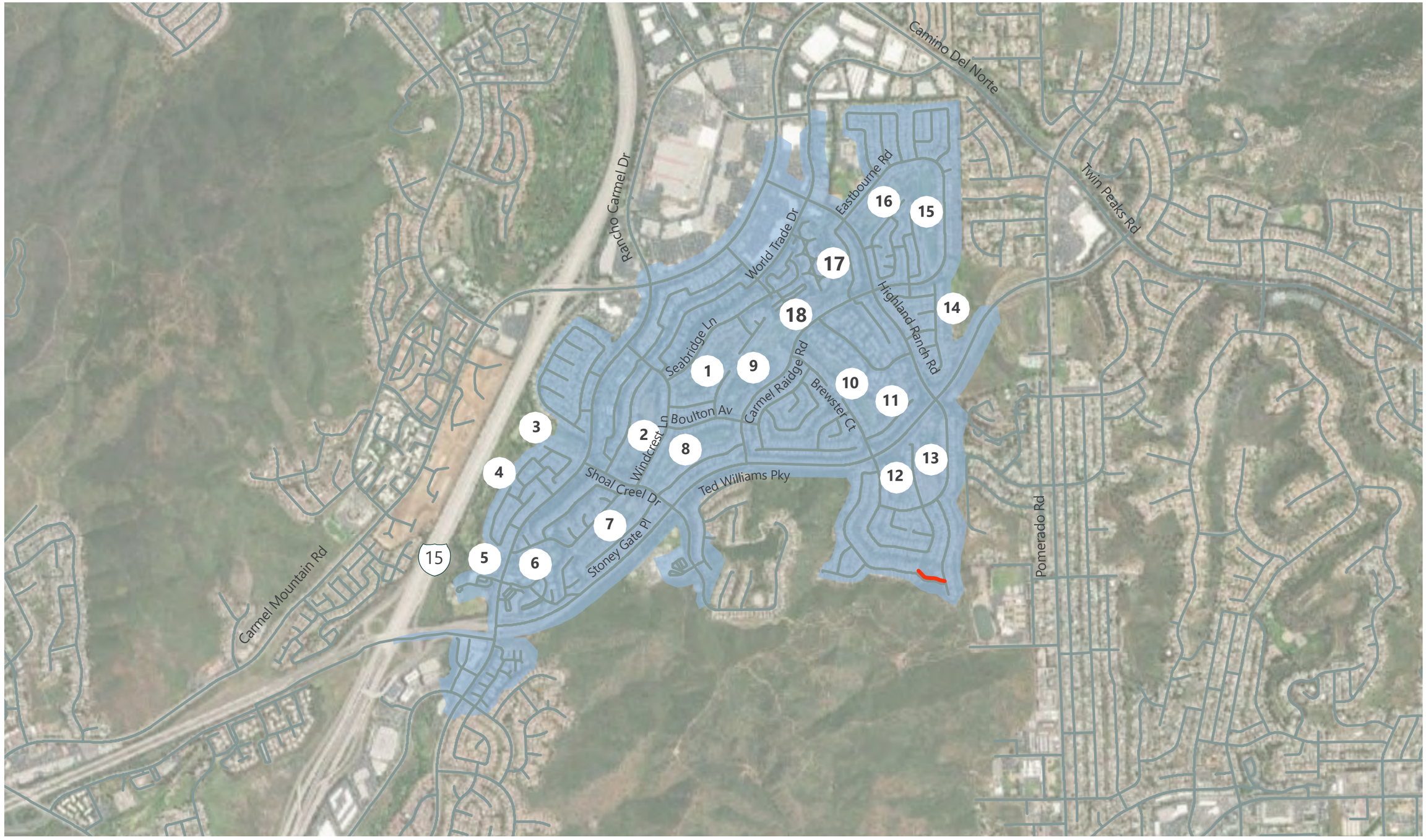


Figure 14b

Existing Pedestrian Activity (PM Peak Hour)

(Page 2 of 2)



*All roadways in the 1/2-mile walkshed provide sidewalk facilities on both sides of the road unless marked with red as a segment missing sidewalks

LEGEND

- Missing Sidewalks*
- # Building Number
- 1/2-Mile Walkshed

0 0.25 0.50 1.00 Miles

Figure 15
Existing Pedestrian Facilities and Walkshed

10 Bicycle Mobility

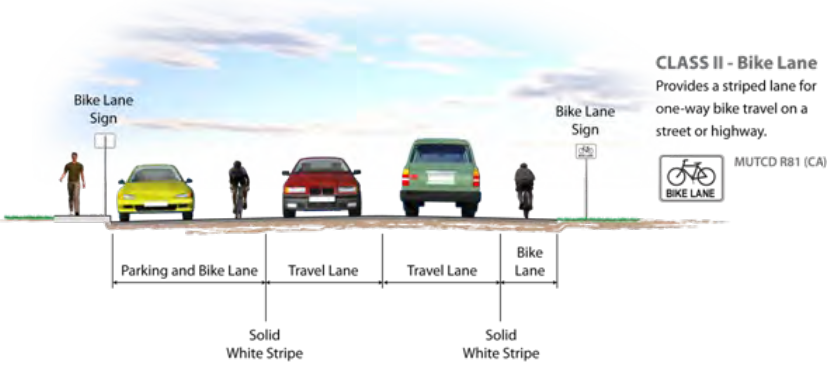
The *City of San Diego Bicycle Master Plan*, the *City of San Diego General Plan – Mobility Element*, the *SANDAG Regional Bike Plan*, and the *Carmel Mountain Ranch Community Plan* establish guidelines for a safe, comprehensive local and regional bikeway network. Bicycle facilities are discussed in the City of San Diego Street Design Manual. The Street Design Manual indicates that the minimum standards are established by Caltrans, Highway Design Manual, CA MUTCD, and AASHTO Guide for the Development of Bicycle Facilities.

Bicycle Classifications

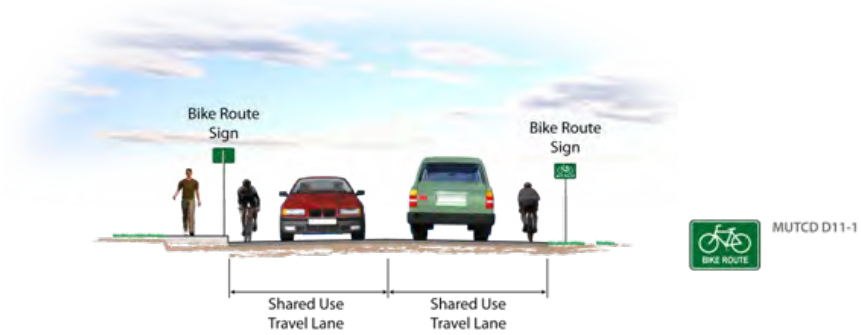
Bicycle facilities generally consist of four types of facilities, which are outlined below:

- *Class I Bike or Shared Use Paths* provide a separate right-of-way and are designated for the exclusive use of bicycles and pedestrians (or exclusively bicycles) with vehicle and pedestrian cross-flow minimized. Generally, the recommended pavement width for a two-directional bike or multi-use path is 10 feet for bicycle only and 12 feet for multi-use.

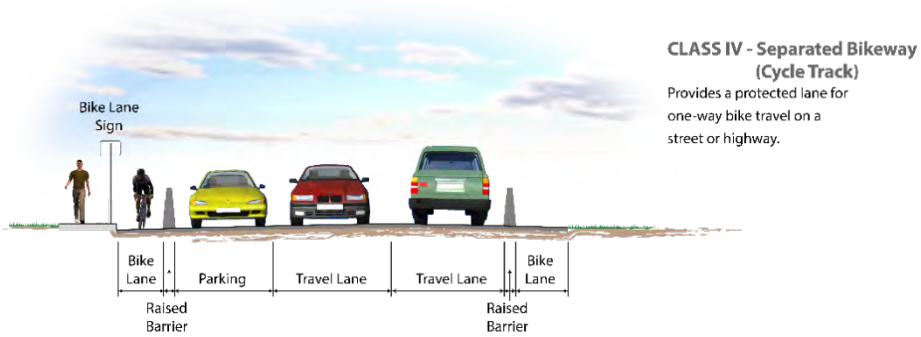
Class II Bike Lanes provide a restricted right-of-way and are designated for the use of bicycles with a striped lane on a street or highway. Bicycle lanes are generally 6 (six) feet wide. Adjacent vehicle parking and vehicle/pedestrian cross-flow are permitted. Where right-of-way allows, the City Street Design Manual indicates buffered bicycle lanes (2 (two) foot buffer) on urban collector, urban major, and primarily arterial roadways.



- *Class III Roadways* provide for a right-of-way designated by signs or shared lane pavement markings, or "sharrows," for shared use with motor vehicles.



- *Class IV Separated Bikeways or Cycle Tracks* provide a restricted right-of-way with physical separation and are designated for the use of bicycles in or directly adjacent to a roadway with a raised barrier such as curbs or bollards. One-way separated bikeways are typically at least five (5) feet wide with a minimum three (3) foot minimum horizontal separation from an adjacent vehicle parking or travel lane. Two-way facilities should be 10 (ten) feet wide with three (3) feet of horizontal separation. Adjacent vehicle parking is permitted, and vehicle/pedestrian cross-flow is restricted to selected locations (e.g., driveways) indicated by breaks in the barrier and buffer.



Bicycle Conditions

As stated in the Pedestrian Mobility section of this report, the Community of Carmel Mountain Ranch has been fully developed, as it relates to the master planned development outlined in the Carmel Mountain Ranch Community Plan. With development of Carmel Mountain Ranch, a "Bikeway and Trails" plan was provided that outlined the non-vehicular needs of the community. Bicycle circulation has been master planned to link residences with community facilities, services, open space, and adjacent neighborhoods. Class II bike lanes on select roadways (Carmel Mountain Road, Ted Williams Parkway, Rancho Carmel Drive), have been planned for and provided. ~~These are non-buffered bike lanes.~~

A detailed bicycle network inventory was conducted for the surrounding study area. **Table 20** summarizes the existing bicycle facility classifications found on the study street segments. As shown in **Table 19** all

roadway bicycle facilities are built to their planned designation and no additional improvements are planned. There are no gaps in existing bicycle facilities.

Figure 16 shows the existing bicycle facilities in the Project study area.

Table 20: Existing and Future Bike Facilities

Roadway Segment	Jurisdiction	Existing	Future	Planned Improvements By Others?
Ted Williams Parkway				
1. I-15 to Rancho Carmel Drive (south side)	San Diego	Class I Multi-Use Path	Class I Multi-Use Path	No
2. Rancho Carmel Drive to Shoal Creek Drive	San Diego	Class II Bike Lane	Class II Bike Lane	No
3. Shoal Creek Drive to Carmel Ridge Road	San Diego	Class II Bike Lane	Class II Bike Lane	No
4. Carmel Ridge Road to Highland Ranch Road	San Diego	Class II Bike Lane	Class II Bike Lane	No
5. Highland Ranch Road to Pomerado Road	Poway	Class II Bike Lane	Class II Bike Lane	No
6. Pomerado Road to Twin Peaks Road	Poway	Class II Bike Lane	Class II Bike Lane	No
Rancho Carmel Drive				
7. Carmel Mountain (North) to Ted Williams Parkway	San Diego	Class II Bike Lane	Class II Bike Lane	No
8. Ted Williams Parkway to Provencal Place	San Diego	Class II Bike Lane	Class II Bike Lane	No
9. Provencal Place to Shoal Creek Drive	San Diego	Class II Bike Lane	Class II Bike Lane	No
10. Shoal Creek Drive to Windcrest Lane	San Diego	Class II Bike Lane	Class II Bike Lane	No
11. Windcrest Lane to Carmel Mountain Road	San Diego	Class II Bike Lane	Class II Bike Lane	No
12. Carmel Mountain Road to Shopping Center Driveways	San Diego	Class II Bike Lane	Class II Bike Lane	No
Carmel Mountain Road				
13. Peñasquitos Drive to I-15	San Diego	Class II Bike Lane	Class II Bike Lane	No
14. I-15 to Rancho Carmel Drive	San Diego	Class II Bike Lane	Class II Bike Lane	No
15. Rancho Carmel Drive to Stoney Peak Drive	San Diego	Class II Bike Lane	Class II Bike Lane	No
16. Stoney Peak Drive to Highland Ranch Road	San Diego	Class II Bike Lane	Class II Bike Lane	No
17. Highland Ranch Road to Conference Way	San Diego	Class II Bike Lane	Class II Bike Lane	No
18. Conference Way to Rancho Carmel Drive	San Diego	Class II Bike Lane	Class II Bike Lane	No
19. Rancho Carmel Drive to Camino Del Norte	San Diego	Class II Bike Lane	Class II Bike Lane	No
Highland Ranch Road				
20. Carmel Mountain Road to World Trade Drive	San Diego	Class II Bike Lane	Class II Bike Lane	No
21. World Trade Drive to Eastbourne Road	San Diego	Class II Bike Lane	Class II Bike Lane	No
22. Eastbourne Road to Carmel Ridge Road	San Diego	Class II Bike Lane	Class II Bike Lane	No

Roadway Segment	Jurisdiction	Existing	Future	Planned Improvements By Others?
23. Carmel Ridge Road to World Trade Drive	San Diego	Class II Bike Lane	Class II Bike Lane	No
Stoney Peak Drive				
24. Carmel Mountain Road to World Trade Drive	San Diego	N/A	N/A	No
World Trade Drive				
25. Stoney Peak Drive to Highland Ranch Road	San Diego	N/A	N/A	No
26. Highland Ranch Road to Conference Way	San Diego	N/A	N/A	No
Pomerado Road				
27. North of Ted Williams Parkway	Poway	Class II Bike Lane	Class II Bike Lane	No
28. 2South of Ted Williams Parkway	Poway	Class II Bike Lane	Class II Bike Lane	No
Shoal Creek Drive				
29. Rancho Carmel Drive to Windcrest Lane	San Diego	N/A	N/A	No
30. Windcrest Lane to Ted Williams Parkway	San Diego	N/A	N/A	No
Windcrest Lane				
31. Rancho Carmel Drive to Seabridge Lane	San Diego	N/A	N/A	No
32. Seabridge Lane to Boulton Avenue	San Diego	N/A	N/A	No
33. Boulton Avenue to Shoal Creek Drive	San Diego	N/A	N/A	No
Boulton Avenue				
34. Windcrest Lane to Carmel Ridge Road	San Diego	N/A	N/A	No
Seabridge Lane				
35. Windcrest Lane to Stoney Peak	San Diego	N/A	N/A	No
Eastbourne Road				
36. North of Highland Ranch Road	San Diego	N/A	N/A	No
37. South of Highland Ranch Road	San Diego	N/A	N/A	No
Carmel Ridge Road				
38. Ted Williams Parkway to Boulton Avenue	San Diego	N/A	N/A	No
39. Boulton Avenue to Highland Ranch Road	San Diego	N/A	N/A	No

Notes:
Source: LLG, 2020.

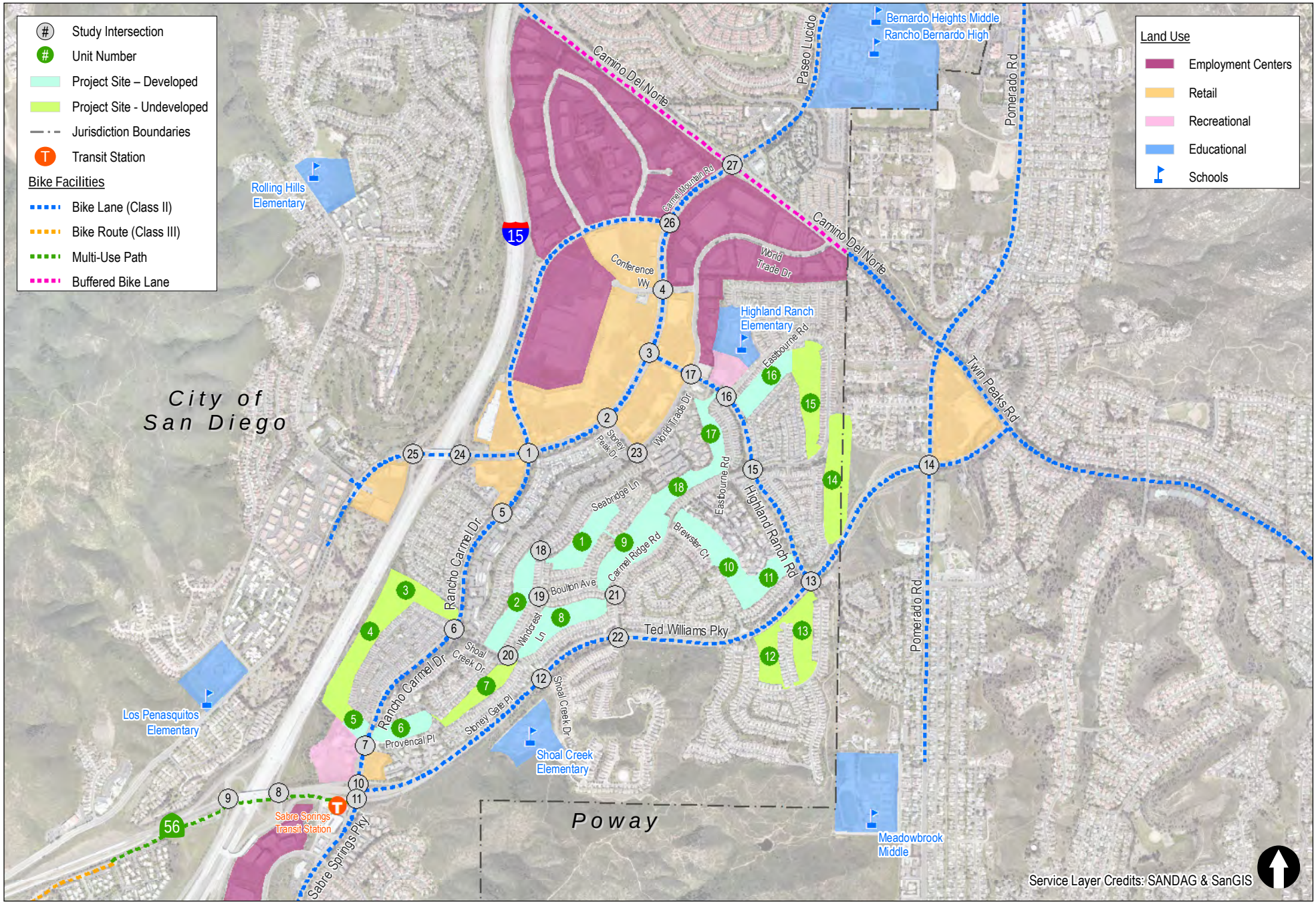


Figure 16

Existing Bicycle Network

Existing Bicycle Activity

Existing bicycle activity was documented at every intersection in the Project study area during the commuter AM/PM peak hours on the same day the vehicular volume data was collected for each street segment (Thursday, February 7, Tuesday, September 17, Tuesday, October 1, or Wednesday December 11, 2019. AM and PM bicycle activity at each was categorized as low, medium, or high.

Figure 17 shows the existing bicycle activity in and around the study area for AM and PM peak hours.

The following intersection was observed as a "high" bicycle activity location within the area because there were more than 10 bicyclists during the peak hours, which was found to be the close to the upper limit of observed peak hour bicycle counts at any one intersection during the peak hours.

- 14. Ted Williams Parkway/Pomerado Road (AM/PM peak hour)

Figure 18 shows the 1-mile bikeshed from the Project and the existing and planned bicycle facilities within the bikeshed. As shown, all primary roadways within a 1-mile bikeshed of the Project have either a Class I or Class II bicycle facility along them. Additional bicycle facilities are planned along other roadways within a 1-mile bikeshed and are described below.

Proposed Bicycle Improvements

All planned bicycle facilities per the Community Plan and Bicycle Master Plan have been implemented except the following:

- Eastbourne Road between Waverly Downs Way and Highland Ranch Road: Class I Shared Use Path
- World Trade Drive between Camino Del Norte/Twin Peaks Road and Stoney Peak Drive: Class III Bike Route
- Stoney Peak Drive between World Trade Drive and Seabridge Lane: Class III Bike Route
- Windcrest Lane between Seabridge Lane and Shoal Creek Drive: Class III Bike Route
- Shoal Creek Drive between Rancho Carmel Drive and Ted Williams Parkway: Class III Bike Route

The Project is not anticipated to generate enough bicycle demand to warrant additional upgrades to existing or planned facilities.

Improvements to internal bicycle circulation are summarized in **Section 12**. A map of the existing and proposed bicycle facilities from the San Diego Bicycle Master Plan is provided in **Appendix I**.

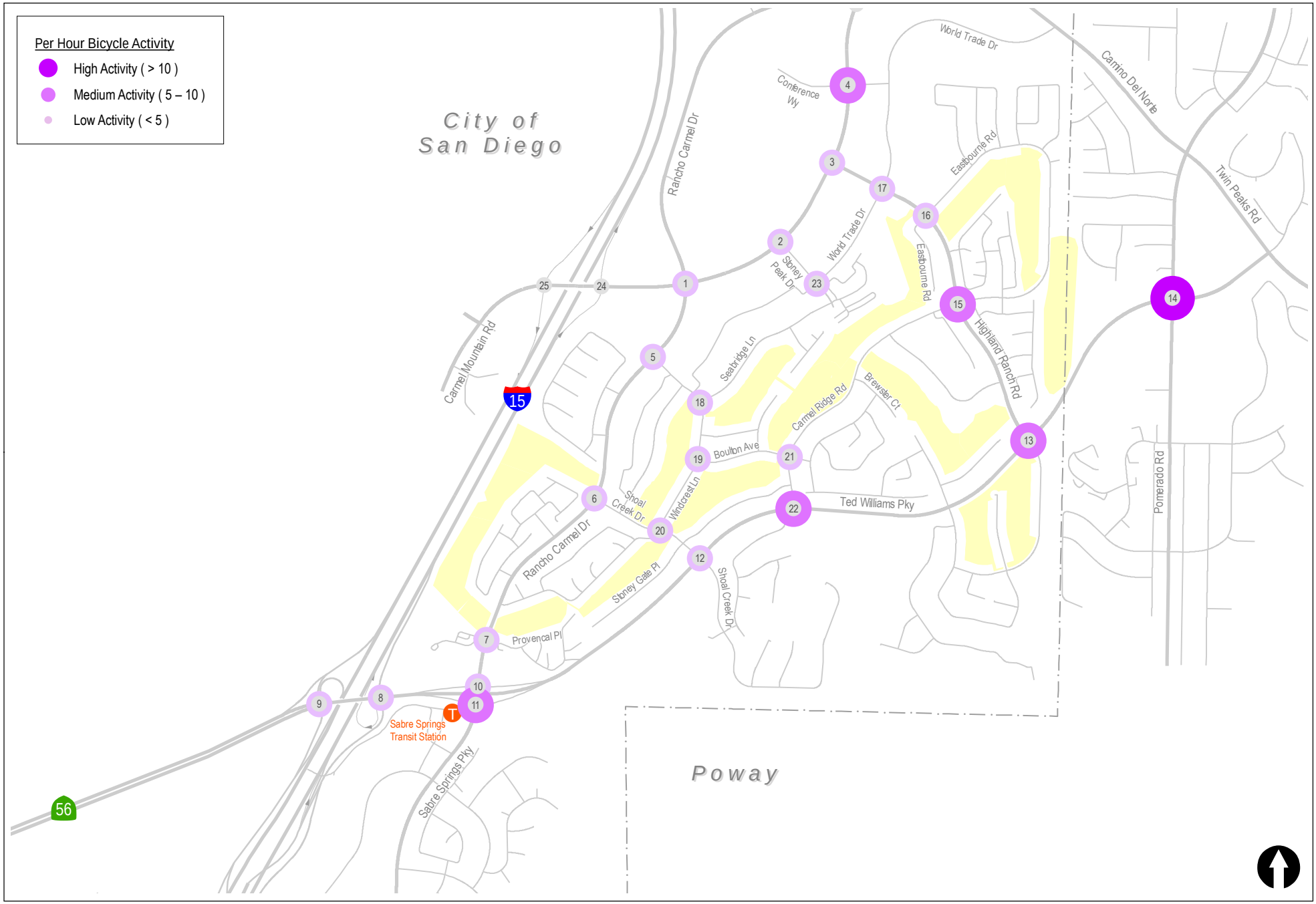


Figure 17a

Existing Bicycle Activity (AM Peak Hour)

(Page 1 of 2)

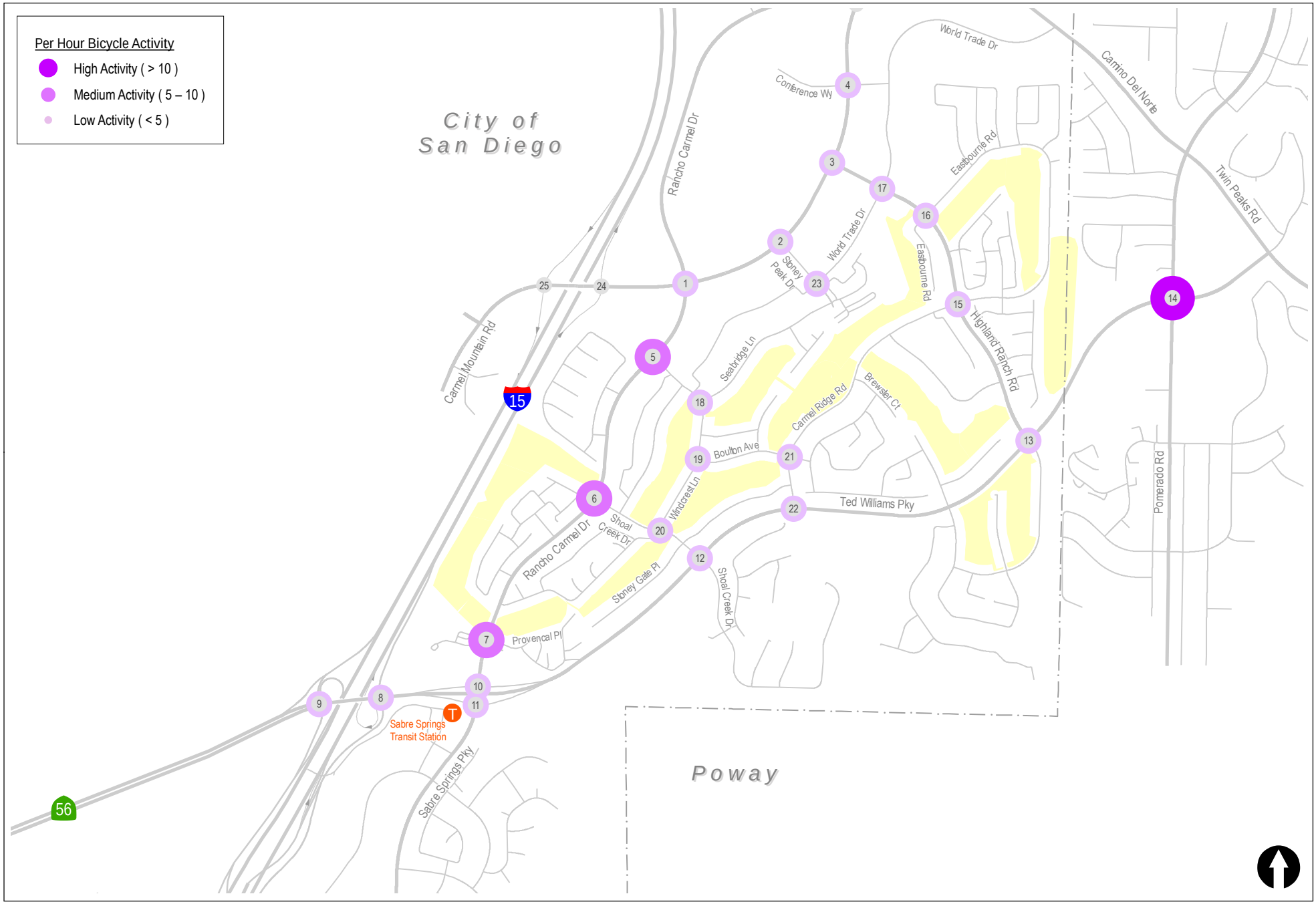
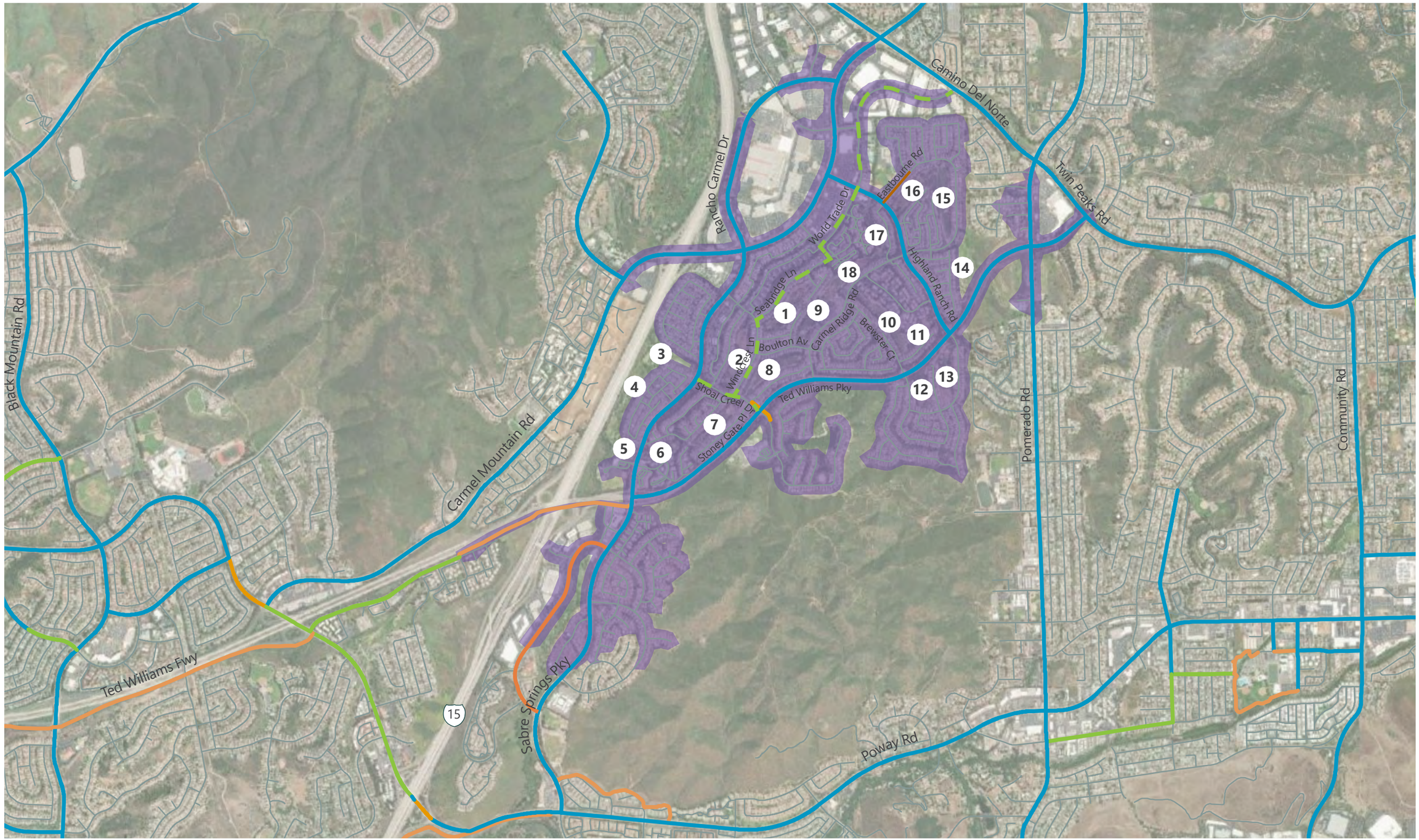


Figure 17b

Existing Bicycle Activity (PM Peak Hour)

(Page 2 of 2)



LEGEND

Existing Bike Facilities
- Multi-Use Path
- Bike Lane
- Bike Route
- Other Suggested Routes

Planned Bike Facilities
- Bike Route

(#) Building Number

1-Mile Bikeshed

0 0.25 0.50 1.00 Miles

Figure 18
Existing and Planned Bicycle Facilities and Bikeshed

11.0 Transit Facilities

This section provides an overview of existing and future transit services and amenities. Potential improvements are also discussed.

Existing Transit Conditions

The San Diego Metropolitan Transit System (MTS) provides bus transit within the Project area. Regional transit services including MTS Rapid and Express bus routes serve the Sabre Springs/Peñasquitos Transit Station and local bus routes provide service to several bus stops along Carmel Mountain Road. Bus transit in the study area is categorized in following classifications:

- **MTS Bus** – is the main type of bus service that is provided by MTS in San Diego area. MTS Bus provides service at different headways depending on the demand and location. The Project area is currently served by MTS Bus routes 20 and 944 with 30-minute headway on weekdays.
- **MTS Express** – are high frequency bus services that have 15-minute headways during peak and non-peak hours. No Express Routes are provided in the area.
- **MTS Rapid** – are high frequency bus services that have 15-minute headways during peak and non-peak hours and provides riders with improved wait time and enhanced comfort and convenience. Route 235 is an MTS Rapid route.
- **MTS Rapid Express/Premium** – operates along the I-15 corridor during weekdays. It provides frequent trips south in the morning (5:00-9:00 AM) and north in the evening (3:00-7:00 PM). Express routes have 15-minute headways during peak and non-peak hours and usually take up to 45 minutes to an hour to get from departure to the final destination. Route 290 is an MTS Rapid Express route.

The closest stops to the project site are located on Carmel Mountain Road, with stops at the Rancho Carmel Drive, Stoney Peak Drive and Highland Ranch Road intersections.

Transit Centers

Transit centers (or hubs) are the interchange of various transit routes and travel modes. The following transit center is in the study area. A brief description is provided below:

Sabre Springs/Peñasquitos Transit Center – mainly serves MTS networks. Routes include MTS route 235, 290, and 944.

Figure 19 shows existing transit centers and transit routes serving the study area. A more detailed overview of existing transit services is included in **Table 20**.

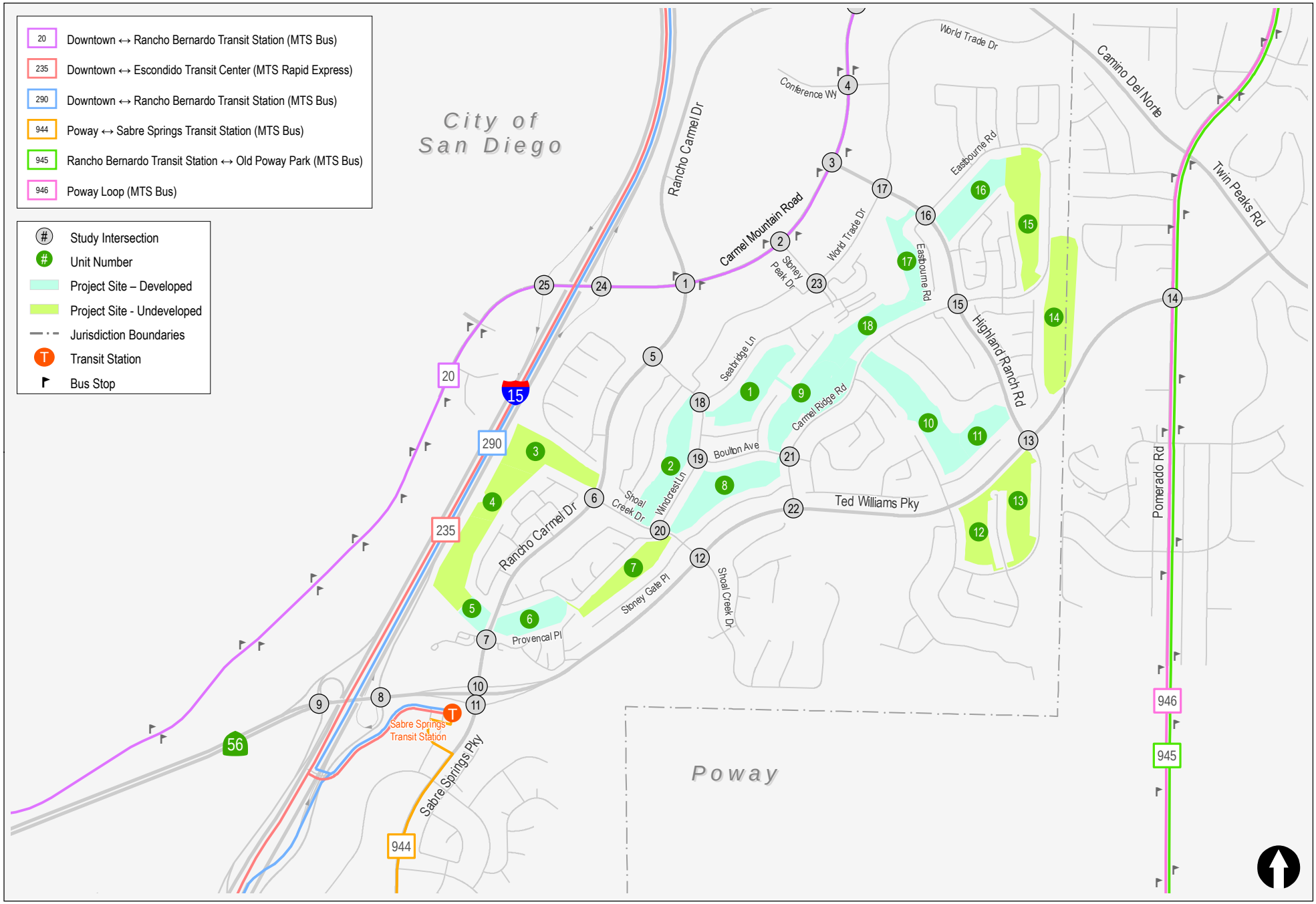


Figure 19

Existing Transit Network

The Trails at Carmel Mountain Ranch

Route Summaries

Table 21 summarizes the various routes in the Project study area. As mentioned above, the routes serving the Project study area are MTS Routes 20, 944, 235 and 290

Table 21: Summary of Bus Routes in Project Vicinity

Route #	Type	Description	Study Area Stops	Weekday		Weekend	
				Service Span[1]	Frequency[2]	Service Span	Frequency
20	Bus	Downtown to Rancho Bernardo Station via Fashion Valley	Carmel Mountain Road at Rancho Carmel Drive, Stoney Peak Road, and Highland Ranch Road	5 AM – 9 PM	30 mins	6 AM – 9 PM	1 hour
944[3]	Bus	Sabre Springs/Peñasquitos Transit Station to Hileary Place (Walmart Station- Poway)	Sabre Springs/Peñasquitos Transit Station	5 AM – 7:30 PM	30 mins	6 AM – 7 PM	1 hour
235	Rapid	Escondido to Downtown via I-15	Sabre Springs/Peñasquitos Transit Station	5 AM – 11 PM	15 mins	5 AM – 11 PM	30 mins
290	Rapid Express	Rancho Bernardo Transit Station to Downtown San Diego via I-15	Sabre Springs/Peñasquitos Transit Station	5 AM – 6:45 PM	15 mins	None	None

[1] Service span is approximate, varies by direction of travel and stop location
[2] Typical approximate frequency throughout service day. May be less frequent during evening hours
[3] Route 944 does not operate on Sundays
Mins = minutes
Service span timeframes are approximate based on information obtained from the MTS website, December 2019
Source: LLG, 2020

Transit Mobility Review

In this section, pedestrian access from the Project site to nearby bus stations is evaluated. The MTS Route 20 is served by existing bus stops along Carmel Mountain Road. The Sabre Springs/Peñasquitos Transit Station is served by MTS Routes 235, 290, and 944. Existing ridership was provided by SANDAG. The Fiscal Year 2019 daily ridership data obtained for each route is shown in **Table 22**.

Table 22: Daily Passenger Boardings

Study Area Bus Stop/Location	Daily Passenger Boardings	
	Northbound	Southbound
Carmel Mountain Road/Rancho Carmel Drive (South)	5	11
Carmel Mountain Road/Stoney Peak Drive	11	33
Carmel Mountain Road/Highland Ranch Road	9	11
Carmel Mountain Road/Conference Way	3	8
Carmel Mountain Road/Rancho Carmel Drive (North)	-	10
Sabre Springs/Penasquitos Transit Station	180	450

Daily boardings provided by SANDAG, FY 2019
Source: LLG, 2020

Amenities at the stops identified within the Project study area were reviewed, although not all stops (particularly along Carmel Mountain Road) are within ½ mile walking distance of the Project site. Most stops are within the one-mile bikeshed. Amenities were identified based on the MTS Design for Transit – A Manual for Integrating Public Transportation and Land Development in the San Diego Metropolitan Area (February 2018). A summary of amenities at transit stations in the study area is provided in **Table 23**.

Table 23: Amenities at Bus Stations Within Project Walkshed & Bikeshed

Feature	Design Standard	Location					Design Standard	Location
	<50 Daily Boardings	Carmel Mountain Road/Rancho Carmel Drive (S)	Carmel Mountain Road/Stoney Peak Drive	Carmel Mountain Road/Highland Ranch Road	Carmel Mountain Road/Conference Way	Carmel Mountain Road/Rancho Carmel Drive (N)	201-500 Daily Boardings	Sabre Springs/Peñasquitos Transit Station
Sign and Pole	S	Yes	Yes	Yes	Yes	Yes	S	Yes
Built-In Sign	-	No	No	No	No	No	O	No
Expanded Sidewalk	O	Yes	Yes	Yes	Yes	Yes	S	Yes
ADA Accessible	S	Yes	Yes	Yes	Yes	Yes	S	Yes
Seating	O	Yes	Yes	Yes	Yes	Yes	S	Yes
Passenger Shelter	O	No	Yes (SB)	No	No	No	S	Yes
Route Designations	S	Yes	Yes	Yes	Yes	Yes	S	Yes
Schedule Display	O	No	No	No	No	No	S	Yes
Route Map	O	No	Yes (SB)	No	No	No	O	Yes
System Map	-	No	No	No	No	No	O	No
Trash/Recycling Receptacle	O	No	Yes (SB)	Yes	No	No	S	Yes
Real Time Digital Display	-	No	No	No	No	No	O	No
Bus Pads (street)*	*	Yes	No	No	No	No	*	Yes
Red Curbs	S	Yes	Yes	Yes	Yes	Yes	S	Yes

Notes: S=Standard, O=Optional, *=Required for stops with four or more busses per hour,-=Not Applicable,
Source: LLG

As shown in **Table 23**, all bus stops provide at least the standard amenities.

Transit Movement LOS

MTS Route 20 travels through seven study intersections along Carmel Mountain Road. Delay per vehicle was examined by movement and by direction to determine whether the addition of Project traffic caused an unacceptable additional delay to transit vehicles.

Table 24 and **Table 25** show the delay for the intersection movements for Bus 20, as well as the total delay experienced by the buses along Carmel Mountain Road during weekday peak hours. While Project traffic is added to movements accommodating transit which operate at LOS E or LOS F under Without Project conditions the additional delay along Carmel Mountain Road within the study area (sum of applicable movement delays at all seven intersections) experienced by transit vehicles is no more than 32 seconds. This additional delay over approximately 1.5 miles is negligible given the variation in typical daily bus schedules. Movement delays and Synchro analysis results can be found in **Appendix D.**

Recommended Transit Improvements

Based on the review of the transit network and transit needs assessment, there are no transit facilities planned within the Community of Carmel Mountain Ranch. The preceding section reviewed existing transit services and infrastructure within the vicinity of the Project and identified that all MTS bus stops located nearest to the site provide at least the standard amenities. The ridership data indicates the bus stops in the Project vicinity provide the standard amenities. No improvements are recommended.

Table 24: AM Transit Movement Delay

Intersection	Without Project				With Project				Change	
	NB/EB		SB/WB		NB/EB		SB/WB		NB/EB	SB/WB
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS		
1. Carmel Mountain Road/Rancho Carmel Drive (South)	17.3	B	32.5	C	19	B	32	C	1.7	-0.5
2. Carmel Mountain Road/Stoney Peak Drive	0.2	A	8.6	A	0.3	A	9	A	0.1	0.4
3. Carmel Mountain Road/Highland Ranch Road	19.2	B	0.2	A	22.2	C	0.2	A	3	0
4. Carmel Mountain Road/Conference Way	0.3	A	29.4	C	0.3	A	29.7	C	0	0.3
24. Carme Mountain Road/I-15 NB Ramps	1.5	A	42.7	D	1.6	A	43.4	D	0.1	0.7
25. Carmel Mountain Road/I-15 SB Ramps	19.5	B	0.1	A	20	B	0.1	A	0.5	0
26. Carmel Mountain Road/Rancho Carmel Drive (North)	0.1	A	7.3	A	0.1	A	7.4	A	0	0.1
27. Carmel Mountain Road/Camino Del Norte	103.7	F	88	F	130	F	92.2	F	26.3	4.2
Corridor Delay	161.8		208.8		193.5		214		31.7	5.2

Notes: Units for delay are seconds/vehicle. LOS and delay are for only the intersection movement serving transit.
Source: Fehr & Peers, 2020. Based on analysis results by LLG.

Table 25: PM Transit Movement Delay

Intersection	Without Project				With Project				Change	
	NB/EB		SB/WB		NB/EB		SB/WB		NB/EB	SB/WB
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS		
1. Carmel Mountain Road/Rancho Carmel Drive (South)	40.2	D	56	E	45.6	D	57.6	E	5.4	1.6
2. Carmel Mountain Road/Stoney Peak Drive	0.6	A	25.9	C	0.5	A	26.7	C	-0.1	0.8
3. Carmel Mountain Road/Highland Ranch Road	22.3	C	0.4	A	25.1	C	0.4	A	2.8	0
4. Carmel Mountain Road/Conference Way	11	B	3	A	11.3	B	3.4	A	0.3	0.4
24. Carmel Mountain Road/I-15 NB Ramps	0.2	A	104.8	F	0.2	A	109.6	F	0	4.8
25. Carmel Mountain Road/I-15 SB Ramps	53.8	D	0.1	A	54.7	D	0.1	A	0.9	0
26. Carmel Mountain Road/Rancho Carmel Drive (North)	0.3	A	22	B	0.3	A	22.4	C	0	0.4
27. Carmel Mountain Road/Camino Del Norte	78.2	E	59.2	E	86.2	E	72.1	F	8	12.9
Corridor Delay	206.6		271.4		223.9		292.3		17.3	20.9

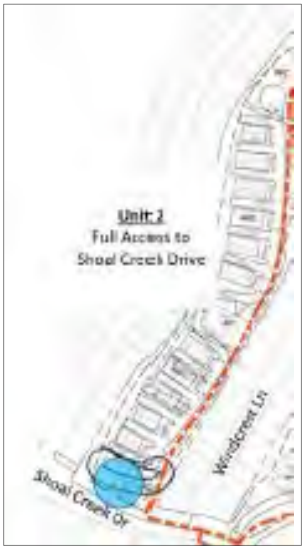
Notes: Units for delay are seconds/vehicle. LOS and delay are for only the intersection movement serving transit.
Source: Fehr & Peers, 2020. Based on analysis results by LLG.

12.0 Site Access and Circulation

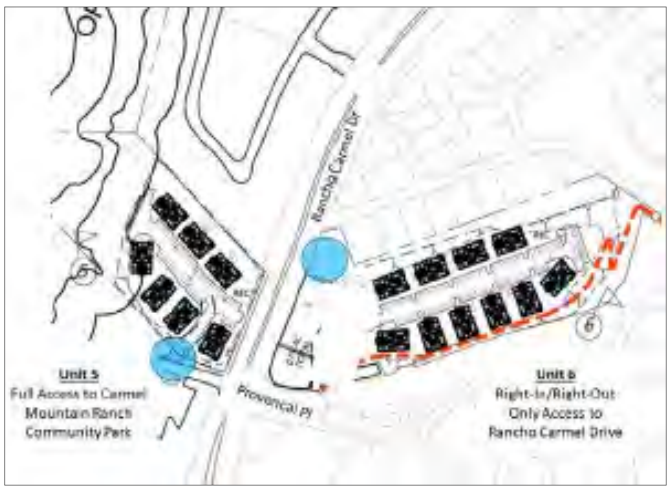
As mentioned throughout this report, the Project is sited throughout the non-contiguous 18 holes of the former golf course and entails the development of 11 of 18 holes (combined into nine units). Individual units will take vehicular access via driveways to the existing street system surrounding the golf course. Individual access for each unit is described in detail below.

Proposed Site Access

Unit 1 (66 Townhomes): A full access unsignalized driveway is proposed on Windcrest Lane. General distribution of Project trips from Unit 1 sends 47% to the north toward Rancho Carmel Drive and 53% south on Windcrest Lane to Ted Williams Parkway. Per the project's civil engineer, Project Design Consultants, the Unit 1 driveway will be designed to meet City sight distance and design standards.



Unit 2 (87 Townhomes): A full access unsignalized driveway is proposed on Shoal Creek Drive. General distribution of Project trips from Unit 2 sends 59% north on Shoal Creek Drive to Rancho Carmel Drive and 41% south toward Ted Williams Parkway. Per the project's civil engineer, Project Design Consultants, the Unit 2 driveway will be designed to meet City sight distance and design standards.



Unit 5 (78 Affordable Apartments): A right-turn in/out only access is proposed on Rancho Carmel Drive north of the Ranch Carmel Drive/Provencal Place intersection. General distribution of Project trips from Unit 5 sends 42% north on Rancho Carmel Drive and 58% south. Per the project's civil engineer, Project Design Consultants, the Unit 5 driveway will be designed to meet City sight distance and design standards.

Unit 6 (128 Mixed Market Rate & Affordable Apartments): A right-turn in/out only access is proposed on Rancho Carmel Drive, north of the Provencal Place intersection given Rancho Carmel Drive is a Four-Lane Major Road and the Project driveway is located less than 600 feet from the signalized intersection of Rancho Carmel Drive/ Provencal Place. General assignment of Project trips from Unit 6 sends 100% of Project trips north on Rancho Carmel Drive where 58% will make a northbound to southbound U-turn at the unsignalized intersection with the Cambridge residential community, where adequate street width is provided to complete this maneuver. That intersection operates acceptably at LOS B in the AM peak hour and LOS C in the PM peak hour under Horizon Year Plus Project conditions. Synchro analysis results are provided in **Appendix D**. Per the project's civil engineer, Project Design Consultants, the Unit 6 driveway will be designed to meet City sight distance and design standards.

Unit 8 (98 Townhomes): A full access unsignalized driveway is proposed on Shoal Creek Drive. General distribution of Project trips from Unit 8 sends 59% north on Shoal Creek Drive to Rancho Carmel Drive and 41% south toward Ted Williams Parkway. Per the project's civil engineer, Project Design Consultants, the Unit 8 driveway will be designed to meet City sight distance and design standards.

Unit 9 (300 Market Rate Apartments): A full access unsignalized driveway is proposed on Carmel Ridge Road serving Unit 9. General distribution of Project trips from Unit 9 sends 57% south on Carmel Ridge Road and 43% to the north toward Highland Ranch Road. Per the project's civil engineer, Project Design Consultants, the Unit 9 driveway will be designed to meet City sight distance and design standards.

Units 10 (200 Townhomes): A full access unsignalized driveway is proposed on Carmel Ridge Road serving Unit 10. General distribution of Project trips from Unit 10 sends 57% south on Carmel Ridge Road and 43% to the north toward Highland Ranch Road. Per the project's civil

engineer, Project Design Consultants, the Unit 10 driveway will be designed to meet City sight distance and design standards.

Unit 16 (123 Market Rate Apartments): A right-turn in/out only access is proposed on Highland Ranch Road given Highlands Ranch Road is a Four-Lane Major Roadway and the Project driveway is proposed less than 600 feet of distance from the Highland Ranch Road/ Eastbourne Road signalized intersection. General distribution of Project trips sends 100% to the north on Highland Ranch Road for approximately 190 feet where 40% would complete a northbound to southbound U-turn at the Highland Ranch Road/ Eastbourne Road signalized intersection ultimately destined to Ted Williams Parkway. As shown in the Horizon Year Conditions analysis section, this intersection continues to operate acceptably under Plus Project conditions. Per the project's civil engineer, Project Design Consultants, the Unit 16 driveway will be designed to meet City sight distance and design standards.

Unit 17 (120 Market Rate Apartments): A full access unsignalized driveway is proposed on Eastbourne Road at its existing southerly cul-de-sac. 100% of Project trips will use the Highland Ranch Road/ Eastbourne Road signalized intersection with 55% destined to the north and 45% destined to the south on Highland Ranch Road.

->

Internal Circulation

As briefly discussed in the Project Description section of this report, the proposed Project's internal circulation system is designed to interconnect with the existing adjacent public street system and discourage cut through automobile traffic. The proposed Project's internal street network would consist of all private roadways. Roadways would be designed as "Complete Streets" that accommodate automobiles, bicycles, pedestrians, low-speed vehicles, neighborhood electric vehicles, and golf carts. Internal roadways would consist of private drives with and without parking. All private drives would include a sidewalk along one side separated from the roadway by a five-foot-wide landscaped parkway. Motor courts would also be provided as a shared driveway (private drive) for two (2) or more of the designated homes and common access roads would provide access from private drives to parking areas.

Because the Project currently has just a preliminary site plan, no detail has been provided regarding parking supply and curbside loading/unloading. These features will be sized and designed per City standards and code.

Figure 20 shows the project access traffic volumes and access point lane configurations.

Figure 20-1

Access Conditions Diagram

THE TRAILS AT CARMEL MOUNTAIN RANCH

Figure 20-2

Project Access Traffic Volumes

The Trails at Carmel Mountain Ranch

Figure 20-3

Opening Year (Year 2025) + Project Access Traffic Volumes

Figure 20-4

Horizon Year (Year 2050) + Project Access Traffic Volumes

Driveway LOS Analysis

Driveway delay under Horizon Year (2050) conditions can be found in **Table 26** and **Table 27**. Operations and analysis worksheets for the driveways are provided in **Appendix J**. All driveways operate with acceptable levels of delay under Opening Year (2025) conditions and Horizon Year (2050) conditions.

Table 26: Opening Year (2025) Access Intersection Operations

Intersection	Control Type	Peak Hour	Horizon Year (2025) With Project	
			Delay	LOS
Unit 1 Driveway/Windcrest Lane	SSSC	AM	9.4	A
		PM	9.9	A
Unit 2 Driveway/Shoal Creek Drive	SSSC	AM	10.7	B
		PM	10.3	B
Unit 5 Driveway/Rancho Carmel Drive	SSSC	AM	10.0	B
		PM	11.3	B
Unit 6 Driveway/Rancho Carmel Drive	SSSC	AM	9.6	A
		PM	11.2	B
Unit 8 Driveway/Shoal Creek Drive	SSSC	AM	12.4	B
		PM	12.6	B
Unit 9 Driveway/Carmel Ridge Road	SSSC	AM	10.8	B
		PM	10.7	B
Unit 10 Driveway/Carmel Ridge Road	SSSC	AM	11.4	B
		PM	11.3	B
Unit 16 Driveway/Highland Ranch Road	SSSC	AM	10.8	B
		PM	11.2	B
Cambridge Driveway/Rancho Carmel Drive	SSSC	AM	12.2	B
		PM	20.4	C

Notes:
Calculated using methodologies consistent with HCM 6th Edition.
Unacceptable seconds of delay per vehicle and LOS highlighted in **bold**
Worst case movement reported for side street stop-controlled intersections.
SSSC = Side Street Stop Control
Source: LLG and Fehr & Peers, 2020

Table 27: Horizon Year (2050) Access Intersection Operations

Intersection	Control Type	Peak Hour	Horizon Year (2050) With Project	
			Delay	LOS
Unit 1 Driveway/Windcrest Lane	SSSC	AM	9.5	A
		PM	9.6	A
Unit 2 Driveway/Shoal Creek Drive	SSSC	AM	10.3	B
		PM	10.3	B
Unit 5 Driveway/Rancho Carmel Drive	SSSC	AM	10.5	B
		PM	11.6	B
Unit 6 Driveway/Rancho Carmel Drive	SSSC	AM	9.8	A
		PM	11.9	B
Unit 8 Driveway/Shoal Creek Drive	SSSC	AM	11.3	B
		PM	12.4	B
Unit 9 Driveway/Carmel Ridge Road	SSSC	AM	10.6	B
		PM	10.5	B
Unit 10 Driveway/Carmel Ridge Road	SSSC	AM	11	B
		PM	11	B
Unit 16 Driveway/Highland Ranch Road	SSSC	AM	11.6	B
		PM	12.6	B
Cambridge Driveway/Rancho Carmel Drive	SSSC	AM	13.4	B
		PM	23.6	C

Notes:
Calculated using methodologies consistent with HCM 6th Edition.
Unacceptable seconds of delay per vehicle and LOS highlighted in **bold**
Worst case movement reported for side street stop-controlled intersections.
SSSC = Side Street Stop Control
Source: LLG and Fehr & Peers, 2020

Driveway Queueing Analysis

Driveway queues under Opening Year (2025) and Horizon Year (2050) conditions can be found in **Table 28** and **Table 29**. Operations and analysis worksheets for the driveways are provided in **Appendix J**. Queue lengths are not found to be excessive under Opening Year (2025) or Horizon Year (2050) conditions.

Table 28: Opening Year (2025) Maximum Driveway Queues

Intersection	Movement		Horizon Year (2025) With Project			
			AM		PM	
			Queue (ft)	Veh	Queue (ft)	Veh
Unit 1 Driveway/Windcrest Lane	Egress	WBL/R	47	1.9	38	1.5
	Ingress	NBR/T	-	-	-	-
	Ingress	SBL/T	-	-	-	-
Unit 2 Driveway/Shoal Creek Drive	Egress	SBL/R	44	1.8	36	1.4
	Ingress	WBR/T	-	-	-	-
	Ingress	EBL/T	-	-	-	-
Unit 5 Driveway/Rancho Carmel Drive	Egress	EBR	46	1.8	37	1.5
	Ingress	SBR/T	-	-	-	-
Unit 6 Driveway/Rancho Carmel Drive	Egress	WBR	51	2.0	41	1.6
	Ingress	NBR/T	-	-	-	-
Unit 8 Driveway/Shoal Creek Drive	Egress	SBL/R	51	2.0	44	1.8
	Ingress	EBL/T	31	1.2	44	1.8
	Ingress	WBR/T	-	-	-	-
Unit 9 Driveway/Carmel Ridge Road	Egress	SBL/T	60	2.4	45	1.8
	Ingress	EBL/T	21	0.8	37	1.5
	Ingress	WBR/T	-	-	-	-
Unit 10 Driveway/Carmel Ridge Road	Egress	NBL/R	62	2.5	52	2.1
	Ingress	WBL/T	12	0.5	34	1.4
	Ingress	EBR/T	-	-	-	-
Unit 16 Driveway/Highland Ranch Road	Egress	WBR	49	2.0	41	1.6
	Ingress	NBT/R	-	-	-	-
	Ingress	NBT	-	-	-	-

Notes:
Queues reported in feet
Vehicles (veh) reported using 25 feet per passenger vehicles, queues of less than one vehicle are reported as one vehicle.
Source: LLG and Fehr & Peers, 2020

Table 29: Horizon Year (2050) Maximum Driveway Queues

Intersection	Movement		Horizon Year (2050) With Project			
			AM		PM	
			Queue (ft)	Veh	Queue (ft)	Veh
Unit 1 Driveway/Windcrest Lane	Egress	WBL/R	36	1.4	27	1.1
	Ingress	NBR/T	-	-	-	-
	Ingress	SBL/T	-	-	-	-
Unit 2 Driveway/Shoal Creek Drive	Egress	SBL/R	32	1.3	32	1.3
	Ingress	WBR/T	-	-	-	-
	Ingress	EBL/T	-	-	-	-
Unit 5 Driveway/Rancho Carmel Drive	Egress	EBR	25	1.0	25	1.0
	Ingress	SBR/T	-	-	-	-
Unit 6 Driveway/Rancho Carmel Drive	Egress	WBR	25	1.0	25	1.0
	Ingress	NBR/T	-	-	-	-
Unit 8 Driveway/Shoal Creek Drive	Egress	SBL/R	25	1.0	34	1.4
	Ingress	EBL/T	25	1.0	26	1.0
	Ingress	WBR/T	-	-	-	-
Unit 9 Driveway/Carmel Ridge Road	Egress	SBL/T	49	2.0	29	1.2
	Ingress	EBL/T	46	1.8	-	-
	Ingress	WBR/T	-	-	-	-
Unit 10 Driveway/Carmel Ridge Road	Egress	NBL/R	56	2.2	31	1.2
	Ingress	WBL/T	-	-	27	1.1
	Ingress	EBR/T	-	-	-	-
Unit 16 Driveway/Highland Ranch Road	Egress	WBR	41	1.6	-	-
	Ingress	NBT/R	81	3.2	54	2.2
	Ingress	NBT	73	2.9	67	2.7

Notes:
Queues reported in feet
Vehicles (veh) reported using 25 feet per passenger vehicles, queues of less than one vehicle are reported as one vehicle.
Source: LLG and Fehr & Peers, 2020:

Pedestrian Circulation

The following pedestrian related facilities internal to the Project Site are proposed by the Project:

- Sidewalks on at least one side of all on-site roadways to connect to on-site trails, leading to the Sabre Springs/Peñasquitos Transit Station and Park & Ride, and to the commercial uses and employment opportunities
- Crosswalks on-site where trails and sidewalks meet vehicular traffic.
- A multi-use trail system, which would circulate throughout the Project site to provide mobility and recreational opportunities for pedestrians and bicyclists. The trail system would include decomposed granite or compacted earth trails with some concrete trails that would be repurposed from the previous golf cart path. Trails would connect to sidewalks along the proposed on-site roadways and along existing adjacent residential streets to maximize access and connectivity.
- A trail staging area which would provide bike racks, a trail map and rules kiosk, bike station, picnic tables, and shade areas.
- Trails between a range from five (5) to eight (8) feet in width and ensure all trails would be publicly accessible.

Bicycle Circulation

The following bicycle related amenities are proposed by the Project:

- A multi-use trail system, which would circulate throughout the Project site to provide mobility and recreational opportunities for pedestrians and bicyclists. The trail system would include decomposed granite or compacted earth trails with some concrete trails that would be repurposed from the previous golf cart path. Trails would connect to sidewalks along the proposed on-site roadways and along existing adjacent residential streets to maximize access and connectivity.
- A trail staging area which would provide bike racks, a trail map and rules kiosk, bike station, picnic tables, and shade areas.
- Trails between a range from five to eight feet in width and ensure all trails would be publicly accessible and would accommodate multiple users.
- Traffic calming measures and low speed designs will be used in the design of on-site roadways, with “shared roadway” markings identifying that bicycle use is permitted.

13.0 Systemic Safety Review

Appendix C of the City's *Systemic Safety the Data-Driven Path to Vision Zero* (2019) document provides methodology for identifying systemic safety hotspots for pedestrians, bicyclists, and vehicles throughout the City based on intersection geometry, control, and ADT.

The TSM methodology for determining study intersections was applied to focus the systemic safety analysis on those intersections where the Project adds the most traffic:

- All signalized intersections and signalized project driveways where the project will add 50 or more peak hour final primary (cumulative) trips to any turning movement at the intersection.
- All unsignalized intersections (side street stop controlled, all-way stop controlled, and roundabouts) and unsignalized project driveways where the project will add 50 or more peak hour final primary (cumulative) trips on any approach.
- All freeway ramp terminal intersections where the project adds 50 or more peak hour final primary (cumulative) (AM or PM) net new trips on any approach.

Existing Conditions volumes and intersection characteristics were used in the analysis to establish which intersections are more likely to experience safety issues prior to construction of the Project.

Table 30 shows the three intersections which were identified as being systemic hotspots. Countermeasures were suggested in accordance with Appendix C of the City's *Systemic Safety the Data-Driven Path to Vision Zero* document for the City to consider implementing. This is provided for informational purposes. The intersections identified already meet the City's criteria for a systemic hotspot. The City also provided a hotspot map which they indicated was for pedestrian hotspots which identifies intersections 1,2,6,10, and 11 as systemic hotspots for pedestrians and is provided in **Appendix K**. Potential countermeasures as identified in the *Systemic Safety the Data-Driven Path to Vision Zero* that could be implemented at these intersections include at these intersections include lead pedestrian interval phasing, high visibility pedestrian crossings, pedestrian countdown signal heads, protected left turn phases (where not already in place), flashing yellow arrows, and education awareness campaigns.

Table 30: Systemic Safety Hot Spots

Intersection	Criteria	Safety Issue	Crash Scenario	Potential Countermeasures
13. Ted Williams Parkway/Highland Ranch Road	Signalized, Primary Road ADT >15,000, Secondary Road ADT >7,000, 6-Lane (2-Way) Intersects 4-Lane (2-Way)	Safety Issue: Vehicle violating red light control while making a through movement	Broadside - Control Violation Through Movement	• Signal hardware upgrade – backplates with retroflective borders • Convert intersection to roundabout • Intersection control awareness campaign • Vehicle red light running enforcement
15. Highland Ranch Road/Carmel Ridge Road	Signalized, 4-Lane Intersects 2-Lane	Safety Issue: Bicyclists approaching an intersection and proceeding through against a red light.	Bicyclist at Fault - Control Violation Through Movement	• Loop detectors for vehicles and bikes • Public safety messaging campaign • Bicycle red light running enforcement
20. Windcrest Lane/Shoal Creek Drive	Side-Street Stop, 2-Lane Intersects 2-Lane	Safety Issue: Bicyclists approaching a stop sign at a side-street stop-controlled intersection and proceeding through without stopping at the stop sign.	Bicyclist at Fault - Control Violation Through Movement	• Public safety messaging campaign • Bicycle stop sign running enforcement

Source: Systemic Safety The Data Driven Path to Vision Zero Appendix C and Fehr & Peers, 2020.

Appendix A: Roadway Segment Analysis Criteria

Roadway Classifications, LOS, and Average Daily Traffic (ADT)

Street Classification	Lanes	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
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.
Source: City of San Diego

Appendix B: Traffic Counts

National Data & Surveying Services

Intersection Turning Movement Count

Location: Rancho Carmel Dr & Carmel Mountain Rd
City: San Diego
Control: Signalized

Project ID: 19-04053-003
Date: 2/7/2019

Total

NS/EW Streets:	Rancho Carmel Dr				Rancho Carmel Dr				Carmel Mountain Rd				Carmel Mountain Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	2	0	2	3	0	0	2	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	43	45	41	0	5	13	61	8	180	145	14	12	17	156	6	0	746
7:15 AM	66	50	32	0	1	15	58	2	188	164	19	19	26	168	6	0	814
7:30 AM	69	28	18	0	6	20	46	4	177	143	23	16	32	165	10	0	757
7:45 AM	57	53	15	0	8	15	48	9	209	193	34	13	21	194	10	0	879
8:00 AM	59	55	22	0	7	20	39	6	188	169	21	17	43	144	11	0	801
8:15 AM	59	48	27	0	10	18	61	12	159	172	34	10	30	182	12	1	835
8:30 AM	26	33	27	1	4	24	50	10	183	170	26	23	29	161	8	0	775
8:45 AM	43	48	35	2	11	16	54	9	218	198	24	27	32	121	16	0	854
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	422	360	217	3	52	141	417	60	1502	1354	195	137	230	1291	79	1	6461
APPROACH %'s :	42.12%	35.93%	21.66%	0.30%	7.76%	21.04%	62.24%	8.96%	47.11%	42.47%	6.12%	4.30%	14.37%	80.64%	4.93%	0.06%	
PEAK HR :	**07:45 AM - 08:45 AM**																TOTAL
PEAK HR VOL :	201	189	91	1	29	77	198	37	739	704	115	63	123	681	41	1	3290
PEAK HR FACTOR :	0.852	0.859	0.843	0.250	0.725	0.802	0.811	0.771	0.884	0.912	0.846	0.685	0.715	0.878	0.854	0.250	0.938
		0.886				0.844				0.903				0.940			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	2	0	2	3	0	0	2	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	40	46	40	1	30	69	203	7	120	268	30	12	62	234	22	1	1185
4:15 PM	37	47	51	1	32	65	177	6	96	209	32	17	61	228	18	1	1078
4:30 PM	38	42	68	3	29	91	233	9	88	269	23	15	49	224	18	0	1199
4:45 PM	50	49	57	4	26	68	174	11	99	257	45	17	68	221	11	3	1162
5:00 PM	26	60	48	1	25	97	251	6	99	233	34	30	70	210	17	1	1208
5:15 PM	29	58	64	1	41	99	244	7	119	280	37	27	83	254	20	0	1363
5:30 PM	41	70	65	1	29	66	224	10	110	280	46	16	64	268	20	0	1310
5:45 PM	41	49	58	4	36	57	165	2	111	241	39	14	76	232	17	2	1144
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	302	421	451	16	248	612	1671	58	842	2037	286	148	533	1871	142	8	9647
APPROACH %'s :	25.38%	35.38%	37.90%	1.34%	9.58%	23.64%	64.54%	2.24%	25.42%	61.49%	8.63%	4.47%	20.86%	73.23%	5.60%	0.31%	
PEAK HR :	**04:45 PM - 05:45 PM**																TOTAL
PEAK HR VOL :	146	237	234	7	121	330	893	34	427	1050	162	90	285	953	68	4	5041
PEAK HR FACTOR :	0.730	0.846	0.900	0.438	0.738	0.833	0.889	0.773	0.897	0.938	0.880	0.750	0.858	0.889	0.850	0.333	0.925
		0.881				0.881				0.934				0.917			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Rancho Carmel Dr & Carmel Mountain Rd
City: San Diego
Control: Signalized

Project ID: 19-04053-003
Date: 2/7/2019

Bikes

NS/EW Streets:	Rancho Carmel Dr				Rancho Carmel Dr				Carmel Mountain Rd				Carmel Mountain Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	2	0	2	3	0	0	2	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%													
PEAK HR :	**07:45 AM - 08:45 AM**																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	2	0	2	3	0	0	2	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
5:45 PM	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	1	0	0	0	2	1	0	0	0	2	0	0	0	0	0	8
APPROACH %'s :	66.67%	33.33%	0.00%	0.00%	0.00%	66.67%	33.33%	0.00%	0.00%	0.00%	100.00%	0.00%					
PEAK HR :	**04:45 PM - 05:45 PM**																TOTAL
PEAK HR VOL :	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	3
PEAK HR FACTOR :	0.25	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.750
		0.250				0.250				0.250							

National Data & Surveying Services

Intersection Turning Movement Count

Location: Rancho Carmel Dr & Carmel Mountain Rd
City: San Diego

Project ID: 19-04053-003
Date: 2/7/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Rancho Carmel Dr		Rancho Carmel Dr		Carmel Mountain Rd		Carmel Mountain Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	1	0	0	2	0	0	0	3
7:15 AM	0	1	0	0	1	0	0	0	2
7:30 AM	0	0	0	1	0	1	0	0	2
7:45 AM	0	1	0	0	2	0	0	0	3
8:00 AM	0	0	0	0	1	0	0	0	1
8:15 AM	1	0	0	1	2	0	0	0	4
8:30 AM	0	0	1	0	0	0	0	0	1
8:45 AM	1	0	0	0	0	0	0	0	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	2	3	1	2	8	1	0	0	17
APPROACH %'s :	40.00%	60.00%	33.33%	66.67%	88.89%	11.11%			
PEAK HR :	**07:45 AM - 08:45 AM**								TOTAL
PEAK HR VOL :	1	1	1	1	5	0	0	0	9
PEAK HR FACTOR :	0.250	0.250	0.250	0.250	0.625				0.563
	0.500		0.500		0.625				

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	2	1	0	1	1	2	0	0	7
4:15 PM	3	2	3	0	2	2	0	0	12
4:30 PM	1	0	1	2	0	1	0	0	5
4:45 PM	0	2	2	0	3	0	0	0	7
5:00 PM	1	0	0	2	0	1	0	0	4
5:15 PM	0	0	0	0	0	1	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	0	1	0	0	0	2
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	7	5	7	5	7	7	0	0	38
APPROACH %'s :	58.33%	41.67%	58.33%	41.67%	50.00%	50.00%			
PEAK HR :	**04:45 PM - 05:45 PM**								TOTAL
PEAK HR VOL :	1	2	2	2	3	2	0	0	12
PEAK HR FACTOR :	0.250	0.250	0.250	0.250	0.250	0.500			0.429
	0.375		0.500		0.417				

Prepared by National Data & Surveying Services

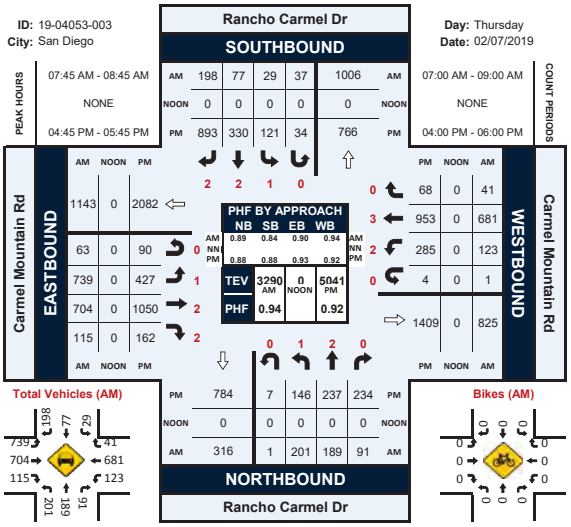
Rancho Carmel Dr & Carmel Mountain Rd

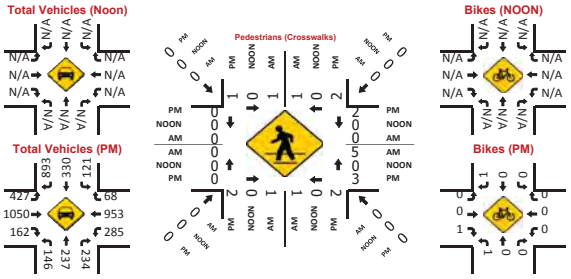
Peak Hour Turning Movement Count

ID: 19-04053-003
City: San Diego

Day: Thursday
Date: 02/07/2019

PEAK HOURS		COUNT PERIODS
	07:45 AM - 08:45 AM	07:00 AM - 09:00 AM
	NONE	NONE
	04:45 PM - 05:45 PM	04:00 PM - 06:00 PM





National Data & Surveying Services

Intersection Turning Movement Count

Location: Stoney Peak Dr & Carmel Mountain Rd
City: San Diego
Control: Signalized

Project ID: 19-04053-004
Date: 2/7/2019

Total

NS/EW Streets:	Stoney Peak Dr				Stoney Peak Dr				Carmel Mountain Rd				Carmel Mountain Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0.5	0.5	0	1	1	1	0	1	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	71	2	18	0	3	0	0	0	4	171	23	2	5	109	1	0	409
7:15 AM	72	3	7	0	6	2	0	0	5	149	24	1	5	135	3	0	412
7:30 AM	63	1	6	0	6	2	2	0	10	151	21	0	7	139	6	0	414
7:45 AM	76	1	5	0	3	2	0	0	9	175	23	5	3	127	2	2	433
8:00 AM	69	2	11	0	5	5	1	0	7	176	26	1	3	137	3	1	447
8:15 AM	64	1	10	0	5	1	4	0	10	149	38	7	7	132	11	0	439
8:30 AM	78	1	4	0	7	5	4	0	15	166	33	3	7	81	4	0	408
8:45 AM	59	4	9	0	8	2	5	0	14	179	44	1	3	99	7	0	434
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	552	15	70	0	43	19	16	0	74	1316	232	20	40	959	37	3	3396
APPROACH %'s :	86.66%	2.35%	10.99%	0.00%	55.13%	24.36%	20.51%	0.00%	4.51%	80.15%	14.13%	1.22%	3.85%	92.30%	3.56%	0.29%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	272	5	32	0	19	10	7	0	36	651	108	13	20	535	22	3	1733
PEAK HR FACTOR :	0.895	0.625	0.727	0.000	0.792	0.500	0.438	0.000	0.900	0.925	0.711	0.464	0.714	0.962	0.500	0.375	0.969
		0.942				0.818				0.953				0.954			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0.5	0.5	0	1	1	1	0	1	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	72	11	7	0	21	16	18	0	30	236	65	1	4	195	19	5	700
4:15 PM	71	12	9	0	20	12	18	0	39	208	53	3	8	167	17	3	640
4:30 PM	92	6	10	0	22	11	27	0	42	245	72	4	15	169	16	7	738
4:45 PM	92	14	11	0	21	16	26	0	33	253	61	5	14	126	24	2	688
5:00 PM	76	11	7	0	26	12	26	0	50	201	44	4	8	159	22	2	652
5:15 PM	84	17	6	0	24	20	32	0	48	275	76	3	17	208	23	5	838
5:30 PM	93	7	6	0	24	17	35	0	50	238	71	7	10	202	15	4	779
5:45 PM	100	10	9	0	33	24	27	0	51	225	70	3	7	169	16	3	747
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	680	88	65	0	191	128	209	0	343	1885	512	30	83	1395	152	31	5792
APPROACH %'s :	81.63%	10.56%	7.80%	0.00%	36.17%	24.24%	39.58%	0.00%	12.38%	68.05%	18.48%	1.08%	5.00%	83.99%	9.15%	1.87%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	353	45	28	0	107	73	120	0	199	943	261	17	42	738	76	14	3016
PEAK HR FACTOR :	0.883	0.662	0.778	0.000	0.811	0.760	0.857	0.000	0.975	0.857	0.859	0.607	0.618	0.887	0.826	0.700	0.900
		0.895				0.893				0.883				0.860			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Stoney Peak Dr & Carmel Mountain Rd
City: San Diego
Control: Signalized

Project ID: 19-04053-004
Date: 2/7/2019

Bikes

NS/EW Streets:	Stoney Peak Dr				Stoney Peak Dr				Carmel Mountain Rd				Carmel Mountain Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0.5	0.5	0	1	1	1	0	1	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%					
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0.5	0.5	0	1	1	1	0	1	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%					
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

National Data & Surveying Services

Intersection Turning Movement Count

Location: Stoney Peak Dr & Carmel Mountain Rd
City: San Diego

Project ID: 19-04053-004
Date: 2/7/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Stoney Peak Dr		Stoney Peak Dr		Carmel Mountain Rd		Carmel Mountain Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	1	0	0	0	0	1
7:15 AM	0	1	0	0	3	0	0	0	4
7:30 AM	0	1	0	0	1	0	0	0	2
7:45 AM	1	1	0	0	1	1	0	0	4
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	2	0	0	0	3	1	0	0	6
8:30 AM	0	2	1	0	0	0	0	0	3
8:45 AM	0	0	1	0	0	0	0	0	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	3	5	2	1	8	2	0	0	21
APPROACH %'s :	37.50%	62.50%	66.67%	33.33%	80.00%	20.00%			
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	3	2	0	0	5	2	0	0	12
PEAK HR FACTOR :	0.375	0.500			0.417	0.500			0.500
	0.625				0.438				

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	2	0	0	0	2
4:15 PM	1	0	0	2	0	1	0	0	4
4:30 PM	0	1	0	0	0	1	0	0	2
4:45 PM	1	2	0	1	4	0	0	0	8
5:00 PM	1	1	1	0	1	0	0	0	4
5:15 PM	1	1	0	1	0	2	0	0	5
5:30 PM	0	0	1	0	0	0	0	0	1
5:45 PM	2	1	2	0	3	0	0	0	8
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	6	6	4	4	10	4	0	0	34
APPROACH %'s :	50.00%	50.00%	50.00%	50.00%	71.43%	28.57%			
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	4	3	4	1	4	2	0	0	18
PEAK HR FACTOR :	0.500	0.750	0.500	0.250	0.333	0.250			0.563
	0.583		0.625		0.500				

Prepared by National Data & Surveying Services

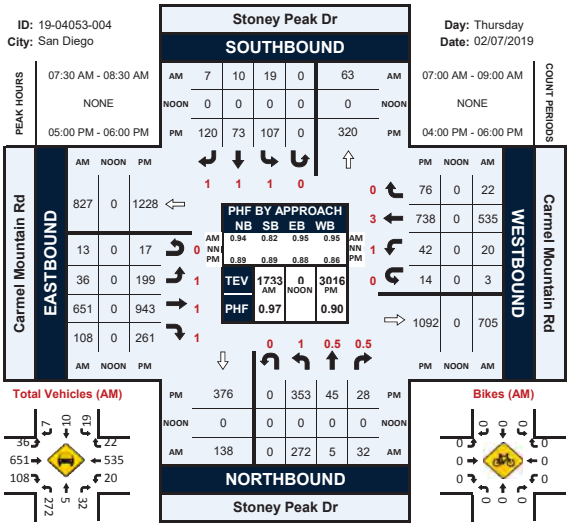
Stoney Peak Dr & Carmel Mountain Rd

Peak Hour Turning Movement Count

ID: 19-04053-004
City: San Diego

Day: Thursday
Date: 02/07/2019

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	07:00 AM - 09:00 AM
NONE	NONE
05:00 PM - 06:00 PM	04:00 PM - 06:00 PM

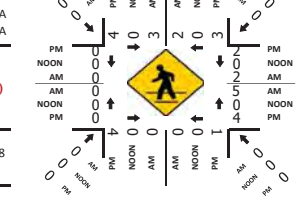


Total Vehicles (AM)

Bikes (AM)

Total Vehicles (Noon)

Pedestrians (Crosswalks)



Bikes (NOON)

Total Vehicles (PM)

Bikes (PM)

National Data & Surveying Services

Intersection Turning Movement Count

Location: Carmel Mountain Rd & Highland Ranch Rd
City: San Diego
Control: Signalized

Project ID: 19-04053-005
Date: 2/7/2019

Total

NS/EW Streets:	Carmel Mountain Rd				Carmel Mountain Rd				Highland Ranch Rd				Highland Ranch Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	3	0	0	2	3	0	0	1	1	1	0	1.5	1	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	24	0	36	0	2	2	6	0	7	121	19	2	49	80	3	4	355
7:15 AM	43	4	60	0	1	3	2	0	6	147	25	1	82	73	3	3	453
7:30 AM	48	2	56	0	1	0	5	0	5	107	28	1	121	121	4	4	503
7:45 AM	48	2	77	0	1	0	2	0	4	148	15	1	24	77	1	2	402
8:00 AM	31	5	31	0	4	0	7	0	7	131	25	1	42	83	6	6	379
8:15 AM	29	7	29	1	1	3	5	0	3	161	26	1	48	119	5	1	439
8:30 AM	36	4	24	0	2	4	1	0	5	109	22	2	41	97	3	5	355
8:45 AM	27	5	20	2	1	2	3	0	9	126	35	1	53	58	7	8	357
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	286	29	333	3	13	14	31	0	46	1050	195	10	460	708	32	33	3243
APPROACH %'s :	43.93%	4.45%	51.15%	0.46%	22.41%	24.14%	53.45%	0.00%	3.54%	80.71%	14.99%	0.77%	37.31%	57.42%	2.60%	2.68%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	170	13	224	0	7	3	16	0	22	533	93	4	269	354	14	15	1737
PEAK HR FACTOR :	0.885	0.650	0.722	0.000	0.438	0.250	0.571	0.000	0.786	0.900	0.830	1.000	0.556	0.731	0.583	0.625	0.863
			0.801				0.591				0.911				0.652		

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	3	0	0	2	3	0	0	1	1	1	0	1.5	1	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	44	18	27	1	19	15	20	0	29	164	30	2	56	132	23	4	584
4:15 PM	39	12	27	0	27	21	13	0	27	180	42	7	89	151	22	5	662
4:30 PM	35	13	38	0	17	21	14	0	35	213	22	3	69	147	11	12	650
4:45 PM	41	13	31	0	29	12	20	0	20	172	42	2	81	126	19	10	618
5:00 PM	55	27	48	3	22	18	9	0	25	183	45	3	90	133	29	4	694
5:15 PM	43	6	41	0	19	21	13	0	44	181	26	3	73	184	33	3	690
5:30 PM	56	21	35	0	28	20	29	0	32	204	35	6	73	150	32	5	726
5:45 PM	54	29	60	1	21	20	20	0	27	186	28	4	80	120	22	12	684
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	367	139	307	5	182	148	138	0	239	1483	270	30	611	1143	191	55	5308
APPROACH %'s :	44.87%	16.99%	37.53%	0.61%	38.89%	31.62%	29.49%	0.00%	11.82%	73.34%	13.35%	1.48%	30.55%	57.15%	9.55%	2.75%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	208	83	184	4	90	79	71	0	128	754	134	16	316	587	116	24	2794
PEAK HR FACTOR :	0.929	0.716	0.767	0.333	0.804	0.940	0.612	0.000	0.727	0.924	0.744	0.667	0.878	0.798	0.879	0.500	0.962
			0.832				0.779				0.931				0.890		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Carmel Mountain Rd & Highland Ranch Rd
City: San Diego
Control: Signalized

Project ID: 19-04053-005
Date: 2/7/2019

Bikes

NS/EW Streets:	Carmel Mountain Rd				Carmel Mountain Rd				Highland Ranch Rd				Highland Ranch Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	3	0	0	2	3	0	0	1	1	1	0	1.5	1	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2
7:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	5
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
			0.250														

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	3	0	0	2	3	0	0	1	1	1	0	1.5	1	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
APPROACH %'s :									0.00%	0.00%	100.00%	0.00%					
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services

Intersection Turning Movement Count

Location: Carmel Mountain Rd & Highland Ranch Rd
City: San Diego

Project ID: 19-04053-005
Date: 2/7/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Carmel Mountain Rd		Carmel Mountain Rd		Highland Ranch Rd		Highland Ranch Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	1	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0	2
7:45 AM	0	1	1	2	1	2	0	0	7
8:00 AM	1	1	4	2	2	1	0	0	11
8:15 AM	0	0	0	1	0	2	0	0	3
8:30 AM	1	0	0	1	0	0	0	0	2
8:45 AM	0	1	3	0	2	1	0	0	7
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	2	4	8	7	6	6	0	0	33
APPROACH %'s :	33.33%	66.67%	53.33%	46.67%	50.00%	50.00%			
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	1	3	5	4	4	3	0	0	20
PEAK HR FACTOR :	0.250	0.750	0.313	0.500	0.500	0.375			0.455
		0.500		0.375		0.583			

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	1	1	1	0	1	0	0	4
4:15 PM	0	0	0	3	0	4	0	0	7
4:30 PM	0	0	2	1	1	0	0	0	4
4:45 PM	1	1	2	3	1	1	0	0	9
5:00 PM	2	2	1	1	0	1	0	0	7
5:15 PM	0	1	0	1	2	0	0	0	4
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	3	6	6	10	4	7	0	0	36
APPROACH %'s :	33.33%	66.67%	37.50%	62.50%	36.36%	63.64%			
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	2	4	1	2	2	1	0	0	12
PEAK HR FACTOR :	0.250	0.500	0.250	0.500	0.250	0.250			0.429
		0.375		0.375		0.375			

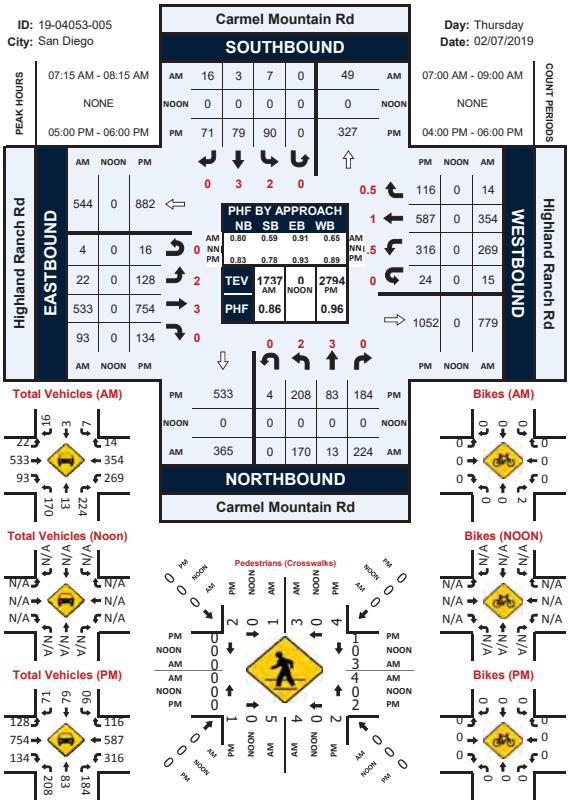
Prepared by National Data & Surveying Services

Carmel Mountain Rd & Highland Ranch Rd

Peak Hour Turning Movement Count

ID: 19-04053-005
City: San Diego

Day: Thursday
Date: 02/07/2019



Intersection Turning Movement - Peak Hour Vehicle Count

Location:	#01	File Name:	ITM-19-109-01
Intersection:	Carmel Mountain Road & Conference Way	Project:	LLG Ref. 3-19-3072
Date of Count:	Tuesday, September 17, 2019		Carmel Mountain

AM	Carmel Mountain Road Southbound			Conference Way Westbound			Carmel Mountain Road Northbound			Conference Way Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	4	108	6	6	6	27	33	120	19	20	6	38	393
7:15	12	198	3	5	5	18	39	129	20	10	7	34	480
7:30	14	111	4	4	6	17	28	120	14	13	7	32	370
7:45	7	86	3	7	8	21	48	181	21	14	6	19	421
8:00	16	116	8	9	4	19	42	125	15	17	7	29	407
8:15	25	106	7	13	6	15	39	126	14	11	6	35	403
8:30	33	97	5	7	5	18	31	91	11	12	7	33	350
8:45	27	99	6	4	8	17	28	98	9	11	8	32	347
Total	138	921	42	55	48	152	288	990	123	108	54	252	3171
Approach%	12.5	83.7	3.8	21.6	18.8	59.6	20.6	70.7	8.8	26.1	13.0	60.9	
Total%	4.4	29.0	1.3	1.7	1.5	4.8	9.1	31.2	3.9	3.4	1.7	7.9	
AM Intersection Peak Hour:	**07:15 to 08:15**												
Volume	49	511	18	25	23	75	157	555	70	54	27	114	1,678
Approach%	8.5	88.4	3.1	20.3	18.7	61.0	20.1	71.0	9.0	27.7	13.8	58.5	
Total%	2.9	30.5	1.1	1.5	1.4	4.5	9.4	33.1	4.2	3.2	1.6	6.8	
PHF			0.68			0.85			0.78			0.92	0.87

PM	Carmel Mountain Road Southbound			Conference Way Westbound			Carmel Mountain Road Northbound			Conference Way Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	38	159	6	14	17	15	57	153	6	24	12	44	545
16:15	38	197	5	11	10	16	58	190	4	34	15	48	626
16:30	24	166	5	7	9	21	55	125	3	20	8	42	485
16:45	40	175	9	9	14	19	47	161	3	43	10	29	559
17:00	43	177	9	23	14	24	47	158	8	25	10	36	574
17:15	31	227	5	11	16	29	60	165	1	38	18	33	634
17:30	36	170	11	11	17	23	50	204	5	30	11	40	608
17:45	34	198	6	12	13	25	64	145	5	29	11	38	580
Total	284	1469	56	98	110	172	438	1301	35	243	95	310	4611
Approach%	15.7	81.2	3.1	25.8	28.9	45.3	24.7	73.3	2.0	37.5	14.7	47.8	
Total%	6.2	31.9	1.2	2.1	2.4	3.7	9.5	28.2	0.8	5.3	2.1	6.7	
PM Intersection Peak Hour:	**17:00 to 18:00**												
Volume	144	772	31	57	60	101	221	672	19	122	50	147	2,396
Approach%	15.2	81.5	3.3	26.1	27.5	46.3	24.2	73.7	2.1	38.2	15.7	46.1	
Total%	6.0	32.2	1.3	2.4	2.5	4.2	9.2	28.0	0.8	5.1	2.1	6.1	
PHF			0.90			0.89			0.88			0.90	0.94

Intersection Turning Movement - Bicycle & Pedestrian Count

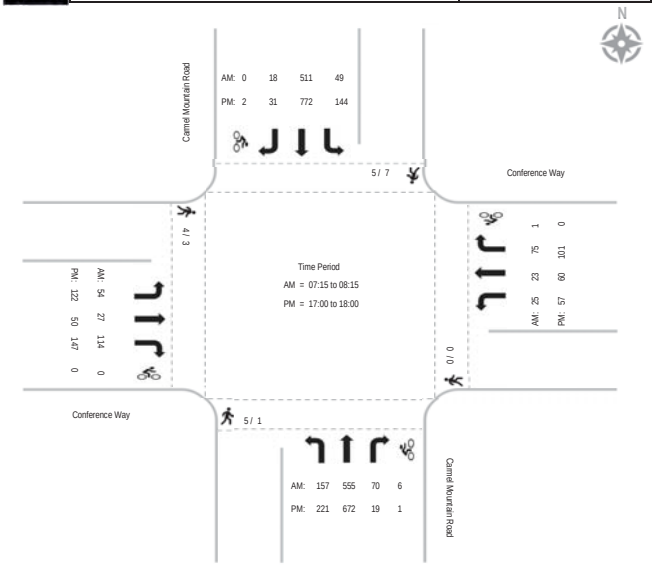
Location:	#01	File Name:	ITM-19-109-01
Intersection:	Carmel Mountain Road & Conference Way	Project:	LLG Ref. 3-19-3072
Date of Count:	Tuesday, September 17, 2019		Carmel Mountain

AM	Carmel Mountain Road Southbound				Conference Way Westbound				Carmel Mountain Road Northbound				Conference Way 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	2	0	3	0	1	0	0	0	3	3
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	2	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	3	2
8:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
8:15	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3	0
8:30	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	2	1
8:45	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	1
Ped Total	5				0				5				4				14	
Bike Total		0	0	0		1	0	0		0	6	0		0	0	0		7

PM	Carmel Mountain Road Southbound				Conference Way Westbound				Carmel Mountain Road Northbound				Conference Way 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	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2	1
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
16:45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
17:00	2	0	0	0	0	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	1	0	0	0	1	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0
17:45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Ped Total	7				0				1				3				11	
Bike Total		2	0	0		0	0	0		0	1	0		0	0	0		3

Intersection Turning Movement - Peak Hour Summary

Location:	#01	File Name:	ITM-19-109-01
Intersection:	Carmel Mountain Road & Conference Way	Project:	LLG Ref. 3-19-3072
Date of Count:	Tuesday, September 17, 2019		Carmel Mountain



National Data & Surveying Services

Intersection Turning Movement Count

Location: Rancho Carmel Dr & Windcrest Ln
City: San Diego
Control: Signalized

Project ID: 19-04053-006
Date: 2/7/2019

Total

AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
NS/EW Streets:	Rancho Carmel Dr				Rancho Carmel Dr				Windcrest Ln				Windcrest Ln				
	1	2	0	0	1	2	0	0	0.5	0.5	1	0	1	0.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	4	92	0	0	5	30	2	0	9	0	10	0	15	2	35	0	204
7:15 AM	4	76	3	0	6	48	1	4	14	0	4	0	20	2	37	0	219
7:30 AM	5	71	3	0	14	57	2	1	16	1	7	0	20	4	43	0	244
7:45 AM	4	94	2	0	8	60	1	2	10	0	12	0	14	5	31	0	243
8:00 AM	10	83	6	0	11	64	3	2	16	2	7	0	13	5	31	0	253
8:15 AM	8	74	2	0	5	83	0	0	13	6	12	1	13	1	24	0	242
8:30 AM	14	70	5	1	7	56	3	1	13	3	10	0	16	4	13	0	216
8:45 AM	5	87	3	0	10	43	2	1	9	2	12	0	8	3	18	0	203
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	54	647	24	1	66	441	14	11	100	14	74	1	119	26	232	0	1824
APPROACH %'s :	7.44%	89.12%	3.31%	0.14%	12.41%	82.89%	2.63%	2.07%	52.91%	7.41%	39.15%	0.53%	31.56%	6.90%	61.54%	0.00%	
PEAK HR :	**07:30 AM - 08:30 AM**																TOTAL
PEAK HR VOL :	27	322	13	0	38	264	6	5	55	9	38	1	60	15	129	0	982
PEAK HR FACTOR :	0.675	0.856	0.542	0.000	0.679	0.795	0.500	0.625	0.859	0.375	0.792	0.250	0.750	0.750	0.750	0.000	0.970
		0.905				0.889				0.805				0.761			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	0.5	0.5	1	0	1	0.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	11	111	11	1	19	141	3	1	12	9	11	1	9	5	11	0	356
4:15 PM	10	104	7	0	22	107	5	1	17	6	12	0	7	0	9	0	308
4:30 PM	12	136	12	0	22	137	4	1	12	5	18	0	8	3	9	0	379
4:45 PM	13	113	4	0	23	126	6	3	17	6	21	0	11	2	12	0	357
5:00 PM	12	131	19	0	23	164	6	1	6	10	13	0	7	4	8	0	404
5:15 PM	13	134	9	0	25	170	3	2	9	12	20	0	10	5	19	0	431
5:30 PM	16	133	15	0	30	128	5	4	10	9	16	0	10	3	20	0	399
5:45 PM	19	120	10	0	32	125	5	5	14	5	19	0	7	7	17	0	385
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	106	982	87	1	197	1098	37	18	97	62	130	1	69	29	105	0	3019
APPROACH %'s :	9.01%	83.50%	7.40%	0.09%	14.59%	81.33%	2.74%	1.33%	33.45%	21.38%	44.83%	0.34%	33.99%	14.29%	51.72%	0.00%	
PEAK HR :	**05:00 PM - 06:00 PM**																TOTAL
PEAK HR VOL :	60	518	53	0	110	587	19	12	39	36	68	0	34	19	64	0	1619
PEAK HR FACTOR :	0.789	0.966	0.697	0.000	0.859	0.863	0.792	0.600	0.696	0.750	0.850	0.000	0.850	0.679	0.800	0.000	0.939
		0.962				0.910				0.872				0.860			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Rancho Carmel Dr & Windcrest Ln
City: San Diego
Control: Signalized

Project ID: 19-04053-006
Date: 2/7/2019

Bikes

NS/EW Streets:	Rancho Carmel Dr				Rancho Carmel Dr				Windcrest Ln				Windcrest Ln				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	0.5	0.5	1	0	1	0.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	0.5	0.5	1	0	1	0.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	3	0	0	1	3	0	0	0	0	0	0	0	0	0	0	7
PEAK HR :	0.00%	100.00%	0.00%	0.00%	25.00%	75.00%	0.00%	0.00%									
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	5
PEAK HR FACTOR :	0.00	0.500	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.625
		0.500				0.375											

National Data & Surveying Services

Intersection Turning Movement Count

Location: Rancho Carmel Dr & Windcrest Ln
City: San Diego

Project ID: 19-04053-006
Date: 2/7/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Rancho Carmel Dr		Rancho Carmel Dr		Windcrest Ln		Windcrest Ln		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	2	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	1	0	1
7:45 AM	0	0	0	0	1	0	0	0	1
8:00 AM	0	0	0	0	0	0	1	0	1
8:15 AM	0	0	0	1	1	0	0	0	2
8:30 AM	0	0	0	1	0	0	1	1	3
8:45 AM	1	0	0	0	0	0	1	0	2
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	1	0	0	2	4	0	4	1	12
	100.00%	0.00%	0.00%	100.00%	100.00%	0.00%	80.00%	20.00%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	0	1	2	0	2	0	5
PEAK HR FACTOR :			0.250	0.250	0.500	0.500	0.500	0.500	0.625

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	2	2	2	6
4:15 PM	0	1	0	0	0	0	0	0	1
4:30 PM	0	1	1	0	1	0	1	2	6
4:45 PM	0	0	0	0	1	1	0	0	2
5:00 PM	0	1	0	0	2	0	0	1	4
5:15 PM	0	0	0	1	0	2	0	0	3
5:30 PM	0	0	0	0	0	0	2	0	2
5:45 PM	0	0	1	0	1	1	0	0	3
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	3	2	1	5	6	5	5	27
	0.00%	100.00%	66.67%	33.33%	45.45%	54.55%	50.00%	50.00%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	0	1	1	1	3	3	2	1	12
PEAK HR FACTOR :		0.250	0.250	0.250	0.375	0.375	0.250	0.250	0.750
			0.500		0.750		0.375		

Prepared by National Data & Surveying Services

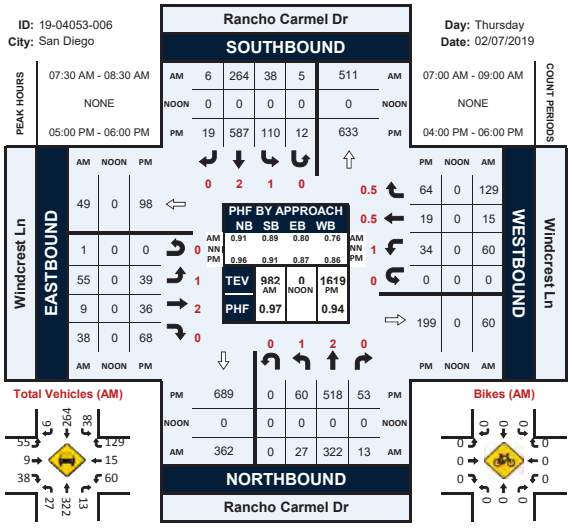
Rancho Carmel Dr & Windcrest Ln

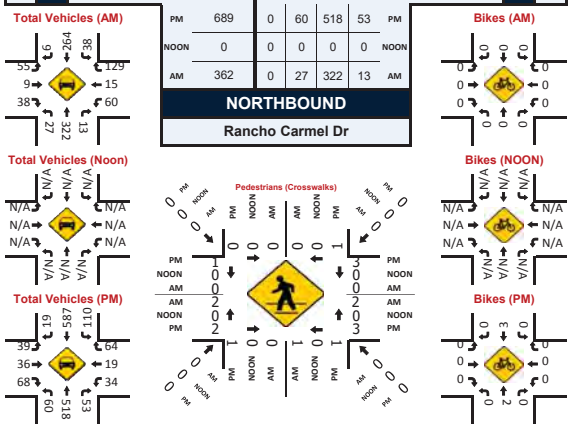
Peak Hour Turning Movement Count

ID: 19-04053-006
City: San Diego

Day: Thursday
Date: 02/07/2019

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	07:00 AM - 09:00 AM
NONE	NONE
05:00 PM - 06:00 PM	04:00 PM - 06:00 PM





National Data & Surveying Services

Intersection Turning Movement Count

Location: Rancho Carmel Dr & Shoal Creek Dr
City: San Diego
Control: Signalized

Project ID: 19-4053-007
Date: 2/7/2019

Total

NS/EW Streets:	Rancho Carmel Dr				Rancho Carmel Dr				Shoal Creek Dr				Shoal Creek Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	78	12	0	9	63	0	0	0	0	0	0	20	0	17	0	199
7:15 AM	0	60	4	0	17	73	0	0	0	0	0	0	16	0	11	0	181
7:30 AM	0	53	10	0	9	88	0	0	0	0	0	0	10	0	23	0	193
7:45 AM	0	74	9	0	28	71	0	0	0	0	0	0	22	0	27	0	231
8:00 AM	0	69	14	0	16	89	0	0	0	0	0	0	21	0	35	0	244
8:15 AM	0	59	6	0	13	93	0	0	0	0	0	0	17	0	15	0	203
8:30 AM	0	78	4	1	12	64	0	0	0	0	0	0	7	0	13	0	179
8:45 AM	0	62	3	0	7	66	0	0	0	0	0	0	9	0	12	0	159
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	533	62	1	111	607	0	0	0	0	0	0	122	0	153	0	1589
	0.00%	89.43%	10.40%	0.17%	15.46%	84.54%	0.00%	0.00%					44.36%	0.00%	55.64%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	255	39	0	66	341	0	0	0	0	0	0	70	0	100	0	871
PEAK HR FACTOR :	0.000	0.861	0.696	0.000	0.589	0.917	0.000	0.000	0.000	0.000	0.000	0.000	0.795	0.000	0.714	0.000	0.892
			0.886			0.960									0.759		

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	101	9	0	15	123	0	0	0	0	0	0	4	0	25	0	277
4:15 PM	0	134	13	0	14	128	0	0	0	0	0	0	3	0	16	0	308
4:30 PM	0	149	8	0	18	136	0	0	0	0	0	0	9	0	22	0	342
4:45 PM	0	122	10	0	21	135	0	0	0	0	0	0	6	0	19	0	313
5:00 PM	0	133	17	0	16	155	0	0	0	0	0	0	10	0	18	0	349
5:15 PM	0	173	15	0	27	173	0	0	0	0	0	0	11	0	18	0	417
5:30 PM	0	131	13	0	20	137	0	0	0	0	0	0	13	0	19	0	333
5:45 PM	0	109	16	0	16	126	0	0	0	0	0	0	11	0	17	0	295
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	1052	101	0	147	1113	0	0	0	0	0	0	67	0	154	0	2634
	0.00%	91.24%	8.76%	0.00%	11.67%	88.33%	0.00%	0.00%					30.32%	0.00%	69.68%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	577	50	0	82	599	0	0	0	0	0	0	36	0	77	0	1421
PEAK HR FACTOR :	0.000	0.834	0.735	0.000	0.759	0.866	0.000	0.000	0.000	0.000	0.000	0.000	0.818	0.000	0.875	0.000	0.852
			0.834			0.851									0.911		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Rancho Carmel Dr & Shoal Creek Dr
City: San Diego
Control: Signalized

Project ID: 19-4053-007
Date: 2/7/2019

Bikes

NS/EW Streets:	Rancho Carmel Dr				Rancho Carmel Dr				Shoal Creek Dr				Shoal Creek Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	2
APPROACH %'s :					0.00%	100.00%	0.00%	0.00%					100.00%	0.00%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250
													0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	1	0	4
5:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	4	3	0	1	3	0	0	0	0	0	0	0	0	1	0	12
APPROACH %'s :	0.00%	57.14%	42.86%	0.00%	25.00%	75.00%	0.00%	0.00%					0.00%	0.00%	100.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	2	3	0	0	1	0	0	0	0	0	0	0	0	1	0	7
PEAK HR FACTOR :	0.00	0.250	0.375	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.438
			0.417			0.250									0.250		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Rancho Carmel Dr & Shoal Creek Dr
City: San Diego

Project ID: 19-4053-007
Date: 2/7/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Rancho Carmel Dr		Rancho Carmel Dr		Shoal Creek Dr		Shoal Creek Dr		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	1	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	1	0	0	2
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	1	1	0	0	1	1	0	0	4
APPROACH %'s :	50.00%	50.00%			50.00%	50.00%			
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	0	0	1	0	0	0	1
PEAK HR FACTOR :					0.250				0.250
					0.250				

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	1	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	1	0	1	0	0	2
5:00 PM	2	0	1	0	0	0	0	0	3
5:15 PM	0	0	0	1	0	0	0	0	1
5:30 PM	0	0	0	0	1	0	0	0	1
5:45 PM	1	0	0	1	0	0	0	0	2
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	3	1	1	3	1	1	0	0	10
APPROACH %'s :	75.00%	25.00%	25.00%	75.00%	50.00%	50.00%			
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	2	0	1	2	0	1	0	0	6
PEAK HR FACTOR :	0.250		0.250	0.500		0.250			0.500
		0.250		0.750		0.250			

Prepared by National Data & Surveying Services

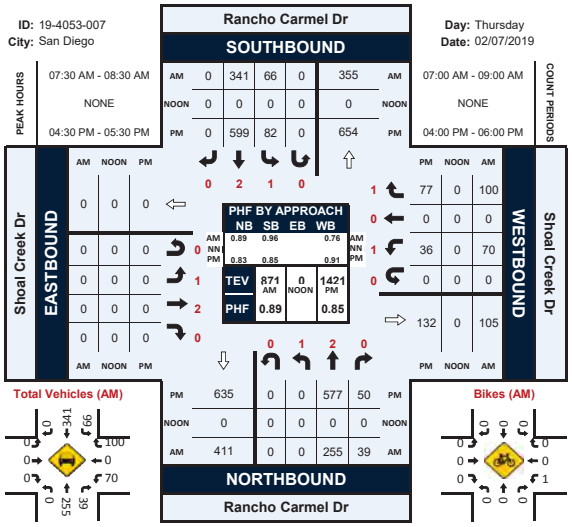
Rancho Carmel Dr & Shoal Creek Dr

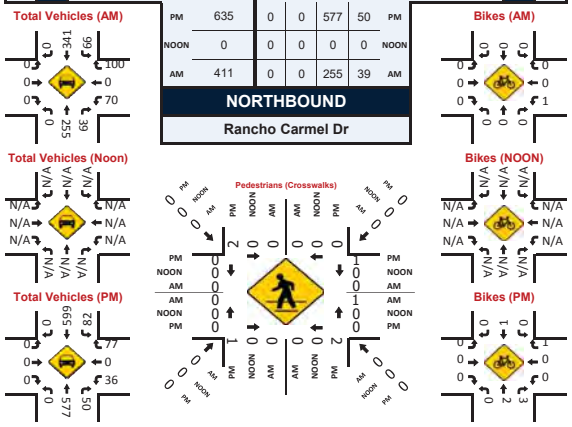
Peak Hour Turning Movement Count

ID: 19-4053-007
City: San Diego

Day: Thursday
Date: 02/07/2019

PEAK HOURS		COUNT PERIODS
	07:30 AM - 08:30 AM	07:00 AM - 09:00 AM
	NONE	NONE
	04:30 PM - 05:30 PM	04:00 PM - 06:00 PM





National Data & Surveying Services

Intersection Turning Movement Count

Location: Rancho Carmel Dr & Provencal Pl
City: San Diego
Control: Signalized

Project ID: 19-04053-008
Date: 2/7/2019

Total

NS/EW Streets:	Rancho Carmel Dr				Rancho Carmel Dr				Provencal Pl				Provencal Pl				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	0	1	0	0	0.5	0.5	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	56	0	1	7	87	1	0	2	0	2	0	27	0	5	0	192
7:15 AM	1	71	6	3	3	95	1	0	1	0	0	0	30	0	6	0	217
7:30 AM	0	48	6	5	8	94	1	0	1	0	1	0	34	0	3	0	201
7:45 AM	1	61	3	2	5	98	0	0	0	0	0	0	26	0	6	0	202
8:00 AM	2	69	2	1	3	102	0	0	0	0	0	0	31	0	7	0	217
8:15 AM	2	51	3	5	12	95	1	0	0	0	0	0	23	0	4	0	196
8:30 AM	0	59	6	2	5	100	0	0	0	0	2	0	39	0	6	0	219
8:45 AM	0	72	5	4	6	76	1	0	0	1	1	0	24	0	9	0	199
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	6	487	31	23	49	747	5	0	4	1	6	0	234	0	50	0	1643
APPROACH %'s :	1.10%	89.03%	5.67%	4.20%	6.12%	93.26%	0.62%	0.00%	36.36%	9.09%	54.55%	0.00%	82.39%	0.00%	17.61%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	4	249	17	11	19	389	2	0	2	0	1	0	121	0	22	0	837
PEAK HR FACTOR :	0.500	0.877	0.708	0.550	0.594	0.953	0.500	0.000	0.500	0.000	0.250	0.000	0.890	0.000	0.786	0.000	0.964
			0.867			0.976					0.375				0.941		

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	0	1	0	0	0.5	0.5	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	9	105	7	3	8	109	1	1	2	0	0	0	17	1	9	0	272
4:15 PM	3	107	8	2	2	115	2	0	2	1	5	0	12	1	6	0	266
4:30 PM	1	155	13	3	5	138	0	0	1	0	2	0	19	0	11	0	348
4:45 PM	0	154	13	7	12	118	0	0	0	0	2	0	8	1	5	0	320
5:00 PM	5	139	9	5	10	135	7	0	1	0	2	0	17	0	4	0	334
5:15 PM	9	145	21	5	9	172	2	0	3	0	11	0	13	0	9	0	399
5:30 PM	4	161	12	8	9	149	10	0	8	3	9	0	11	0	7	0	391
5:45 PM	4	132	13	5	5	125	1	0	2	0	5	0	13	0	12	0	317
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	35	1098	96	38	60	1061	23	1	19	4	36	0	110	3	63	0	2647
APPROACH %'s :	2.76%	86.66%	7.58%	3.00%	5.24%	92.66%	2.01%	0.09%	32.20%	6.78%	61.02%	0.00%	62.50%	1.70%	35.80%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	18	599	55	25	40	574	19	0	12	3	24	0	49	1	25	0	1444
PEAK HR FACTOR :	0.500	0.930	0.655	0.781	0.833	0.834	0.475	0.000	0.375	0.250	0.545	0.000	0.721	0.250	0.694	0.000	0.905
			0.942			0.865					0.488				0.852		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Rancho Carmel Dr & Provencal Pl
City: San Diego
Control: Signalized

Project ID: 19-04053-008
Date: 2/7/2019

Bikes

NS/EW Streets:	Rancho Carmel Dr				Rancho Carmel Dr				Provencal Pl				Provencal Pl				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	0	1	0	0	0.5	0.5	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
APPROACH %'s :					0.00%	100.00%	0.00%	0.00%									
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
						0.500											

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	0	1	0	0	0.5	0.5	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3
5:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	4	0	0	1	2	0	0	1	0	0	0	0	0	1	0	10
APPROACH %'s :	20.00%	80.00%	0.00%	0.00%	33.33%	66.67%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	1	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	6
PEAK HR FACTOR :	0.25	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.500
		0.500								0.250					0.250		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Rancho Carmel Dr & Provencal Pl
City: San Diego

Project ID: 19-04053-008
Date: 2/7/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Rancho Carmel Dr		Rancho Carmel Dr		Provencal Pl		Provencal Pl		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	2	0	0	0	2
7:15 AM	0	0	0	0	0	0	2	0	2
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	1
8:00 AM	0	1	0	0	1	0	1	0	3
8:15 AM	0	0	0	0	1	0	1	2	4
8:30 AM	0	0	0	0	1	0	0	1	2
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	1	0	0	5	0	4	4	14
APPROACH %'s :	0.00%	100.00%			100.00%	0.00%	50.00%	50.00%	
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	0	1	0	0	1	0	3	1	6
PEAK HR FACTOR :		0.250			0.250		0.375	0.250	0.500
		0.250			0.250		0.500		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	1	0	0	2	0	0	0	3
4:15 PM	2	0	0	0	0	0	0	0	2
4:30 PM	1	0	0	0	2	0	1	1	5
4:45 PM	1	1	0	0	1	3	0	2	8
5:00 PM	0	1	0	0	1	0	0	0	2
5:15 PM	0	1	0	0	1	3	0	1	6
5:30 PM	15	0	0	0	0	0	1	1	17
5:45 PM	1	0	0	0	1	1	1	0	4
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	20	4	0	0	8	7	3	5	47
APPROACH %'s :	83.33%	16.67%			53.33%	46.67%	37.50%	62.50%	
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	16	3	0	0	3	6	1	4	33
PEAK HR FACTOR :	0.267	0.750			0.750	0.500	0.250	0.500	0.485
		0.317			0.563		0.625		

Prepared by National Data & Surveying Services

Rancho Carmel Dr & Provencal Pl

Peak Hour Turning Movement Count

ID: 19-04053-008
City: San Diego

Day: Thursday
Date: 02/07/2019

PEAK HOURS	AM	NOON	PM
	07:15 AM - 08:15 AM	NONE	04:45 PM - 05:45 PM

COUNT PERIODS	AM	NOON	PM
	07:00 AM - 09:00 AM	NONE	04:00 PM - 06:00 PM

Rancho Carmel Dr — SOUTHBOUND

	AM	NOON	PM	
	2	389	19	0	273
	0	0	0	0	0
	19	574	40	0	636

EASTBOUND

AM	NOON	PM
6	0	38
0	0	0
2	0	12
0	0	3
1	0	24

WESTBOUND

PM	NOON	AM
25	0	22
1	0	0
49	0	121
0	0	0
98	0	36

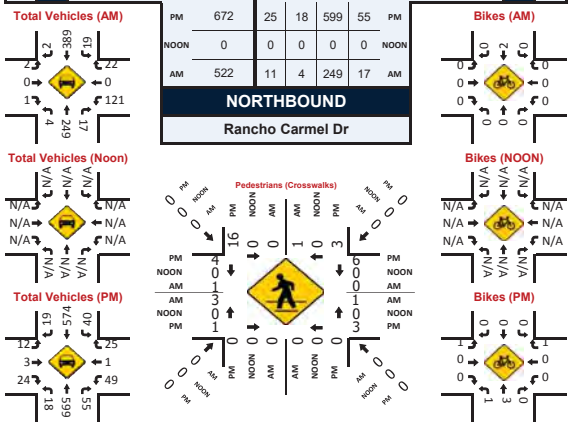
PHF BY APPROACH

	NB	SB	EB	WB
AM	0.87	0.98	0.38	0.94
NN				
PM	0.94	0.86	0.49	0.85

TEV	837 AM	0 NOON	1444 PM
PHF	0.96		0.90

NORTHBOUND — Rancho Carmel Dr

	AM	NOON	PM
	672	25	18	599	55
	0	0	0	0	0
	522	11	4	249	17



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN ENGINEERS	Location:	#02	File Name: ITM-19-013-02
	Intersection:	Ted Williams Parkway & I-15 Northbound Ramps	Project: LLG Ref. 3-18-2896
	Date of Count:	Thursday, February 07, 2019	Carmel Mountain

AM	I-15 N/B On Ramp Southbound			Ted Williams Parkway Westbound			I-15 S/B Off Ramp Northbound			Ted Williams Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	0	0	0	618	36	155	0	90	0	158	204	1261
7:15	0	0	0	0	359	33	156	6	86	0	215	226	1081
7:30	0	0	0	0	477	34	103	8	97	0	228	242	1189
7:45	0	0	0	0	482	40	122	9	99	0	225	309	1286
8:00	0	0	0	0	453	40	145	3	99	0	247	290	1277
8:15	0	0	0	0	443	33	171	1	107	0	180	311	1246
8:30	0	0	0	0	415	41	203	5	90	0	176	231	1161
8:45	0	0	0	0	364	32	184	5	103	0	197	253	1138
Total	0	0	0	0	3611	289	1239	37	771	0	1626	2066	9639
Approach%	-	-	-	-	92.6	7.4	60.5	1.8	37.7	-	44.0	56.0	
Total%	-	-	-	-	37.5	3.0	12.9	0.4	8.0	-	16.9	21.4	
AM Intersection Peak Hour:	**07:30 to 08:30**												
Volume	-	-	-	-	1,855	147	541	21	402	-	880	1,152	4,998
Approach%	-	-	-	-	92.7	7.3	56.1	2.2	41.7	-	43.3	56.7	
Total%	-	-	-	-	37.1	2.9	10.8	0.4	8.0	-	17.6	23.0	
PHF			#DIV/0!			0.96			0.86			0.95	0.97

PM	I-15 N/B On Ramp Southbound			Ted Williams Parkway Westbound			I-15 S/B Off Ramp Northbound			Ted Williams Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	0	0	0	0	315	28	137	17	195	0	308	300	1300
16:15	0	0	0	0	318	43	154	13	200	0	310	338	1376
16:30	0	0	0	0	315	56	133	22	256	0	402	268	1452
16:45	0	0	0	0	311	35	166	20	232	0	333	240	1337
17:00	0	0	0	0	360	56	197	24	232	0	330	297	1496
17:15	0	0	0	0	385	46	199	23	223	0	357	299	1532
17:30	0	0	0	0	359	28	194	36	213	0	326	339	1495
17:45	0	0	0	0	324	9	203	20	226	0	346	357	1485
Total	0	0	0	0	2687	301	1383	175	1777	0	2712	2438	11473
Approach%	-	-	-	-	89.9	10.1	41.5	5.2	53.3	-	52.7	47.3	
Total%	-	-	-	-	23.4	2.6	12.1	1.5	15.5	-	23.6	21.2	
PM Intersection Peak Hour:	**17:00 to 18:00**												
Volume	-	-	-	-	1,428	139	793	103	894	-	1,359	1,292	6,008
Approach%	-	-	-	-	91.1	8.9	44.3	5.8	49.9	-	51.3	48.7	
Total%	-	-	-	-	23.8	2.3	13.2	1.7	14.9	-	22.6	21.5	
PHF			#DIV/0!			0.91			0.99			0.94	0.98

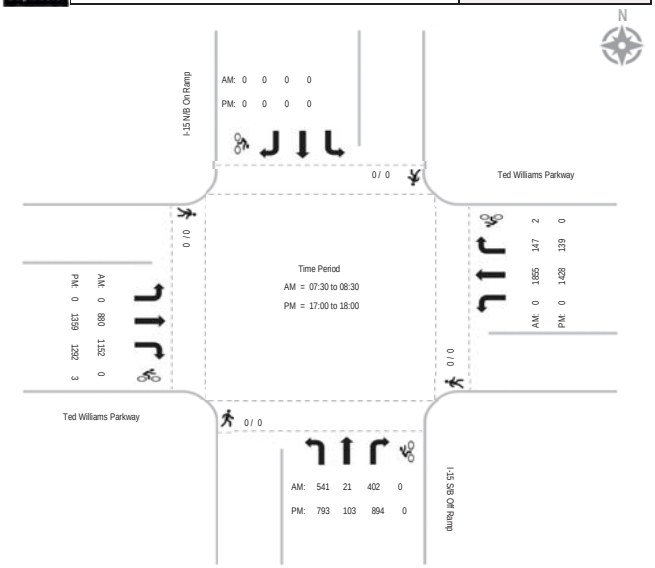
Intersection Turning Movement - Bicycle & Pedestrian Count

Location:	#02	File Name:	ITM-19-013-02
Intersection:	Ted Williams Parkway & I-15 Northbound Ramps	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain

AM	I-15 N/B On Ramp Southbound				Ted Williams Parkway Westbound				I-15 S/B Off Ramp Northbound				Ted Williams 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	0	0	2	0	0	0	0	0	0	0	0	0	0	2
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	0				0				0				0				0	
Bike Total		0	0	0		0	2	0		0	0	0		0	0	0		2

PM	I-15 N/B On Ramp Southbound				Ted Williams Parkway Westbound				I-15 S/B Off Ramp Northbound				Ted Williams 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Ped Total	0				0				0				0				0	
Bike Total		0	0	0		0	0	0		0	0	0		0	3	0		3

Location:	#02	File Name:	ITM-19-013-02
Intersection:	Ted Williams Parkway & I-15 Northbound Ramps	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain



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Intersection Turning Movement - Peak Hour Summary

Intersection Turning Movement - Peak Hour Vehicle Count

Location:	#01	File Name:	ITM-19-013-01
Intersection:	Ted Williams Parkway & I-15 Southbound Ramps	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain

AM	I-15 S/B Off Ramp Southbound			Ted Williams Parkway Westbound			I-15 S/B On Ramp Northbound			Ted Williams Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	33	3	516	0	491	220	0	0	0	0	346	146	1755
7:15	38	11	421	0	389	309	0	0	0	0	421	203	1792
7:30	46	20	280	0	331	232	0	0	0	0	489	219	1617
7:45	55	16	322	0	385	231	0	0	0	0	478	152	1639
8:00	59	20	308	0	403	246	0	0	0	0	558	157	1751
8:15	35	24	365	0	439	196	0	0	0	0	481	165	1705
8:30	40	12	375	0	405	229	0	0	0	0	411	151	1623
8:45	51	8	313	0	357	201	0	0	0	0	413	117	1460
Total	357	114	2900	0	3200	1864	0	0	0	0	3597	1310	13342
Approach%	10.6	3.4	86.0	-	63.2	36.8	-	-	-	-	73.3	26.7	
Total%	2.7	0.9	21.7	-	24.0	14.0	-	-	-	-	27.0	9.8	
AM Intersection Peak Hour:			**07:00 to 08:00**										
Volume	172	50	1,539	-	1,596	992	-	-	-	-	1,734	720	6,803
Approach%	9.8	2.8	87.4	-	61.7	38.3	-	-	-	-	70.7	29.3	
Total%	2.5	0.7	22.6	-	23.5	14.6	-	-	-	-	25.5	10.6	
PHF			0.80			0.91			#DIV/0!			0.87	0.95

PM	I-15 S/B Off Ramp Southbound			Ted Williams Parkway Westbound			I-15 S/B On Ramp Northbound			Ted Williams Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	49	5	244	0	328	143	0	0	0	0	529	105	1403
16:15	26	3	258	0	337	140	0	0	0	0	656	153	1573
16:30	55	1	247	0	338	132	0	0	0	0	610	155	1538
16:45	39	3	280	0	343	140	0	0	0	0	574	145	1524
17:00	46	5	297	0	396	138	0	0	0	0	566	148	1596
17:15	51	1	300	0	410	139	0	0	0	0	547	150	1598
17:30	42	1	314	0	401	113	0	0	0	0	574	163	1608
17:45	41	0	311	0	394	83	0	0	0	0	571	108	1508
Total	349	19	2251	0	2947	1028	0	0	0	0	4627	1127	12348
Approach%	13.3	0.7	85.9	-	74.1	25.9	-	-	-	-	80.4	19.6	
Total%	2.8	0.2	18.2	-	23.9	8.3	-	-	-	-	37.5	9.1	
PM Intersection Peak Hour:			**16:45 to 17:45**										
Volume	178	10	1,191	-	1,550	530	-	-	-	-	2,261	606	6,326
Approach%	12.9	0.7	86.4	-	74.5	25.5	-	-	-	-	78.9	21.1	
Total%	2.8	0.2	18.8	-	24.5	8.4	-	-	-	-	35.7	9.6	
PHF			0.97			0.95			#DIV/0!			0.97	0.98

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Intersection Turning Movement - Bicycle & Pedestrian Count

Location:	#01	File Name:	ITM-19-013-01
Intersection:	Ted Williams Parkway & I-15 Southbound Ramps	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain

AM	I-15 S/B Off Ramp Southbound				Ted Williams Parkway Westbound				I-15 S/B On Ramp Northbound				Ted Williams 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	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	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	0				0				0				0				0	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

PM	I-15 S/B Off Ramp Southbound				Ted Williams Parkway Westbound				I-15 S/B On Ramp Northbound				Ted Williams 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	0				0				0				0				0	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

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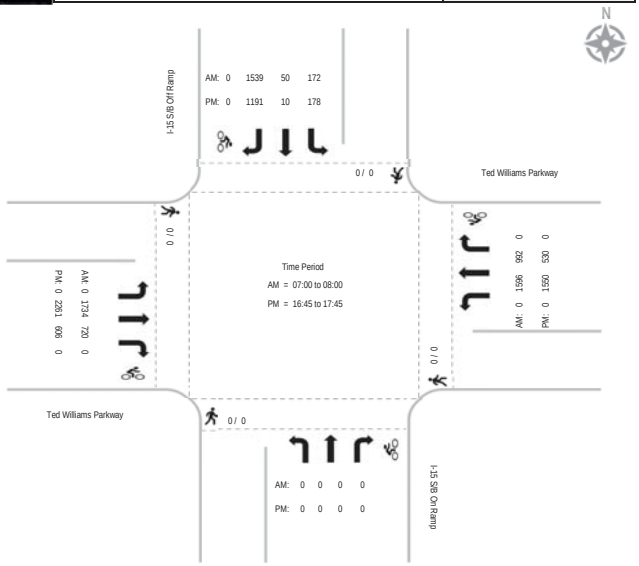
Intersection Turning Movement - Peak Hour Summary

Location:	#01	File Name:	ITM-19-013-01
Intersection:	Ted Williams Parkway & I-15 Southbound Ramps	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain



Intersection Turning Movement - Peak Hour Vehicle Count

Location:	#04	File Name:	ITM-19-013-04
Intersection:	Ted Williams Parkway & Rancho Carmel Drive (N)	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain

AM	Rancho Carmel Dr (N) Southbound			Ted Williams Parkway Westbound			Rancho Carmel Dr (N) Northbound			Ted Williams Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	35	82	27	2	5	103	68	0	0	0	0	322
7:15	0	52	88	42	1	8	75	79	0	0	0	0	345
7:30	0	51	86	40	0	6	59	63	0	0	0	0	305
7:45	0	62	59	43	1	9	75	77	0	0	0	0	326
8:00	0	70	60	27	1	16	77	82	0	0	0	0	333
8:15	1	70	63	23	0	7	71	79	0	0	0	0	314
8:30	0	67	63	19	1	3	61	77	0	0	0	0	291
8:45	0	48	54	21	0	13	56	87	0	0	0	0	279
Total	1	455	555	242	6	67	577	612	0	0	0	0	2515
Approach%	0.1	45.0	54.9	76.8	1.9	21.3	48.5	51.5	-	-	-	-	
Total%	0.0	18.1	22.1	9.6	0.2	2.7	22.9	24.3	-	-	-	-	
AM Intersection Peak Hour:	**07:15 to 08:15**												
Volume	-	235	293	152	3	39	286	301	-	-	-	-	1,309
Approach%	-	44.5	55.5	78.4	1.5	20.1	48.7	51.3	-	-	-	-	
Total%	-	18.0	22.4	11.6	0.2	3.0	21.8	23.0	-	-	-	-	
PHF			0.94			0.92			0.92			#DIV/0!	0.10

PM	Rancho Carmel Dr (N) Southbound			Ted Williams Parkway Westbound			Rancho Carmel Dr (N) Northbound			Ted Williams Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	0	62	66	22	1	5	85	125	0	0	0	0	366
16:15	0	57	88	21	0	8	77	133	0	0	0	0	384
16:30	0	74	91	21	0	7	111	186	0	0	0	0	490
16:45	0	68	69	19	1	15	87	152	0	0	0	0	411
17:00	0	67	92	33	0	12	113	188	0	0	0	0	505
17:15	0	93	110	24	2	18	91	163	0	0	0	0	501
17:30	0	85	95	27	3	10	101	170	0	0	0	0	491
17:45	0	63	70	27	0	5	88	142	0	0	0	0	395
Total	0	569	681	194	7	80	753	1259	0	0	0	0	3543
Approach%	-	45.5	54.5	69.0	2.5	28.5	37.4	62.6	-	-	-	-	
Total%	-	16.1	19.2	5.5	0.2	2.3	21.3	35.5	-	-	-	-	
PM Intersection Peak Hour:	**16:45 to 17:45**												
Volume	-	313	366	103	6	55	392	673	-	-	-	-	1,908
Approach%	-	46.1	53.9	62.8	3.7	33.5	36.8	63.2	-	-	-	-	
Total%	-	16.4	19.2	5.4	0.3	2.9	20.5	35.3	-	-	-	-	
PHF			0.84			0.91			0.88			#DIV/0!	0.94

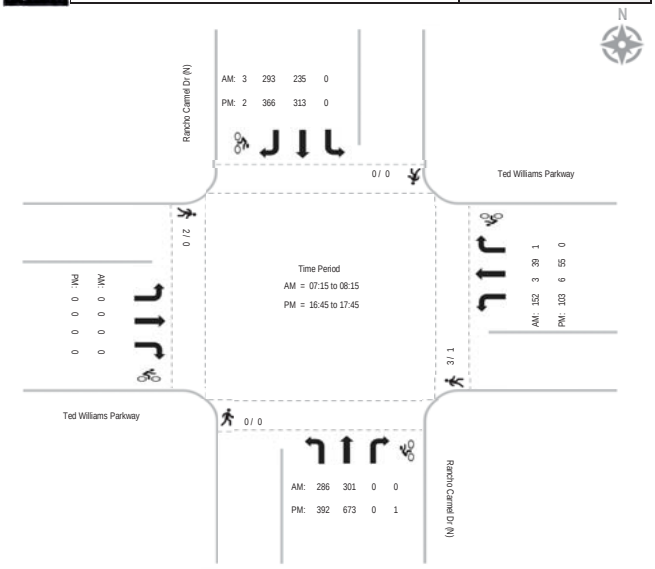
Intersection Turning Movement - Bicycle & Pedestrian Count

Location:	#04	File Name:	ITM-19-013-04
Intersection:	Ted Williams Parkway & Rancho Carmel Drive (N)	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain

AM	Rancho Carmel Dr (N) Southbound				Ted Williams Parkway Westbound				Rancho Carmel Dr (N) Northbound				Ted Williams 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	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
7:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
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	0	0	0	0	0	0	0	0	0	0	0	2	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
Ped Total	0				3				0				2				5	
Bike Total		0	3	0		1	0	0		0	0	0		0	0	0		4

PM	Rancho Carmel Dr (N) Southbound				Ted Williams Parkway Westbound				Rancho Carmel Dr (N) Northbound				Ted Williams 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	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	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
Ped Total	0				1				0				0				1	
Bike Total		0	2	0		0	0	0		0	1	0		0	0	0		3

Location:	#04	File Name:	ITM-19-013-04
Intersection:	Ted Williams Parkway & Rancho Carmel Drive (N)	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain



Intersection Turning Movement - Peak Hour Summary

Intersection Turning Movement - Peak Hour Vehicle Count

Location:	#03	File Name:	ITM-19-013-03
Intersection:	Ted Williams Parkway & Rancho Carmel Drive (S)	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain

AM	Rancho Carmel Dr (S) Southbound			Ted Williams Parkway Westbound			Rancho Carmel Dr (S) Northbound			Ted Williams Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	29	4	10	1	57	0	30	0	0	0	0	131
7:15	0	53	5	6	0	64	0	42	0	0	0	0	170
7:30	0	57	15	15	11	61	1	33	0	0	0	0	193
7:45	0	106	19	15	1	74	2	60	0	0	0	0	277
8:00	0	132	27	24	1	80	3	55	0	0	0	0	322
8:15	0	149	49	42	4	110	6	78	0	0	0	0	438
8:30	0	89	19	35	1	94	4	80	0	0	0	0	322
8:45	0	99	19	58	0	113	2	98	0	0	0	0	389
Total	0	714	157	205	19	653	18	476	0	0	0	0	2242
Approach%	-	82.0	18.0	23.4	2.2	74.5	3.6	96.4	-	-	-	-	
Total%	-	31.8	7.0	9.1	0.8	29.1	0.8	21.2	-	-	-	-	
AM Intersection Peak Hour:	**08:00 to 09:00**												
Volume	-	469	114	159	6	397	15	311	-	-	-	-	1,471
Approach%	-	80.4	19.6	28.3	1.1	70.6	4.6	95.4	-	-	-	-	
Total%	-	31.9	7.7	10.8	0.4	27.0	1.0	21.1	-	-	-	-	
PHF			0.74			0.82			0.82			#DIV/0!	0.84

PM	Rancho Carmel Dr (S) Southbound			Ted Williams Parkway Westbound			Rancho Carmel Dr (S) Northbound			Ted Williams Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	0	146	20	66	1	56	3	92	0	0	0	0	384
16:15	0	100	35	80	2	60	8	74	0	0	0	0	359
16:30	0	137	38	71	0	56	5	80	0	0	0	0	387
16:45	0	123	24	77	5	55	2	71	0	0	0	0	357
17:00	0	126	31	70	0	66	5	76	0	0	0	0	374
17:15	0	144	33	70	0	62	8	60	0	0	0	0	377
17:30	0	184	43	111	0	77	5	91	0	0	0	0	511
17:45	0	180	39	84	0	56	3	69	0	0	0	0	431
Total	0	1140	263	629	8	488	39	613	0	0	0	0	3180
Approach%	-	81.3	18.7	55.9	0.7	43.4	6.0	94.0	-	-	-	-	
Total%	-	35.8	8.3	19.8	0.3	15.3	1.2	19.3	-	-	-	-	
PM Intersection Peak Hour:	**17:00 to 18:00**												
Volume	-	634	146	335	-	261	21	296	-	-	-	-	1,693
Approach%	-	81.3	18.7	56.2	-	43.8	6.6	93.4	-	-	-	-	
Total%	-	37.4	8.6	19.8	-	15.4	1.2	17.5	-	-	-	-	
PHF			0.86			0.79			0.83			#DIV/0!	0.83

Intersection Turning Movement - Bicycle & Pedestrian Count

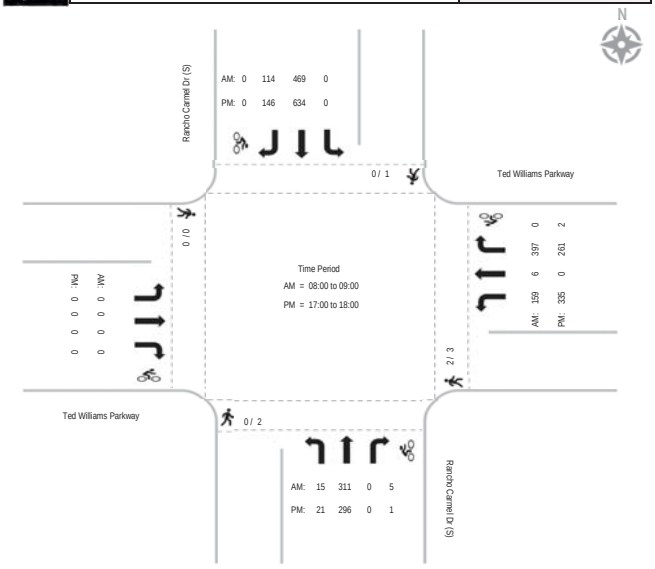
Location:	#03	File Name:	ITM-19-013-03
Intersection:	Ted Williams Parkway & Rancho Carmel Drive (S)	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain

AM	Rancho Carmel Dr (S) Southbound				Ted Williams Parkway Westbound				Rancho Carmel Dr (S) Northbound				Ted Williams 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	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	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
8:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:15	0	0	0	0	2	0	0	0	0	0	1	1	0	0	0	0	2	2
8:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	0				2				0				0				2	
Bike Total		0	0	0		0	0	0		0	3	2		0	0	0		5

PM	Rancho Carmel Dr (S) Southbound				Ted Williams Parkway Westbound				Rancho Carmel Dr (S) Northbound				Ted Williams 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	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2	1
16:30	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	1
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	2	1
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	0	0	0	0	0	0	0	0	1	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	1				3				2				0				6	
Bike Total		0	0	0		1	1	0		0	1	0		0	0	0		3

Intersection Turning Movement - Peak Hour Summary

Location:	#03	File Name:	ITM-19-013-03
Intersection:	Ted Williams Parkway & Rancho Carmel Drive (S)	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain



Intersection Turning Movement - Peak Hour Vehicle Count

Location:	#05	File Name:	ITM-19-013-05
Intersection:	Ted Williams Parkway & Shoal Creek Drive	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain

AM	Shoal Creek Drive Southbound			Ted Williams Parkway Westbound			Shoal Creek Drive Northbound			Ted Williams Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	37	10	28	18	440	4	24	27	20	6	168	8	790
7:15	14	8	21	19	423	11	23	4	12	10	187	10	742
7:30	24	13	20	24	408	20	21	4	8	8	173	17	740
7:45	9	40	16	77	329	56	49	40	25	13	175	28	857
8:00	11	74	15	75	311	7	63	51	36	12	147	35	837
8:15	11	9	16	14	347	9	32	30	22	10	206	11	717
8:30	15	3	17	11	326	13	19	9	10	8	172	4	607
8:45	8	3	22	4	271	3	19	3	7	16	201	6	563
Total	129	160	155	242	2855	123	250	168	140	83	1429	119	5853
Approach%	29.1	36.0	34.9	7.5	88.7	3.8	44.8	30.1	25.1	5.1	87.6	7.3	
Total%	2.2	2.7	2.6	4.1	48.8	2.1	4.3	2.9	2.4	1.4	24.4	2.0	
AM Intersection Peak Hour:	**07:15 to 08:15**												
Volume	58	135	72	195	1,471	94	156	99	81	43	682	90	3,176
Approach%	21.9	50.9	27.2	11.1	83.6	5.3	46.4	29.5	24.1	5.3	83.7	11.0	
Total%	1.8	4.3	2.3	6.1	46.3	3.0	4.9	3.1	2.6	1.4	21.5	2.8	
PHF			0.66			0.95			0.56			0.94	0.93

PM	Shoal Creek Drive Southbound			Ted Williams Parkway Westbound			Shoal Creek Drive Northbound			Ted Williams Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	8	6	7	6	228	13	14	12	15	38	373	21	741
16:15	14	6	16	8	189	15	17	6	11	34	397	20	733
16:30	12	10	16	5	206	10	10	4	11	42	387	15	728
16:45	15	7	7	11	211	17	11	8	9	39	416	18	769
17:00	9	11	8	69	175	11	9	10	7	49	465	22	845
17:15	13	8	13	33	212	21	14	15	11	61	414	21	836
17:30	20	7	13	8	249	15	8	11	14	57	409	11	822
17:45	23	11	15	14	204	19	15	10	8	61	375	19	774
Total	114	66	95	154	1674	121	98	76	86	381	3236	147	6248
Approach%	41.5	24.0	34.5	7.9	85.9	6.2	37.7	29.2	33.1	10.1	86.0	3.9	
Total%	1.8	1.1	1.5	2.5	26.8	1.9	1.6	1.2	1.4	6.1	51.8	2.4	
PM Intersection Peak Hour:	**17:00 to 18:00**												
Volume	65	37	49	124	840	66	46	46	40	228	1,663	73	3,277
Approach%	43.0	24.5	32.5	12.0	81.6	6.4	34.8	34.8	30.3	11.6	84.7	3.7	
Total%	2.0	1.1	1.5	3.8	25.6	2.0	1.4	1.4	1.2	7.0	50.7	2.2	
PHF			0.77			0.95			0.83			0.92	0.97

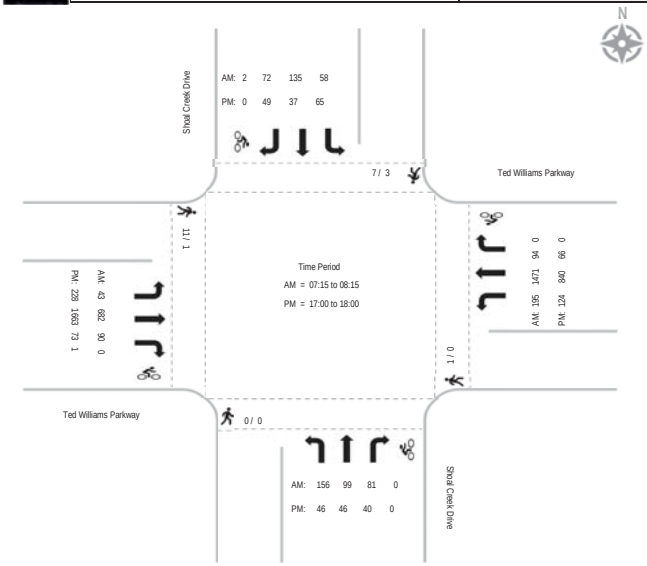
Intersection Turning Movement - Bicycle & Pedestrian Count

Location:	#05	File Name:	ITM-19-013-05
Intersection:	Ted Williams Parkway & Shoal Creek Drive	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain

AM	Shoal Creek Drive Southbound				Ted Williams Parkway Westbound				Shoal Creek Drive Northbound				Ted Williams 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	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	1
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
7:45	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	10	0
8:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
Ped Total	7				1				0				11				19	
Bike Total		0	1	1		0	0	0		0	0	0		0	0	0		2

PM	Shoal Creek Drive Southbound				Ted Williams Parkway Westbound				Shoal Creek Drive Northbound				Ted Williams 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	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
17:30	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	3				0				0				1				4	
Bike Total		0	0	0		0	0	0		0	0	0		0	1	0		1

Location:	#05	File Name:	ITM-19-013-05
Intersection:	Ted Williams Parkway & Shoal Creek Drive	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain



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Intersection Turning Movement - Peak Hour Summary

Intersection Turning Movement - Peak Hour Vehicle Count

Location:	#06	File Name:	ITM-19-013-06
Intersection:	Ted Williams Parkway & Highland Ranch Road	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain

AM	Highland Ranch Road Southbound			Ted Williams Parkway Westbound			Highland Ranch Road Northbound			Ted Williams Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	40	10	52	1	289	22	41	8	11	34	212	1	721
7:15	48	2	40	8	315	51	19	10	7	63	194	5	762
7:30	50	2	51	14	328	62	19	4	6	54	176	0	766
7:45	61	3	68	4	303	33	34	4	3	39	189	1	742
8:00	28	2	43	5	230	33	29	2	6	35	165	1	579
8:15	27	2	38	1	267	32	16	5	3	39	213	1	644
8:30	33	3	51	3	256	27	13	4	3	34	161	2	590
8:45	44	3	28	7	216	40	8	8	4	31	188	3	580
Total	331	27	371	43	2204	300	179	45	43	329	1498	14	5384
Approach%	45.4	3.7	50.9	1.7	86.5	11.8	67.0	16.9	16.1	17.9	81.4	0.8	
Total%	6.1	0.5	6.9	0.8	40.9	5.6	3.3	0.8	0.8	6.1	27.8	0.3	
AM Intersection Peak Hour:	**07:00 to 08:00**												
Volume	199	17	211	27	1,235	168	113	26	27	190	771	7	2,991
Approach%	46.6	4.0	49.4	1.9	86.4	11.7	68.1	15.7	16.3	19.6	79.6	0.7	
Total%	6.7	0.6	7.1	0.9	41.3	5.6	3.8	0.9	0.9	6.4	25.8	0.2	
PHF			0.81			0.88			0.69			0.92	0.98

PM	Highland Ranch Road Southbound			Ted Williams Parkway Westbound			Highland Ranch Road Northbound			Ted Williams Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	62	4	46	13	203	62	1	6	3	77	310	4	791
16:15	56	15	63	10	164	63	3	4	6	83	320	2	789
16:30	54	3	46	7	204	75	9	6	4	95	358	6	867
16:45	70	5	49	11	171	66	6	5	4	95	338	2	822
17:00	55	6	59	16	221	71	4	7	7	81	391	7	925
17:15	96	16	57	12	187	67	11	9	8	89	336	7	895
17:30	58	5	56	12	194	84	12	11	3	101	321	4	861
17:45	58	2	46	10	171	74	4	4	4	91	318	4	786
Total	509	56	422	91	1515	562	50	52	39	712	2692	36	6736
Approach%	51.6	5.7	42.8	4.2	69.9	25.9	35.5	36.9	27.7	20.7	78.3	1.0	
Total%	7.6	0.8	6.3	1.4	22.5	8.3	0.7	0.8	0.6	10.6	40.0	0.5	
PM Intersection Peak Hour:	**16:30 to 17:30**												
Volume	275	30	211	46	783	279	30	27	23	360	1,423	22	3,509
Approach%	53.3	5.8	40.9	4.2	70.7	25.2	37.5	33.8	28.8	19.9	78.8	1.2	
Total%	7.8	0.9	6.0	1.3	22.3	8.0	0.9	0.8	0.7	10.3	40.6	0.6	
PHF			0.76			0.90			0.71			0.94	0.95

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Intersection Turning Movement - Bicycle & Pedestrian Count

Location:	#06	File Name:	ITM-19-013-06
Intersection:	Ted Williams Parkway & Highland Ranch Road	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain

AM	Highland Ranch Road Southbound				Ted Williams Parkway Westbound				Highland Ranch Road Northbound				Ted Williams 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	1	0	0	0	0	0	0	0	0	0	0	0	2	0
7:15	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
7:30	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
7:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
8:00	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	3	1
8:45	0	0	0	0	1	0	0	0	2	0	1	0	0	0	0	0	3	1
Ped Total	4				6				2				0				12	
Bike Total		0	2	0		0	1	0		0	1	0		1	0	0		5

PM	Highland Ranch Road Southbound				Ted Williams Parkway Westbound				Highland Ranch Road Northbound				Ted Williams 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	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
16:15	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	4	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	1	0	0	0	0	0	0	0	1	0	0	0	2	0
17:00	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	2	1
17:15	1	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	2	3
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	3				2				3				4				12	
Bike Total		0	0	0		0	0	0		0	2	0		0	2	0		4

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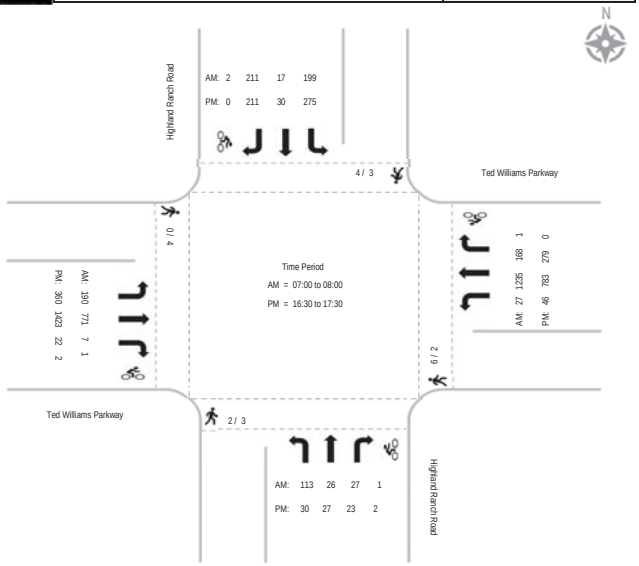
Intersection Turning Movement - Peak Hour Summary

Location:	#06	File Name:	ITM-19-013-06
Intersection:	Ted Williams Parkway & Highland Ranch Road	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain



Intersection Turning Movement - Peak Hour Vehicle Count

Location:	#02	File Name:	ITM-19-109-02
Intersection:	Pomerado Road & Ted Williams Parkway	Project:	LLG Ref. 3-19-3072
Date of Count:	Tuesday, September 17, 2019		Carmel Mountain

AM	Pomerado Road Southbound			Ted Williams Parkway Westbound			Pomerado Road Northbound			Ted Williams Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	106	106	12	129	3	80	139	13	77	66	60	791
7:15	0	132	117	19	147	3	57	121	5	76	64	49	790
7:30	4	174	131	20	157	5	51	126	7	74	66	56	871
7:45	0	169	145	18	150	3	50	120	6	70	60	53	844
8:00	0	140	73	18	113	1	71	153	10	116	65	70	830
8:15	0	164	73	31	122	10	98	168	12	107	97	90	972
8:30	7	182	114	23	124	3	106	179	20	80	100	128	1066
8:45	5	123	68	19	84	4	71	148	21	75	74	41	733
Total	16	1190	827	160	1026	32	584	1154	94	675	592	547	6897
Approach%	0.8	58.5	40.7	13.1	84.2	2.6	31.9	63.0	5.1	37.2	32.6	30.2	
Total%	0.2	17.3	12.0	2.3	14.9	0.5	8.5	16.7	1.4	9.8	8.6	7.9	
AM Intersection Peak Hour:	**07:45 to 08:45**												
Volume	7	655	405	90	509	17	325	620	48	373	322	341	3,712
Approach%	0.7	61.4	38.0	14.6	82.6	2.8	32.7	62.4	4.8	36.0	31.1	32.9	
Total%	0.2	17.6	10.9	2.4	13.7	0.5	8.8	16.7	1.3	10.0	8.7	9.2	
PHF			0.85			0.90			0.81			0.84	0.87

PM	Pomerado Road Southbound			Ted Williams Parkway Westbound			Pomerado Road Northbound			Ted Williams Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	3	141	89	20	91	5	57	195	12	128	191	68	1000
16:15	7	150	72	26	77	4	63	158	17	106	171	76	927
16:30	9	139	81	39	85	3	94	182	18	123	161	102	1036
16:45	0	158	87	56	88	2	84	187	12	117	203	89	1083
17:00	3	146	83	57	76	7	81	217	10	142	189	78	1089
17:15	0	179	77	55	116	6	85	223	20	131	209	95	1196
17:30	4	163	81	42	95	4	79	180	14	93	169	71	995
17:45	1	143	59	52	92	8	69	166	12	115	159	70	946
Total	27	1219	629	347	720	39	612	1508	115	955	1452	649	8272
Approach%	1.4	65.0	33.5	31.4	65.1	3.5	27.4	67.5	5.1	31.3	47.5	21.2	
Total%	0.3	14.7	7.6	4.2	8.7	0.5	7.4	18.2	1.4	11.5	17.6	7.8	
PM Intersection Peak Hour:	**16:30 to 17:30**												
Volume	12	622	328	207	365	18	344	809	60	513	762	364	4,404
Approach%	1.2	64.7	34.1	35.1	61.9	3.1	28.4	66.7	4.9	31.3	46.5	22.2	
Total%	0.3	14.1	7.4	4.7	8.3	0.4	7.8	18.4	1.4	11.6	17.3	8.3	
PHF			0.94			0.83			0.92			0.94	0.92

Intersection Turning Movement - Bicycle & Pedestrian Count

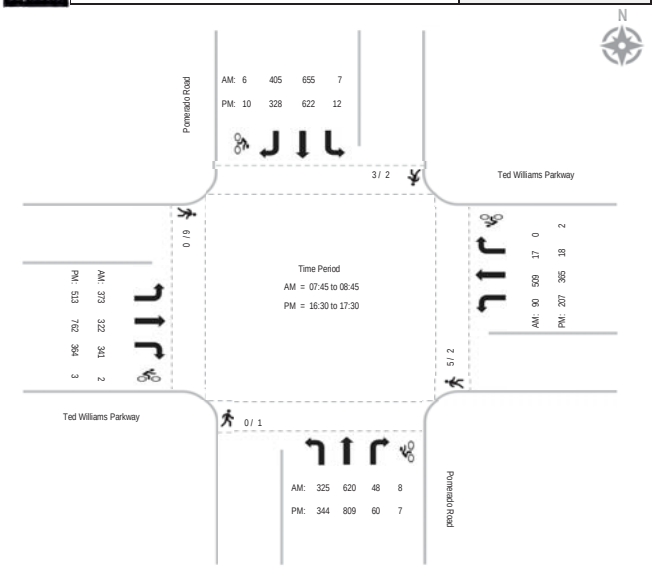
Location:	#02	File Name:	ITM-19-109-02
Intersection:	Pomerado Road & Ted Williams Parkway	Project:	LLG Ref. 3-19-3072
Date of Count:	Tuesday, September 17, 2019		Carmel Mountain

AM	Pomerado Road Southbound				Ted Williams Parkway Westbound				Pomerado Road Northbound				Ted Williams 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	3	0	0	0	0	0	0	1	0	1	0	0	0	1	4
7:15	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	1	0	4
7:30	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
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	1	0	0	0	0	0	1	0	0	0	0	0	1	1
8:15	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
8:30	1	0	1	0	2	0	0	0	0	0	1	0	5	0	1	0	8	3
8:45	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	1	2
Ped Total	3				5				0				6				14	
Bike Total		0	2	4		0	0	0		0	8	0		0	1	1		16

PM	Pomerado Road Southbound				Ted Williams Parkway Westbound				Pomerado Road Northbound				Ted Williams 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	1	0	0	0	0	0	0	1
16:15	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
16:30	0	0	2	0	1	0	0	0	1	0	2	0	0	0	0	0	2	4
16:45	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	1	1	3
17:00	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	3
17:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17:30	0	0	3	0	0	0	0	0	0	0	1	0	0	0	1	0	0	5
17:45	2	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	2	2
Ped Total	2				2				1				0				5	
Bike Total		0	10	0		0	2	0		0	7	0		0	2	1		22

Intersection Turning Movement - Peak Hour Summary

Location:	#02	File Name:	ITM-19-109-02
Intersection:	Pomerado Road & Ted Williams Parkway	Project:	LLG Ref. 3-19-3072
Date of Count:	Tuesday, September 17, 2019		Carmel Mountain



Intersection Turning Movement - Peak Hour Vehicle Count

Location:	#07	File Name:	ITM-19-013-07
Intersection:	Highland Ranch Road & Carmel Ridge Road	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain

AM	Highland Ranch Road Southbound			Carmel Ridge Road Westbound			Highland Ranch Road Northbound			Carmel Ridge Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	5	55	9	22	8	8	4	72	2	37	2	12	236
7:15	18	49	4	19	5	8	6	71	20	24	4	6	234
7:30	67	80	16	21	8	21	6	56	42	22	2	5	346
7:45	9	66	7	35	8	25	4	62	1	15	1	4	237
8:00	11	46	14	10	6	12	4	61	2	14	2	9	191
8:15	10	40	7	12	5	3	12	64	1	9	0	8	171
8:30	5	61	5	13	1	4	11	53	0	14	0	4	171
8:45	8	55	5	12	1	4	6	64	2	14	1	9	181
Total	133	452	67	144	42	85	53	503	70	149	12	57	1767
Approach%	20.4	69.3	10.3	53.1	15.5	31.4	8.5	80.4	11.2	68.3	5.5	26.1	
Total%	7.5	25.6	3.8	8.1	2.4	4.8	3.0	28.5	4.0	8.4	0.7	3.2	
AM Intersection Peak Hour:	**07:00 to 08:00**												
Volume	99	250	36	97	29	62	20	261	65	98	9	27	1,053
Approach%	25.7	64.9	9.4	51.6	15.4	33.0	5.8	75.4	18.8	73.1	6.7	20.1	
Total%	9.4	23.7	3.4	9.2	2.8	5.9	1.9	24.8	6.2	9.3	0.9	2.6	
PHF			0.59			0.69			0.83			0.66	0.76

PM	Highland Ranch Road Southbound			Carmel Ridge Road Westbound			Highland Ranch Road Northbound			Carmel Ridge Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	10	97	9	10	4	3	15	108	12	12	1	4	285
16:15	14	107	19	5	2	4	13	109	13	16	0	5	307
16:30	13	85	20	7	0	4	9	129	6	7	0	4	284
16:45	6	106	26	5	2	7	22	140	10	15	0	4	343
17:00	11	132	16	5	0	5	8	120	8	13	1	3	322
17:15	14	114	24	6	3	6	9	128	10	12	1	6	333
17:30	12	116	22	6	1	5	10	130	19	22	1	5	349
17:45	16	89	19	7	0	5	11	136	15	12	0	3	313
Total	96	846	155	51	12	39	97	1000	93	109	4	34	2536
Approach%	8.8	77.1	14.1	50.0	11.8	38.2	8.2	84.0	7.8	74.1	2.7	23.1	
Total%	3.8	33.4	6.1	2.0	0.5	1.5	3.8	39.4	3.7	4.3	0.2	1.3	
PM Intersection Peak Hour:	**16:45 to 17:45**												
Volume	43	468	88	22	6	23	49	518	47	62	3	18	1,347
Approach%	7.2	78.1	14.7	43.1	11.8	45.1	8.0	84.4	7.7	74.7	3.6	21.7	
Total%	3.2	34.7	6.5	1.6	0.4	1.7	3.6	38.5	3.5	4.6	0.2	1.3	
PHF			0.94			0.85			0.89			0.74	0.96

Intersection Turning Movement - Bicycle & Pedestrian Count

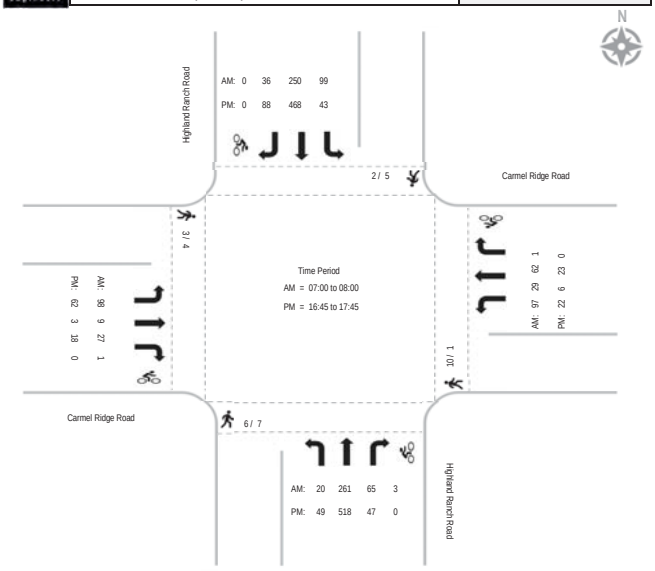
Location:	#07	File Name:	ITM-19-013-07
Intersection:	Highland Ranch Road & Carmel Ridge Road	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain

AM	Highland Ranch Road Southbound				Carmel Ridge Road Westbound				Highland Ranch Road Northbound				Carmel Ridge 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	2	0	0	0	1	0	0	0	0	0	0	0	3	0
7:15	0	0	0	0	2	0	0	0	1	0	1	0	1	0	0	0	4	1
7:30	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1
7:45	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	3	0
8:00	0	0	0	0	3	0	0	0	0	0	0	1	1	1	0	0	4	2
8:15	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
8:30	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	3	0
8:45	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0
Ped Total	2				10				6				3				21	
Bike Total		0	0	0		1	0	0		0	2	1		1	0	0		5

PM	Highland Ranch Road Southbound				Carmel Ridge Road Westbound				Highland Ranch Road Northbound				Carmel Ridge 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	2	0	0	0	0	0	0	0	2	0
16:15	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	3	0
16:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
17:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	0	6	0
17:45	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0
Ped Total	5				1				7				4				17	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

Intersection Turning Movement - Peak Hour Summary

Location:	#07	File Name:	ITM-19-013-07
Intersection:	Highland Ranch Road & Carmel Ridge Road	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain



Intersection Turning Movement - Peak Hour Vehicle Count

Location:	#03 R	File Name:	ITM-19-109-03R
Intersection:	Highland Ranch Road & Eastbourne Road	Project:	LLG Ref. 3-19-3072
Date of Count:	Tuesday, September 17, 2019		Carmel Mountain

AM	Highland Ranch Road Southbound			Eastbourne Road Westbound			Highland Ranch Road Northbound			Eastbourne Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	45	36	0	19	1	28	2	125	8	6	0	2	272
7:15	121	63	3	22	0	65	1	52	32	2	2	2	365
7:30	112	70	9	28	0	118	3	69	9	3	4	2	427
7:45	12	45	3	33	0	117	1	103	8	12	0	2	336
8:00	11	43	1	9	0	31	3	88	5	7	0	2	200
8:15	11	55	5	14	0	14	7	89	4	1	0	0	200
8:30	11	52	1	8	0	13	1	88	3	2	0	0	179
8:45	16	50	0	3	0	13	3	86	9	2	0	2	184
Total	339	414	22	136	1	399	21	700	78	35	6	12	2163
Approach%	43.7	53.4	2.8	25.4	0.2	74.4	2.6	87.6	9.8	66.0	11.3	22.6	
Total%	15.7	19.1	1.0	6.3	0.0	18.4	1.0	32.4	3.6	1.6	0.3	0.6	
AM Intersection Peak Hour:	**07:00 to 08:00**												
Volume	290	214	15	102	1	328	7	349	57	23	6	8	1,400
Approach%	55.9	41.2	2.9	23.7	0.2	76.1	1.7	84.5	13.8	62.2	16.2	21.6	
Total%	20.7	15.3	1.1	7.3	0.1	23.4	0.5	24.9	4.1	1.6	0.4	0.6	
PHF			0.68			0.72			0.76			0.66	0.82

PM	Highland Ranch Road Southbound			Eastbourne Road Westbound			Highland Ranch Road Northbound			Eastbourne Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	37	85	5	7	1	23	2	115	9	4	1	1	290
16:15	41	120	5	8	3	24	6	145	20	1	0	3	376
16:30	26	120	4	10	0	19	2	108	16	0	0	0	305
16:45	37	122	2	13	1	23	4	117	18	1	0	1	339
17:00	38	112	2	6	0	35	2	122	15	0	0	2	334
17:15	36	148	1	3	0	31	5	141	22	3	1	1	392
17:30	27	125	3	16	1	39	4	124	18	0	0	2	359
17:45	35	123	0	10	0	16	4	121	17	2	0	0	328
Total	277	955	22	73	6	210	29	993	135	11	2	10	2723
Approach%	22.1	76.2	1.8	25.3	2.1	72.7	2.5	85.8	11.7	47.8	8.7	43.5	
Total%	10.2	35.1	0.8	2.7	0.2	7.7	1.1	36.5	5.0	0.4	0.1	0.4	
PM Intersection Peak Hour:	**16:45 to 17:45**												
Volume	138	507	8	38	2	128	15	504	73	4	1	6	1,424
Approach%	21.1	77.6	1.2	22.6	1.2	76.2	2.5	85.1	12.3	36.4	9.1	54.5	
Total%	9.7	35.6	0.6	2.7	0.1	9.0	1.1	35.4	5.1	0.3	0.1	0.4	
PHF			0.88			0.75			0.88			0.55	0.91

Intersection Turning Movement - Bicycle & Pedestrian Count

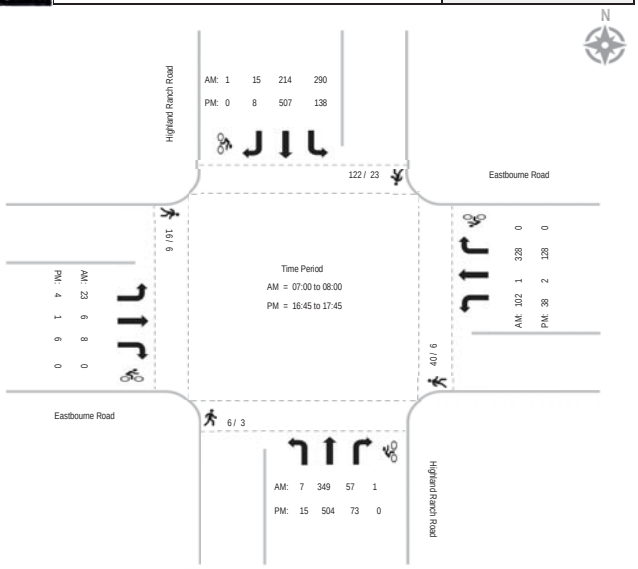
Location:	#03 R	File Name:	ITM-19-109-03R
Intersection:	Highland Ranch Road & Eastbourne Road	Project:	LLG Ref. 3-19-3072
Date of Count:	Tuesday, September 17, 2019		Carmel Mountain

AM	Highland Ranch Road Southbound				Eastbourne Road Westbound				Highland Ranch Road Northbound				Eastbourne 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	2	0	0	0	2	0	0	0	4	0	0	0	10	0
7:15	19	0	1	0	6	0	0	0	0	0	0	0	1	0	0	0	26	1
7:30	64	0	0	0	12	0	0	0	1	0	1	0	1	0	0	0	78	1
7:45	31	0	0	0	9	0	0	0	1	0	0	0	2	0	0	0	43	0
8:00	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0
8:15	3	0	0	0	5	0	0	0	0	0	0	0	1	0	0	0	9	0
8:30	0	0	0	0	1	0	0	0	2	0	0	0	3	0	0	0	6	0
8:45	2	0	0	0	5	0	0	0	0	0	0	0	3	0	0	0	10	0
Ped Total	122				40				6				16				184	
Bike Total		0	1	0		0	0	0		0	1	0		0	0	0		2

PM	Highland Ranch Road Southbound				Eastbourne Road Westbound				Highland Ranch Road Northbound				Eastbourne 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	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0
16:15	3	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	5	0
16:30	3	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	6	0
16:45	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0
17:00	9	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	12	0
17:15	0	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0	4	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0
Ped Total	23				6				3				6				38	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

Intersection Turning Movement - Peak Hour Summary

Location:	#03 R	File Name:	ITM-19-109-03R
Intersection:	Highland Ranch Road & Eastbourne Road	Project:	LLG Ref. 3-19-3072
Date of Count:	Tuesday, September 17, 2019		Carmel Mountain



Intersection Turning Movement - Peak Hour Vehicle Count

Location:	#04	File Name:	ITM-19-109-04
Intersection:	Highland Ranch Road & World Trade Drive	Project:	LLG Ref. 3-19-3072
Date of Count:	Tuesday, September 17, 2019		Carmel Mountain

AM	World Trade Drive Southbound			Highland Ranch Road Westbound			World Trade Drive Northbound			Highland Ranch Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	20	23	7	8	78	81	7	27	18	14	42	2	327
7:15	62	18	2	11	62	46	6	24	29	8	87	3	358
7:30	53	21	3	38	87	50	5	21	34	5	101	10	428
7:45	13	20	4	35	127	72	7	31	15	14	26	2	366
8:00	15	22	2	19	61	62	4	27	17	20	28	9	286
8:15	18	26	6	29	45	34	4	19	27	9	34	6	257
8:30	16	19	7	15	46	35	2	18	10	12	32	7	219
8:45	24	25	3	31	45	31	5	27	17	19	27	4	258
Total	221	174	34	186	551	411	40	194	167	101	377	43	2499
Approach%	51.5	40.6	7.9	16.2	48.0	35.8	10.0	48.4	41.6	19.4	72.4	8.3	
Total%	8.8	7.0	1.4	7.4	22.0	16.4	1.6	7.8	6.7	4.0	15.1	1.7	
AM Intersection Peak Hour:	**07:00 to 08:00**												
Volume	148	82	16	92	354	249	25	103	96	41	256	17	1,479
Approach%	60.2	33.3	6.5	13.2	50.9	35.8	11.2	46.0	42.9	13.1	81.5	5.4	
Total%	10.0	5.5	1.1	6.2	23.9	16.8	1.7	7.0	6.5	2.8	17.3	1.1	
PHF			0.75			0.74			0.93			0.68	0.86

PM	World Trade Drive Southbound			Highland Ranch Road Westbound			World Trade Drive Northbound			Highland Ranch Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	43	36	7	32	57	47	12	25	29	34	50	10	382
16:15	39	34	9	50	53	53	7	29	29	43	69	12	427
16:30	41	52	11	33	55	39	10	36	26	24	70	9	406
16:45	59	29	11	40	59	59	12	34	31	39	60	8	441
17:00	46	57	14	46	54	46	5	38	39	30	58	9	442
17:15	44	45	7	45	55	44	8	49	36	38	90	7	468
17:30	52	57	17	35	63	52	11	29	38	36	69	10	469
17:45	37	42	12	42	56	37	9	39	40	57	71	8	450
Total	361	352	88	323	452	377	74	279	268	301	537	73	3485
Approach%	45.1	43.9	11.0	28.0	39.2	32.7	11.9	44.9	43.2	33.0	58.9	8.0	
Total%	10.4	10.1	2.5	9.3	13.0	10.8	2.1	8.0	7.7	8.6	15.4	2.1	
PM Intersection Peak Hour:	**17:00 to 18:00**												
Volume	179	201	50	168	228	179	33	155	153	161	288	34	1,829
Approach%	41.6	46.7	11.6	29.2	39.7	31.1	9.7	45.5	44.9	33.3	59.6	7.0	
Total%	9.8	11.0	2.7	9.2	12.5	9.8	1.8	8.5	8.4	8.8	15.7	1.9	
PHF			0.85			0.96			0.92			0.89	0.97

Intersection Turning Movement - Bicycle & Pedestrian Count

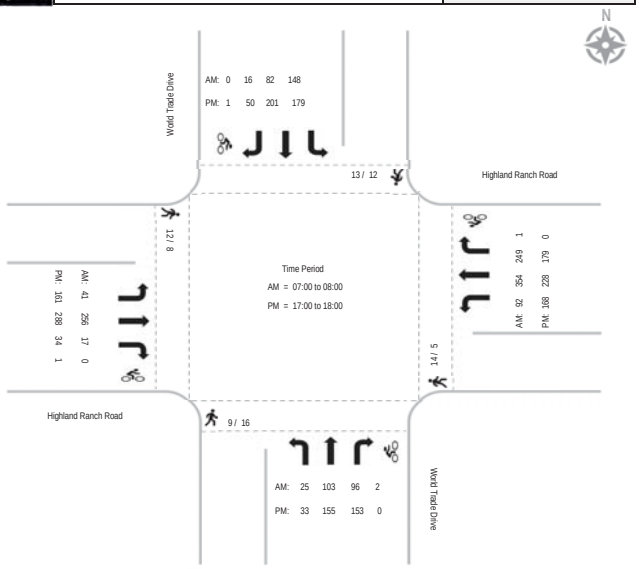
Location:	#04	File Name:	ITM-19-109-04
Intersection:	Highland Ranch Road & World Trade Drive	Project:	LLG Ref. 3-19-3072
Date of Count:	Tuesday, September 17, 2019		Carmel Mountain

AM	World Trade Drive Southbound				Highland Ranch Road Westbound				World Trade Drive Northbound				Highland Ranch 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	3	0	0	0	2	2	0	0	4	0	0	0	11	2
7:15	3	0	0	0	3	0	0	0	2	0	0	0	2	0	0	0	10	0
7:30	3	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	5	1
7:45	1	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	4	0
8:00	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2	0
8:15	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3	0
8:30	1	0	0	0	2	0	0	0	0	0	0	0	3	0	0	0	6	0
8:45	2	0	0	0	2	0	0	0	2	0	0	0	1	0	0	0	7	0
Ped Total	13				14				9				12				48	
Bike Total		0	0	0		0	1	0		2	0	0		0	0	0		3

PM	World Trade Drive Southbound				Highland Ranch Road Westbound				World Trade Drive Northbound				Highland Ranch 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	1	0	0	0	1	0
16:15	2	0	0	0	0	0	0	0	4	0	0	0	5	0	0	0	11	0
16:30	1	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	3	1
16:45	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
17:00	1	0	0	0	2	0	0	0	2	0	0	0	1	0	0	0	6	0
17:15	3	1	0	0	2	0	0	0	5	0	0	0	0	0	0	0	10	1
17:30	1	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	4	0
17:45	2	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	4	0
Ped Total	12				5				16				8				41	
Bike Total		1	0	0		0	0	0		0	0	0		0	1	0		2

Intersection Turning Movement - Peak Hour Summary

Location:	#04	File Name:	ITM-19-109-04
Intersection:	Highland Ranch Road & World Trade Drive	Project:	LLG Ref. 3-19-3072
Date of Count:	Tuesday, September 17, 2019		Carmel Mountain



Intersection Turning Movement - Peak Hour Vehicle Count

Location:	#01	File Name:	ITM-19-118-01
Intersection:	Windcrest Lane & Seabridge Lane	Project:	LLG Ref. 3-18-2896
Date of Count:	Tuesday, October 1, 2019		Carmel Mountain

AM	Windcrest Lane Southbound			Seabridge Lane Westbound			Windcrest Lane Northbound			- Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	5	4	0	9	0	9	0	15	10	0	0	0	52
7:15	5	4	0	1	0	6	0	4	5	0	0	0	25
7:30	5	10	0	7	0	5	0	17	4	0	0	0	48
7:45	3	11	0	8	0	6	0	14	5	0	0	0	47
8:00	4	11	0	9	0	5	0	12	9	0	0	0	50
8:15	6	10	0	21	0	10	0	6	5	0	0	0	58
8:30	2	5	0	9	0	8	0	10	3	0	0	0	37
8:45	1	13	0	3	0	6	0	8	3	0	0	0	34
Total	31	68	0	67	0	55	0	86	44	0	0	0	351
Approach%	31.3	68.7	-	54.9	-	45.1	-	66.2	33.8	-	-	-	
Total%	8.8	19.4	-	19.1	-	15.7	-	24.5	12.5	-	-	-	
AM Intersection Peak Hour:	**07:30 to 08:30**												
Volume	18	42	-	45	-	26	-	49	23	-	-	-	203
Approach%	30.0	70.0	-	63.4	-	36.6	-	68.1	31.9	-	-	-	
Total%	8.9	20.7	-	22.2	-	12.8	-	24.1	11.3	-	-	-	
PHF			0.94			0.57			0.86			#DIV/0!	0.88

PM	Windcrest Lane Southbound			Seabridge Lane Westbound			Windcrest Lane Northbound			- Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	9	7	0	8	0	6	0	6	11	0	0	0	47
16:15	2	9	0	11	0	13	0	17	10	0	0	0	62
16:30	10	9	0	6	0	7	0	9	11	0	0	0	52
16:45	9	5	0	8	0	7	0	7	4	0	0	0	40
17:00	13	14	0	12	0	12	0	11	11	0	0	0	73
17:15	7	10	0	9	0	11	0	19	14	0	0	0	70
17:30	17	18	0	16	0	8	1	9	14	0	0	0	83
17:45	6	16	0	6	0	10	0	8	9	0	0	0	55
Total	73	88	0	76	0	74	1	86	84	0	0	0	482
Approach%	45.3	54.7	-	50.7	-	49.3	0.6	50.3	49.1	-	-	-	
Total%	15.1	18.3	-	15.8	-	15.4	0.2	17.8	17.4	-	-	-	
PM Intersection Peak Hour:	**17:00 to 18:00**												
Volume	43	58	-	43	-	41	1	47	48	-	-	-	281
Approach%	42.6	57.4	-	51.2	-	48.8	1.0	49.0	50.0	-	-	-	
Total%	15.3	20.6	-	15.3	-	14.6	0.4	16.7	17.1	-	-	-	
PHF			0.72			0.88			0.73			#DIV/0!	0.85

Intersection Turning Movement - Bicycle & Pedestrian Count

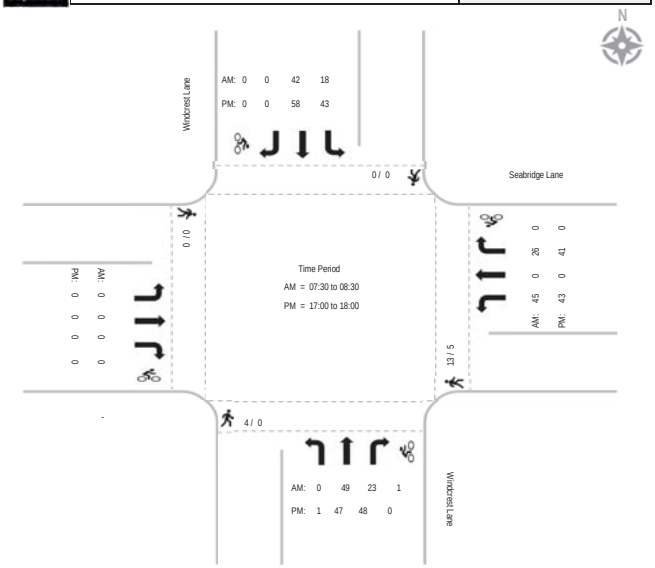
Location:	#01	File Name:	ITM-19-118-01
Intersection:	Windcrest Lane & Seabridge Lane	Project:	LLG Ref. 3-18-2896
Date of Count:	Tuesday, October 1, 2019		Carmel Mountain

AM	Windcrest Lane Southbound				Seabridge Lane Westbound				Windcrest Lane Northbound				- Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0
7:15	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	3	0
7:30	0	0	0	0	3	0	0	0	1	0	0	0	0	0	0	0	4	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	0	0	0	0	2	0	0	0	0	0	0	0	2	0
8:15	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1	1
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	1	0	0	0	0	0	0	0	0	0	0	0	1	0
Ped Total	0				13				4				0				17	
Bike Total		0	0	0		0	0	0		0	1	0		0	0	0		1

PM	Windcrest Lane Southbound				Seabridge Lane Westbound				Windcrest Lane 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	1	0	0	0	0	0	0	0	0	0	0	0	1	0
16:30	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
16:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	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	1	0	0	0	0	0	0	0	0	0	0	0	1	0
17:30	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	0				5				0				0				5	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

Intersection Turning Movement - Peak Hour Summary

Location:	#01	File Name:	ITM-19-118-01
Intersection:	Windcrest Lane & Seabridge Lane	Project:	LLG Ref. 3-18-2896
Date of Count:	Tuesday, October 1, 2019		Carmel Mountain



Intersection Turning Movement - Peak Hour Vehicle Count

Location:	#08	File Name:	ITM-19-013-08
Intersection:	Windcrest Lane & Boulton Avenue	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain

AM	Windcrest Lane Southbound			Boulton Avenue Westbound			Windcrest Lane Northbound			- Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	1	22	0	3	0	9	0	15	1	0	0	0	51
7:15	4	10	0	2	0	10	0	4	0	0	0	0	30
7:30	3	13	0	4	0	4	0	4	1	0	0	0	29
7:45	2	19	0	6	0	8	0	10	1	0	0	0	46
8:00	2	20	0	4	0	7	0	11	5	0	0	0	49
8:15	3	18	0	0	0	4	0	8	5	0	0	0	38
8:30	2	6	0	1	0	3	0	3	2	0	0	0	17
8:45	4	7	0	1	0	5	0	8	4	0	0	0	29
Total	21	115	0	21	0	50	0	63	19	0	0	0	289
Approach%	15.4	84.6	-	29.6	-	70.4	-	76.8	23.2	-	-	-	
Total%	7.3	39.8	-	7.3	-	17.3	-	21.8	6.6	-	-	-	
AM Intersection Peak Hour:	**07:30 to 08:30**												
Volume	10	70	-	14	-	23	-	33	12	-	-	-	162
Approach%	12.5	87.5	-	37.8	-	62.2	-	73.3	26.7	-	-	-	
Total%	6.2	43.2	-	8.6	-	14.2	-	20.4	7.4	-	-	-	
PHF			0.91			0.66			0.70			#DIV/0!	0.83

PM	Windcrest Lane Southbound			Boulton Avenue Westbound			Windcrest Lane Northbound			- Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	5	8	0	2	0	2	0	17	9	0	0	0	43
16:15	5	10	0	2	0	8	0	15	6	0	0	0	46
16:30	5	11	0	3	0	3	0	15	6	0	0	0	43
16:45	6	10	0	1	0	2	0	17	8	0	0	0	44
17:00	6	9	0	2	0	1	0	17	8	0	0	0	43
17:15	10	14	0	2	0	2	0	23	5	0	0	0	56
17:30	14	24	0	3	0	3	0	19	14	0	0	0	77
17:45	12	9	0	4	0	5	0	20	17	0	0	0	67
Total	63	95	0	19	0	26	0	143	73	0	0	0	419
Approach%	39.9	60.1	-	42.2	-	57.8	-	66.2	33.8	-	-	-	
Total%	15.0	22.7	-	4.5	-	6.2	-	34.1	17.4	-	-	-	
PM Intersection Peak Hour:	**17:00 to 18:00**												
Volume	42	56	-	11	-	11	-	79	44	-	-	-	243
Approach%	42.9	57.1	-	50.0	-	50.0	-	64.2	35.8	-	-	-	
Total%	17.3	23.0	-	4.5	-	4.5	-	32.5	18.1	-	-	-	
PHF			0.64			0.61			0.83			#DIV/0!	0.79

Intersection Turning Movement - Bicycle & Pedestrian Count

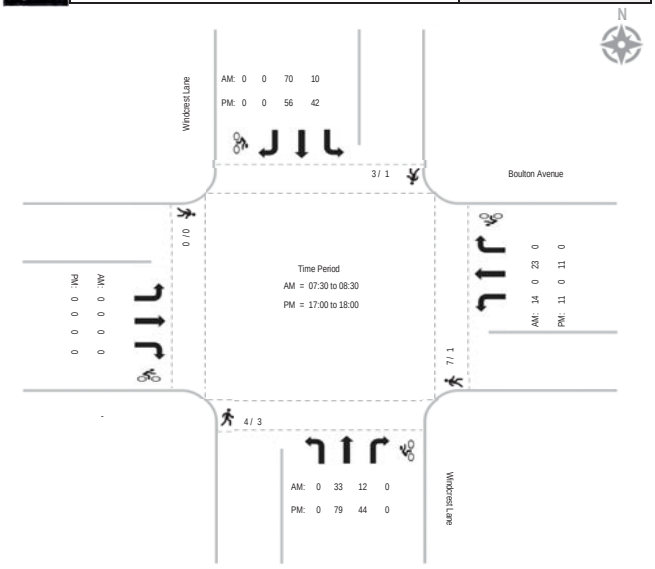
Location:	#08	File Name:	ITM-19-013-08
Intersection:	Windcrest Lane & Boulton Avenue	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain

AM	Windcrest Lane Southbound				Boulton Avenue Westbound				Windcrest Lane Northbound				- Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	3	0
7:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
7:30	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0
7:45	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
8:00	0	0	0	0	3	0	0	0	0	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	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	3				7				4				0				14	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

PM	Windcrest Lane Southbound				Boulton Avenue Westbound				Windcrest Lane 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	1	0	0	0	0	0	0	0	1	0
16:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
16:30	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0
16:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	1				1				3				0				5	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

Intersection Turning Movement - Peak Hour Summary

Location:	#08	File Name:	ITM-19-013-08
Intersection:	Windcrest Lane & Boulton Avenue	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain



Intersection Turning Movement - Peak Hour Vehicle Count

Location:	#09	File Name:	ITM-19-013-09
Intersection:	Windcrest Lane & Shoal Creek Drive	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain

AM	Windcrest Lane Southbound			Shoal Creek Drive Westbound			Windcrest Lane Northbound			Shoal Creek Drive Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	23	1	5	1	13	5	6	5	6	0	26	3	94
7:15	12	2	3	1	11	5	1	0	5	0	24	2	66
7:30	15	0	3	4	20	6	1	0	4	0	24	3	80
7:45	25	0	3	2	34	10	2	1	9	0	41	1	128
8:00	23	0	5	5	44	18	1	0	6	1	57	1	161
8:15	17	1	3	1	29	9	1	0	2	1	18	3	85
8:30	10	0	2	1	21	6	0	0	8	3	13	1	65
8:45	11	0	1	1	6	3	1	0	0	5	18	0	46
Total	136	4	25	16	178	62	13	6	40	10	221	14	725
Approach%	82.4	2.4	15.2	6.3	69.5	24.2	22.0	10.2	67.8	4.1	90.2	5.7	
Total%	18.8	0.6	3.4	2.2	24.6	8.6	1.8	0.8	5.5	1.4	30.5	1.9	
AM Intersection Peak Hour:	**07:30 to 08:30**												
Volume	80	1	14	12	127	43	5	1	21	2	140	8	454
Approach%	84.2	1.1	14.7	6.6	69.8	23.6	18.5	3.7	77.8	1.3	93.3	5.3	
Total%	17.6	0.2	3.1	2.6	28.0	9.5	1.1	0.2	4.6	0.4	30.8	1.8	
PHF			0.85			0.68			0.56			0.64	0.70

PM	Windcrest Lane Southbound			Shoal Creek Drive Westbound			Windcrest Lane Northbound			Shoal Creek Drive Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	5	1	4	8	29	20	0	0	1	3	14	2	87
16:15	13	0	1	8	23	21	1	2	4	1	21	1	96
16:30	10	1	0	3	19	16	1	1	2	4	20	1	78
16:45	7	2	1	4	20	7	0	0	2	0	13	0	56
17:00	8	1	2	4	31	27	2	0	0	3	27	3	108
17:15	9	1	3	5	41	30	1	1	8	2	22	2	125
17:30	15	4	2	2	27	30	2	0	1	5	15	6	109
17:45	12	5	4	4	28	27	1	0	2	6	28	2	119
Total	79	15	17	38	218	178	8	4	20	24	160	17	778
Approach%	71.2	13.5	15.3	8.8	50.2	41.0	25.0	12.5	62.5	11.9	79.6	8.5	
Total%	10.2	1.9	2.2	4.9	28.0	22.9	1.0	0.5	2.6	3.1	20.6	2.2	
PM Intersection Peak Hour:	**17:00 to 18:00**												
Volume	44	11	11	15	127	114	6	1	11	16	92	13	461
Approach%	66.7	16.7	16.7	5.9	49.6	44.5	33.3	5.6	61.1	13.2	76.0	10.7	
Total%	9.5	2.4	2.4	3.3	27.5	24.7	1.3	0.2	2.4	3.5	20.0	2.8	
PHF			0.79			0.84			0.45			0.84	0.92

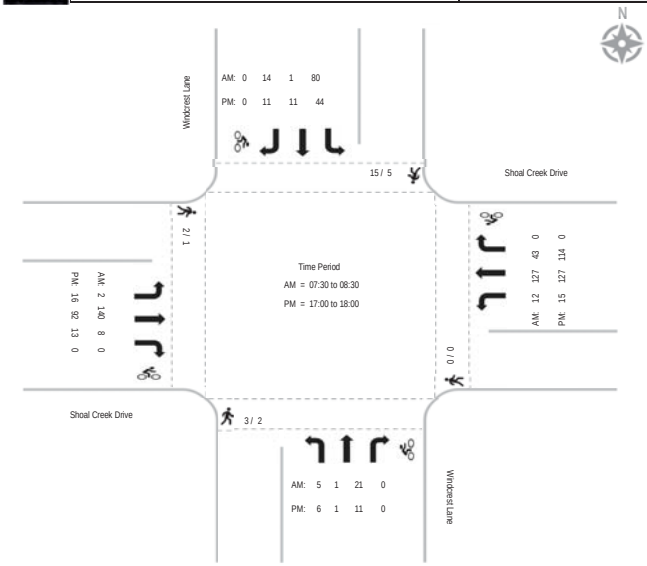
Intersection Turning Movement - Bicycle & Pedestrian Count

Location:	#09	File Name:	ITM-19-013-09
Intersection:	Windcrest Lane & Shoal Creek Drive	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain

AM	Windcrest Lane Southbound				Shoal Creek Drive Westbound				Windcrest Lane Northbound				Shoal Creek Drive Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0
7:30	4	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	5	0
7:45	5	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	6	0
8:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
8:15	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0
8:30	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	15				0				3				2				20	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

PM	Windcrest Lane Southbound				Shoal Creek Drive Westbound				Windcrest Lane Northbound				Shoal Creek Drive Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0
17:00	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	3	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
17:45	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4	0
Ped Total	5				0				2				1				8	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

Location:	#09	File Name:	ITM-19-013-09
Intersection:	Windcrest Lane & Shoal Creek Drive	Project:	LLG Ref. 3-18-2896
Date of Count:	Thursday, February 07, 2019		Carmel Mountain



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Intersection Turning Movement - Peak Hour Summary

Intersection Turning Movement - Peak Hour Vehicle Count

Location:	#02	File Name:	ITM-19-118-02
Intersection:	Boulton Avenue & Carmel Ridge Road	Project:	LLG Ref. 3-18-2896
Date of Count:	Tuesday, October 1, 2019		Carmel Mountain

AM	Carmel Ridge Road Southbound			Boulton Avenue Westbound			Carmel Ridge Road Northbound			Boulton Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	2	24	2	10	6	10	0	8	2	2	1	2	69
7:15	0	19	2	11	1	1	1	3	0	2	2	4	46
7:30	1	26	4	9	7	1	2	3	1	0	5	6	65
7:45	0	18	4	27	5	4	0	2	3	3	1	2	69
8:00	0	22	5	14	7	3	4	7	3	3	5	1	74
8:15	0	13	3	11	1	4	4	3	4	3	3	0	49
8:30	1	9	3	8	0	0	2	4	2	0	4	2	35
8:45	1	18	0	7	3	2	2	1	1	2	8	2	47
Total	5	149	23	97	30	25	15	31	16	15	29	19	454
Approach%	2.8	84.2	13.0	63.8	19.7	16.4	24.2	50.0	25.8	23.8	46.0	30.2	
Total%	1.1	32.8	5.1	21.4	6.6	5.5	3.3	6.8	3.5	3.3	6.4	4.2	
AM Intersection Peak Hour:	**07:30 to 08:30**												
Volume	1	79	16	61	20	12	10	15	11	9	14	9	257
Approach%	1.0	82.3	16.7	65.6	21.5	12.9	27.8	41.7	30.6	28.1	43.8	28.1	
Total%	0.4	30.7	6.2	23.7	7.8	4.7	3.9	5.8	4.3	3.5	5.4	3.5	
PHF			0.77			0.65			0.64			0.73	0.87

PM	Carmel Ridge Road Southbound			Boulton Avenue Westbound			Carmel Ridge Road Northbound			Boulton Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	0	8	3	9	3	1	3	9	4	2	6	2	50
16:15	1	11	1	5	0	2	1	5	4	1	8	0	39
16:30	1	10	1	4	2	3	2	4	2	5	3	0	37
16:45	0	4	5	3	2	2	2	7	1	2	8	1	37
17:00	3	7	2	5	0	3	2	4	4	4	9	1	44
17:15	0	11	1	2	4	1	4	10	2	2	4	0	41
17:30	2	12	2	2	3	2	2	3	9	5	11	4	57
17:45	1	12	0	2	1	1	1	5	6	7	6	2	44
Total	8	75	15	32	15	15	17	47	32	28	55	10	349
Approach%	8.2	76.5	15.3	51.6	24.2	24.2	17.7	49.0	33.3	30.1	59.1	10.8	
Total%	2.3	21.5	4.3	9.2	4.3	4.3	4.9	13.5	9.2	8.0	15.8	2.9	
PM Intersection Peak Hour:	**17:00 to 18:00**												
Volume	6	42	5	11	8	7	9	22	21	18	30	7	186
Approach%	11.3	79.2	9.4	42.3	30.8	26.9	17.3	42.3	40.4	32.7	54.5	12.7	
Total%	3.2	22.6	2.7	5.9	4.3	3.8	4.8	11.8	11.3	9.7	16.1	3.8	
PHF			0.83			0.81			0.81			0.69	0.82

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Intersection Turning Movement - Bicycle & Pedestrian Count

Location:	#02	File Name:	ITM-19-118-02
Intersection:	Boulton Avenue & Carmel Ridge Road	Project:	LLG Ref. 3-18-2896
Date of Count:	Tuesday, October 1, 2019		Carmel Mountain

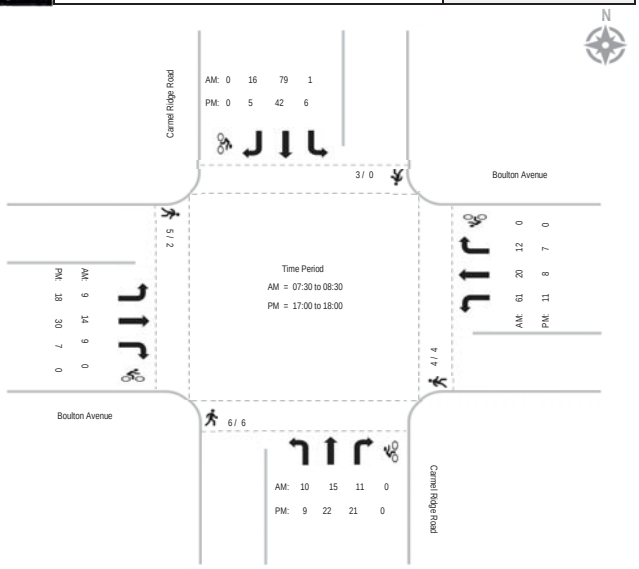
AM	Carmel Ridge Road Southbound				Boulton Avenue Westbound				Carmel Ridge Road Northbound				Boulton Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	3	0
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0	4	0	0	0	0	1	0	0	4	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	2	0	0	0	0	0	0	0	1	0	0	0	3	0
8:15	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	3	0
8:30	1	0	0	0	0	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	1	0	0	0	1	0
Ped Total	3				4				6				5				18	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

PM	Carmel Ridge Road Southbound				Boulton Avenue Westbound				Carmel Ridge Road Northbound				Boulton Avenue 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	1	0	0	0	0	0	0	0	0	0	0	0	1	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	2	0	0	0	2	0	0	0	0	0	0	0	4	0
17:15	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2	0
17:30	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	0
17:45	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2	0
Ped Total	0				4				6				2				12	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

Report Generated by Bearcat Enterprises LLC, DBA "Count Data" | 619-987-5136 | info@yourcountdata.com

Intersection Turning Movement - Peak Hour Summary

Location:	#02	File Name:	ITM-19-118-02
Intersection:	Boulton Avenue & Carmel Ridge Road	Project:	LLG Ref. 3-18-2896
Date of Count:	Tuesday, October 1, 2019		Carmel Mountain



Intersection Turning Movement - Peak Hour Vehicle Count

Location:	#03	File Name:	ITM-19-118-03
Intersection:	Carmel Ridge Road & Ted Williams Parkway	Project:	LLG Ref. 3-18-2896
Date of Count:	Tuesday, October 1, 2019		Carmel Mountain

AM	Carmel Ridge Road Southbound			Ted Williams Parkway Westbound			- Northbound			Ted Williams Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	0	33	0	439	4	0	0	0	0	156	0	632
7:15	0	0	42	0	390	1	0	0	0	0	194	0	627
7:30	0	0	38	0	384	4	0	0	0	0	231	0	657
7:45	0	0	49	0	407	2	0	0	0	0	232	0	690
8:00	0	0	45	0	318	2	0	0	0	0	271	0	636
8:15	0	0	29	0	381	5	0	0	0	0	284	0	699
8:30	0	0	20	0	390	3	0	0	0	0	244	0	657
8:45	0	0	28	0	242	3	0	0	0	0	199	0	472
Total	0	0	284	0	2951	24	0	0	0	0	1811	0	5070
Approach%	-	-	100.0	-	99.2	0.8	-	-	-	-	100.0	-	
Total%	-	-	5.6	-	58.2	0.5	-	-	-	-	35.7	-	
AM Intersection Peak Hour:	**07:30 to 08:30**												
Volume	-	-	161	-	1,490	13	-	-	-	-	1,018	-	2,682
Approach%	-	-	100.0	-	99.1	0.9	-	-	-	-	100.0	-	
Total%	-	-	6.0	-	55.6	0.5	-	-	-	-	38.0	-	
PHF			0.82			0.92			#DIV/0!			0.90	0.96

PM	Carmel Ridge Road Southbound			Ted Williams Parkway Westbound			- Northbound			Ted Williams Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	0	0	14	0	217	5	0	0	0	0	286	0	522
16:15	0	0	17	0	212	2	0	0	0	0	380	0	611
16:30	0	0	11	0	226	3	0	0	0	0	399	0	639
16:45	0	0	8	0	228	5	0	0	0	0	423	0	664
17:00	0	0	14	0	231	4	0	0	0	0	475	0	724
17:15	0	0	11	0	256	5	0	0	0	0	433	0	705
17:30	0	0	10	0	254	4	0	0	0	0	398	0	666
17:45	0	0	13	0	225	4	0	0	0	0	429	0	671
Total	0	0	98	0	1849	32	0	0	0	0	3223	0	5202
Approach%	-	-	100.0	-	98.3	1.7	-	-	-	-	100.0	-	
Total%	-	-	1.9	-	35.5	0.6	-	-	-	-	62.0	-	
PM Intersection Peak Hour:	**17:00 to 18:00**												
Volume	-	-	48	-	966	17	-	-	-	-	1,735	-	2,766
Approach%	-	-	100.0	-	98.3	1.7	-	-	-	-	100.0	-	
Total%	-	-	1.7	-	34.9	0.6	-	-	-	-	62.7	-	
PHF			0.86			0.94			#DIV/0!			0.91	0.96

Intersection Turning Movement - Bicycle & Pedestrian Count

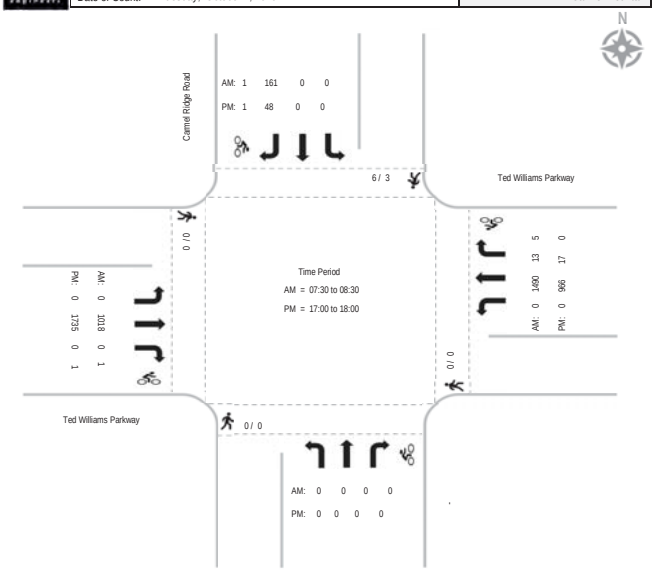
Location:	#03	File Name:	ITM-19-118-03
Intersection:	Carmel Ridge Road & Ted Williams Parkway	Project:	LLG Ref. 3-18-2896
Date of Count:	Tuesday, October 1, 2019		Carmel Mountain

AM	Carmel Ridge Road Southbound				Ted Williams Parkway Westbound				- Northbound				Ted Williams 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	0	0	3	0	0	0	0	0	0	0	0	0	0	3
7:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30	2	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	2	2
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	0	0	0	0	0	0	0	0	0	0	0	2	0
8:15	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	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	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
Ped Total	6				0				0				0				6	
Bike Total		1	0	0		0	5	0		0	0	0		0	1	0		7

PM	Carmel Ridge Road Southbound				Ted Williams Parkway Westbound				- Northbound				Ted Williams 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	1	0	0	1
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
17:15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
17:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	3				0				0				0				3	
Bike Total		0	0	1		0	0	0		0	0	0		0	1	0		2

Intersection Turning Movement - Peak Hour Summary

Location:	#03	File Name:	ITM-19-118-03
Intersection:	Carmel Ridge Road & Ted Williams Parkway	Project:	LLG Ref. 3-18-2896
Date of Count:	Tuesday, October 1, 2019		Carmel Mountain



Intersection Turning Movement - Peak Hour Vehicle Count

Location:	#05	File Name:	ITM-19-118-05
Intersection:	Stoney Peak Drive & World Trade Drive	Project:	LLG Ref. 3-18-2896
Date of Count:	Tuesday, October 1, 2019		Carmel Mountain

AM	Stoney Peak Drive Southbound			World Trade Drive Westbound			Stoney Peak Drive Northbound			Carmel Summit Driveway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	17	7	0	2	1	14	2	29	12	6	6	0	96
7:15	27	5	2	5	2	10	0	21	18	11	5	0	106
7:30	29	3	1	9	3	35	0	23	19	6	4	0	132
7:45	15	3	1	8	0	32	1	16	15	4	5	0	100
8:00	22	6	1	5	1	18	2	18	15	6	1	2	97
8:15	12	7	3	8	1	29	0	14	7	2	3	1	87
8:30	20	8	3	8	2	16	0	13	11	0	6	0	87
8:45	21	3	2	12	2	21	0	10	5	4	2	0	82
Total	163	42	13	57	12	175	5	144	102	39	32	3	787
Approach%	74.8	19.3	6.0	23.4	4.9	71.7	2.0	57.4	40.6	52.7	43.2	4.1	
Total%	20.7	5.3	1.7	7.2	1.5	22.2	0.6	18.3	13.0	5.0	4.1	0.4	
AM Intersection Peak Hour:	**07:15 to 08:15**												
Volume	93	17	5	27	6	95	3	78	67	27	15	2	435
Approach%	80.9	14.8	4.3	21.1	4.7	74.2	2.0	52.7	45.3	61.4	34.1	4.5	
Total%	21.4	3.9	1.1	6.2	1.4	21.8	0.7	17.9	15.4	6.2	3.4	0.5	
PHF			0.85			0.68			0.88			0.69	0.82

PM	Stoney Peak Drive Southbound			World Trade Drive Westbound			Stoney Peak Drive Northbound			Carmel Summit Driveway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	24	11	2	16	1	36	0	10	14	4	4	0	122
16:15	34	22	9	18	15	23	0	3	7	3	4	0	138
16:30	22	12	5	15	6	30	0	6	17	5	2	1	121
16:45	22	19	5	24	5	25	0	12	5	1	1	0	119
17:00	31	16	3	25	6	35	1	7	14	3	1	0	142
17:15	35	12	1	26	2	39	1	11	16	1	1	0	145
17:30	33	23	2	23	8	45	0	16	19	5	3	0	177
17:45	30	20	7	15	5	32	0	6	17	2	4	0	138
Total	231	135	34	162	48	265	2	71	109	24	20	1	1102
Approach%	57.8	33.8	8.5	34.1	10.1	55.8	1.1	39.0	59.9	53.3	44.4	2.2	
Total%	21.0	12.3	3.1	14.7	4.4	24.0	0.2	6.4	9.9	2.2	1.8	0.1	
PM Intersection Peak Hour:	**17:00 to 18:00**												
Volume	129	71	13	89	21	151	2	40	66	11	9	-	602
Approach%	60.6	33.3	6.1	34.1	8.0	57.9	1.9	37.0	61.1	55.0	45.0	-	
Total%	21.4	11.8	2.2	14.8	3.5	25.1	0.3	6.6	11.0	1.8	1.5	-	
PHF			0.92			0.86			0.77			0.63	0.85

Intersection Turning Movement - Bicycle & Pedestrian Count

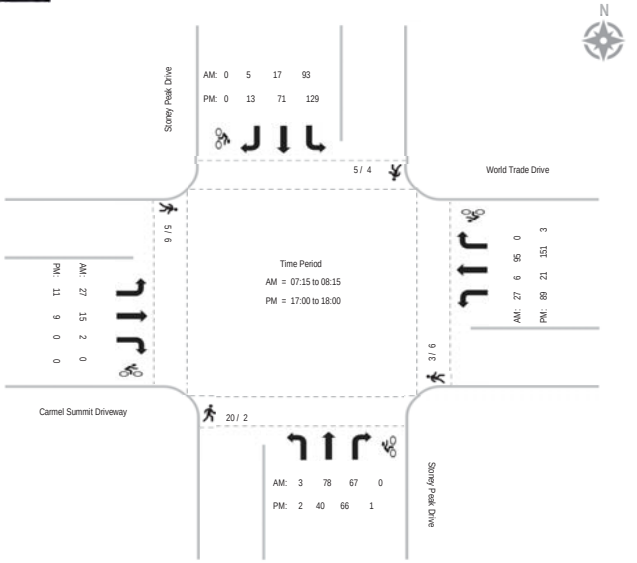
Location:	#05	File Name:	ITM-19-118-05
Intersection:	Stoney Peak Drive & World Trade Drive	Project:	LLG Ref. 3-18-2896
Date of Count:	Tuesday, October 1, 2019		Carmel Mountain

AM	Stoney Peak Drive Southbound				World Trade Drive Westbound				Stoney Peak Drive Northbound				Carmel Summit Driveway 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	5	0	0	0	0	0	0	0	5	0
7:30	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	0
7:45	0	0	0	0	3	0	0	0	3	0	0	0	2	0	0	0	8	0
8:00	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0
8:15	2	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	9	0
8:30	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	4	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	5				3				20				5				33	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

PM	Stoney Peak Drive Southbound				World Trade Drive Westbound				Stoney Peak Drive Northbound				Carmel Summit Driveway 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	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1
16:30	0	0	0	0	1	0	3	0	2	0	0	0	2	0	0	0	5	3
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	2	0	0	0	0	0	0	0	2	0	0	0	4	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	3	0
17:45	2	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	5	0
Ped Total	4				6				2				6				18	
Bike Total		0	0	0		0	3	0		1	0	0		0	0	0		4

Intersection Turning Movement - Peak Hour Summary

Location:	#05	File Name:	ITM-19-118-05
Intersection:	Stoney Peak Drive & World Trade Drive	Project:	LLG Ref. 3-18-2896
Date of Count:	Tuesday, October 1, 2019		Carmel Mountain



National Data & Surveying Services

Intersection Turning Movement Count

Location: I-15 NB Ramps & Carmel Mountain
City: San Diego
Control: Signalized

Project ID: 19-04053-002
Date: 2/7/2019

Total

NS/EW Streets:	I-15 NB Ramps				I-15 NB Ramps				Carmel Mountain Rd				Carmel Mountain Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1.5	0.5	2	0	0	0	0	0	2	3	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	35	0	222	0	0	0	0	0	76	127	0	0	0	202	71	0	733
7:15 AM	29	0	258	0	0	0	0	0	62	151	0	0	0	202	76	0	778
7:30 AM	46	0	224	0	0	0	0	0	97	133	0	0	0	193	91	0	784
7:45 AM	35	0	296	0	0	0	0	0	80	169	0	0	0	187	82	0	849
8:00 AM	35	2	229	0	0	0	0	0	75	151	0	0	0	167	80	0	739
8:15 AM	45	1	272	0	0	0	0	0	73	161	0	0	0	202	73	0	827
8:30 AM	44	1	233	0	0	0	0	0	73	170	0	0	0	169	71	0	761
8:45 AM	43	0	265	0	0	0	0	0	56	179	0	0	0	155	69	0	767
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	312	4	1999	0	0	0	0	0	592	1241	0	0	0	1477	613	0	6238
APPROACH %'s :	13.48%	0.17%	86.35%	0.00%					32.30%	67.70%	0.00%	0.00%	0.00%	70.67%	29.33%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	161	3	1021	0	0	0	0	0	325	614	0	0	0	749	326	0	3199
PEAK HR FACTOR :	0.875	0.375	0.862	0.000	0.000	0.000	0.000	0.000	0.838	0.908	0.000	0.000	0.000	0.927	0.896	0.000	0.942
			0.895							0.943					0.946		

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1.5	0.5	2	0	0	0	0	0	2	3	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	71	0	211	0	0	0	0	0	57	198	0	0	0	342	109	0	988
4:15 PM	82	4	181	0	0	0	0	0	45	183	0	0	0	339	110	0	944
4:30 PM	69	9	205	0	0	0	0	0	64	207	0	0	0	345	136	0	1035
4:45 PM	83	5	208	0	0	0	0	0	47	215	0	0	0	324	130	0	1012
5:00 PM	52	1	208	0	0	0	0	0	56	185	0	0	0	373	134	0	1049
5:15 PM	76	3	229	0	0	0	0	0	63	234	0	0	0	361	152	0	1118
5:30 PM	109	0	230	0	0	0	0	0	55	220	0	0	0	361	155	0	1130
5:45 PM	81	0	223	0	0	0	0	0	61	226	0	0	0	337	97	0	1025
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	663	22	1695	0	0	0	0	0	448	1668	0	0	0	2782	1023	0	8301
APPROACH %'s :	27.88%	0.92%	71.22%	0.00%					21.17%	78.83%	0.00%	0.00%	0.00%	73.11%	26.89%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	358	4	890	0	0	0	0	0	235	865	0	0	0	1432	538	0	4322
PEAK HR FACTOR :	0.821	0.333	0.967	0.000	0.000	0.000	0.000	0.000	0.933	0.924	0.000	0.000	0.000	0.960	0.868	0.000	0.956
			0.923							0.926					0.954		

National Data & Surveying Services

Intersection Turning Movement Count

Location: I-15 NB Ramps & Carmel Mountain Rd
City: San Diego
Control: Signalized

Project ID: 19-04053-002
Date: 2/7/2019

Bikes

NS/EW Streets:	I-15 NB Ramps				I-15 NB Ramps				Carmel Mountain Rd				Carmel Mountain Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1.5	0.5	2	0	0	0	0	0	2	3	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1.5	0.5	2	0	0	0	0	0	2	3	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
APPROACH %'s :													0.00%	100.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.375
														0.375			

National Data & Surveying Services

Intersection Turning Movement Count

Location: I-15 NB Ramps & Carmel Mountain Rd
City: San Diego

Project ID: 19-04053-002
Date: 2/7/2019

Pedestrians (Crosswalks)

NS/EW Streets:	I-15 NB Ramps		I-15 NB Ramps		Carmel Mountain Rd		Carmel Mountain Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	1	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	3	3	1	1	1	1	0	0	10
8:30 AM	1	0	1	0	0	1	0	0	3
8:45 AM	0	0	1	0	0	0	0	0	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	4	4	3	2	1	2	0	0	16
APPROACH %'s :	50.00%	50.00%	60.00%	40.00%	33.33%	66.67%			
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	3	3	1	2	1	1	0	0	11
PEAK HR FACTOR :	0.250	0.250	0.250	0.500	0.250	0.250			0.275
	0.250		0.375		0.250				

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	1	0	0	0	0	0	0	0	1
4:15 PM	0	2	2	0	0	0	0	0	4
4:30 PM	0	0	0	3	0	0	0	0	3
4:45 PM	1	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	1	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0	1
5:45 PM	4	0	0	1	0	0	0	0	5
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	6	3	2	5	0	0	0	0	16
APPROACH %'s :	66.67%	33.33%	28.57%	71.43%					
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	4	1	0	2	0	0	0	0	7
PEAK HR FACTOR :	0.250	0.250		0.500					0.350
	0.313		0.500						

Prepared by National Data & Surveying Services

I-15 NB Ramps & Carmel Mountain Rd

Peak Hour Turning Movement Count

ID: 19-04053-002
City: San Diego

Day: Thursday
Date: 02/07/2019

PEAK HOURS

AM	07:30 AM - 08:30 AM
NOON	NONE
PM	05:00 PM - 06:00 PM

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

I-15 NB Ramps — SOUTHBOUND

AM	0	0	0	0	654
NOON	0	0	0	0	0
PM	0	0	0	0	777

EASTBOUND — Carmel Mountain Rd

AM	NOON	PM
910	0	1790
0	0	0
325	0	235
614	0	865
0	0	0

WESTBOUND — Carmel Mountain Rd

PM	NOON	AM
538	0	326
1432	0	749
0	0	0
0	0	0
1755	0	1635

NORTHBOUND — I-15 NB Ramps

PM	NOON	AM
0	0	358
0	0	0
0	0	161

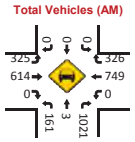
PM	NOON	AM
4	890	
0	0	
3	1021	

PHF BY APPROACH

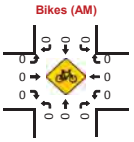
	NB	SB	EB	WB
AM	0.90		0.94	0.95
NOON				
PM	0.92		0.93	0.95

TEV	3199 AM	0 NOON	4322 PM
PHF	0.94		0.96

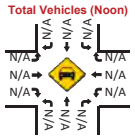
Total Vehicles (AM)



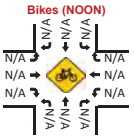
Bikes (AM)



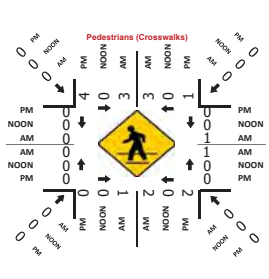
Total Vehicles (Noon)



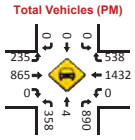
Bikes (NOON)



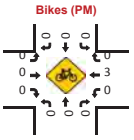
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: I-15 SB Ramps & Carmel Mountain Rd
City: San Diego
Control: Signalized

Project ID: 19-04053-001
Date: 2/7/2019

Total

NS/EW Streets:	I-15 SB Ramps				I-15 SB Ramps				Carmel Mountain Rd				Carmel Mountain Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1.3	0.3	1.3	0	0	2	1	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	43	0	62	0	0	138	125	0	140	78	0	0	586
7:15 AM	0	0	0	0	67	0	47	0	0	151	158	0	151	93	0	0	667
7:30 AM	0	0	0	0	53	1	66	0	0	190	171	0	138	89	0	0	708
7:45 AM	0	0	0	0	72	0	65	0	0	163	115	0	124	105	0	0	645
8:00 AM	0	0	0	0	71	0	56	0	0	161	145	0	115	86	0	0	634
8:15 AM	0	0	0	0	74	1	52	0	0	161	128	0	138	109	0	0	663
8:30 AM	0	0	0	0	74	0	55	0	0	168	117	0	122	100	0	0	636
8:45 AM	0	0	0	0	71	1	56	0	0	170	94	0	101	90	0	0	583
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	525	3	459	0	0	1302	1053	0	1029	751	0	0	5122
APPROACH %'s :					53.19%	0.30%	46.50%	0.00%	0.00%	55.29%	44.71%	0.00%	57.81%	42.19%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	263	1	234	0	0	665	589	0	528	374	0	0	2654
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.913	0.250	0.886	0.000	0.000	0.875	0.861	0.000	0.874	0.882	0.000	0.000	0.937
						0.909				0.868				0.924			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1.3	0.3	1.3	0	0	2	1	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	108	0	66	0	0	155	64	0	230	188	0	0	811
4:15 PM	0	0	0	0	95	1	74	0	0	143	55	0	210	189	0	0	767
4:30 PM	0	0	0	0	86	2	80	0	0	170	59	0	226	208	0	0	831
4:45 PM	0	0	0	0	95	0	97	0	0	171	76	0	215	180	0	0	834
5:00 PM	0	0	0	0	89	0	70	0	0	143	56	0	240	230	0	0	828
5:15 PM	0	0	0	0	116	1	79	0	0	186	56	0	242	193	0	0	873
5:30 PM	0	0	0	0	127	0	65	0	0	161	76	0	231	229	0	0	889
5:45 PM	0	0	0	0	114	0	79	0	0	172	48	0	215	231	0	0	859
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	830	4	610	0	0	1301	490	0	1809	1648	0	0	6692
APPROACH %'s :					57.48%	0.28%	42.24%	0.00%	0.00%	72.64%	27.36%	0.00%	52.33%	47.67%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	446	1	293	0	0	662	236	0	928	883	0	0	3449
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.878	0.250	0.927	0.000	0.000	0.890	0.776	0.000	0.959	0.956	0.000	0.000	0.970
						0.944				0.928				0.963			

National Data & Surveying Services

Intersection Turning Movement Count

Location: I-15 SB Ramps & Carmel Mountain Rd
City: San Diego
Control: Signalized

Project ID: 19-04053-001
Date: 2/7/2019

Bikes

NS/EW Streets:	I-15 SB Ramps				I-15 SB Ramps				Carmel Mountain Rd				Carmel Mountain Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1.3	0.3	1.3	0	0	2	1	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1.3	0.3	1.3	0	0	2	1	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
APPROACH %'s :													0.00%	100.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.375

National Data & Surveying Services

Intersection Turning Movement Count

Location: I-15 SB Ramps & Carmel Mountain Rd
City: San Diego

Project ID: 19-04053-001
Date: 2/7/2019

Pedestrians (Crosswalks)

NS/EW Streets:	I-15 SB Ramps		I-15 SB Ramps		Carmel Mountain Rd		Carmel Mountain Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	1	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	1	0	0	0	0	0	0	0	1
8:30 AM	1	1	1	0	0	0	0	0	3
8:45 AM	0	0	1	0	0	0	0	0	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	2	2	2	1	0	0	0	0	7
APPROACH %'s :	50.00%	50.00%	66.67%	33.33%					
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	0	1	0	1	0	0	0	0	2
PEAK HR FACTOR :	0.250		0.250						0.500

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	1	0	2	0	0	0	0	0	3
4:30 PM	0	2	0	1	0	0	0	0	3
4:45 PM	0	0	0	2	0	0	0	0	2
5:00 PM	1	0	0	1	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	1	1	0	0	0	0	0	0	2
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	3	3	2	4	0	0	0	0	12
APPROACH %'s :	50.00%	50.00%	33.33%	66.67%					
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	2	1	0	1	0	0	0	0	4
PEAK HR FACTOR :	0.500	0.250		0.250					0.500
	0.375		0.250						

Prepared by National Data & Surveying Services

I-15 SB Ramps & Carmel Mountain Rd

Peak Hour Turning Movement Count

ID: 19-04053-001
City: San Diego

Day: Thursday
Date: 02/07/2019

PEAK HOURS
07:15 AM - 08:15 AM
NONE
05:00 PM - 06:00 PM

COUNT PERIODS
07:00 AM - 09:00 AM
NONE
04:00 PM - 06:00 PM

I-15 SB Ramps — SOUTHBOUND

AM	234	1	263	0	0
NOON	0	0	0	0	0
PM	293	1	446	0	0

Carmel Mountain Rd — EASTBOUND

AM	NOON	PM
608	0	1176
0	0	0
0	0	0
665	0	662
589	0	236

Carmel Mountain Rd — WESTBOUND

PM	NOON	AM
0	0	0
883	0	374
928	0	528
0	0	0
1108	0	928

PHF BY APPROACH

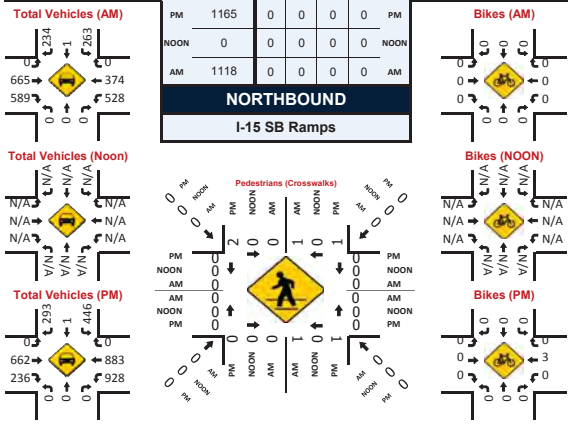
	NB	SB	EB	WB
AM		0.91	0.87	0.92
NN				
PM		0.94	0.93	0.96

TEV	2654 AM	0 NOON	3449 PM
PHF	0.94		0.97

NORTHBOUND — I-15 SB Ramps

PM	1165	0	0	0	0
NOON	0	0	0	0	0
AM	1118	0	0	0	0

Total Vehicles (AM) | Bikes (AM) | Total Vehicles (Noon) | Bikes (NOON) | Pedestrians (Crosswalks) | Total Vehicles (PM) | Bikes (PM)



Intersection Turning Movement - Peak Hour Vehicle Count

Location:	#05	File Name:	ITM-19-118-05
Intersection:	Stoney Gate Place & Shoal Creek Drive	Project:	LLG Ref. 3-18-2896
Date of Count:	Tuesday, October 1, 2019		Carmel Mountain

AM	Shoal Creek Drive Southbound			Stoney Gate Place Westbound			Shoal Creek Drive Northbound			Stoney Gate Place Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	1	35	0	6	0	3	1	18	1	2	1	3	71
7:15	5	28	1	6	0	2	0	16	1	6	0	6	71
7:30	3	46	0	3	0	2	4	18	4	4	0	3	87
7:45	2	79	1	6	0	1	2	30	4	5	0	9	139
8:00	1	74	3	4	0	5	2	53	9	4	1	3	159
8:15	1	52	1	4	0	4	4	44	6	3	1	8	128
8:30	1	32	2	2	0	1	5	29	3	7	1	5	88
8:45	2	24	2	2	1	0	3	25	2	2	0	4	67
Total	16	370	10	33	1	18	21	233	30	33	4	41	810
Approach%	4.0	93.4	2.5	63.5	1.9	34.6	7.4	82.0	10.6	42.3	5.1	52.6	
Total%	2.0	45.7	1.2	4.1	0.1	2.2	2.6	28.8	3.7	4.1	0.5	5.1	
AM Intersection Peak Hour:	**07:45 to 08:45**												
Volume	5	237	7	16	-	11	13	156	22	19	3	25	514
Approach%	2.0	95.2	2.8	59.3	-	40.7	6.8	81.7	11.5	40.4	6.4	53.2	
Total%	1.0	46.1	1.4	3.1	-	2.1	2.5	30.4	4.3	3.7	0.6	4.9	
PHF			0.76			0.75			0.75			0.84	0.81

PM	Shoal Creek Drive Southbound			Stoney Gate Place Westbound			Shoal Creek Drive Northbound			Stoney Gate Place Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	6	28	2	0	0	2	3	39	8	0	0	2	90
16:15	1	25	0	0	1	2	5	51	8	1	0	3	97
16:30	0	22	4	5	1	1	1	55	8	1	0	6	104
16:45	1	26	3	1	0	0	2	50	10	2	0	3	98
17:00	5	35	2	3	0	2	9	55	9	1	0	5	126
17:15	1	23	3	4	0	2	9	55	9	3	0	3	112
17:30	1	27	7	2	0	1	8	53	22	2	0	3	126
17:45	0	29	2	0	0	4	5	48	10	1	0	5	104
Total	15	215	23	15	2	14	42	406	84	11	0	30	857
Approach%	5.9	85.0	9.1	48.4	6.5	45.2	7.9	76.3	15.8	26.8	-	73.2	
Total%	1.8	25.1	2.7	1.8	0.2	1.6	4.9	47.4	9.8	1.3	-	3.5	
PM Intersection Peak Hour:	**17:00 to 18:00**												
Volume	7	114	14	9	-	9	31	211	50	7	-	16	468
Approach%	5.2	84.4	10.4	50.0	-	50.0	10.6	72.3	17.1	30.4	-	69.6	
Total%	1.5	24.4	3.0	1.9	-	1.9	6.6	45.1	10.7	1.5	-	3.4	
PHF			0.80			0.75			0.88			0.96	0.93

Intersection Turning Movement - Bicycle & Pedestrian Count

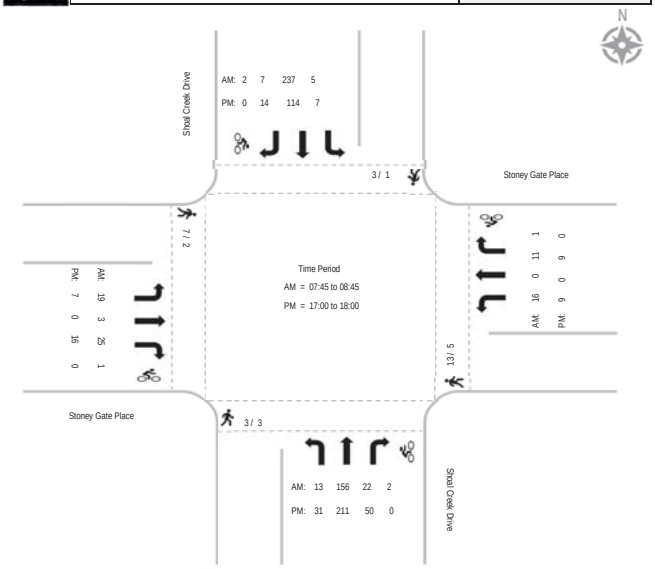
Location:	#05	File Name:	ITM-19-118-05
Intersection:	Stoney Gate Place & Shoal Creek Drive	Project:	LLG Ref. 3-18-2896
Date of Count:	Tuesday, October 1, 2019		Carmel Mountain

AM	Shoal Creek Drive Southbound				Stoney Gate Place Westbound				Shoal Creek Drive Northbound				Stoney Gate Place 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	0	0	1	0	0	0	0	0	0	0	0	0	2	1
7:15	0	0	1	0	2	0	0	0	0	0	0	0	0	1	0	0	2	2
7:30	0	0	1	0	4	0	0	0	0	0	0	0	3	0	0	0	7	1
7:45	0	0	0	0	1	0	0	0	2	0	0	0	2	0	0	0	5	0
8:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0
8:15	1	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0	3	1
8:30	0	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0	2	1
8:45	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	3	0
Ped Total	3				13				3				7				26	
Bike Total		0	2	0		0	1	0		0	2	0		1	0	0		6

PM	Shoal Creek Drive Southbound				Stoney Gate Place Westbound				Shoal Creek Drive Northbound				Stoney Gate Place 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	1	0	0	0	0	0	0	0	0	0	0	0	1	0
16:30	0	0	0	0	3	0	0	0	1	0	0	0	0	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	1	0	0	0	1	0
17:15	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2	0
17:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
17:45	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
Ped Total	1				5				3				2				11	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

Intersection Turning Movement - Peak Hour Summary

Location:	#05	File Name:	ITM-19-118-05
Intersection:	Stoney Gate Place & Shoal Creek Drive	Project:	LLG Ref. 3-18-2896
Date of Count:	Tuesday, October 1, 2019		Carmel Mountain



Intersection Turning Movement - Peak Hour Vehicle Count

Location:	#06	File Name:	ITM-19-118-06
Intersection:	Stoney Gate Place & Carmel Ridge Road	Project:	LLG Ref. 3-18-2896
Date of Count:	Tuesday, October 1, 2019		Carmel Mountain

AM	Carmel Ridge Road Southbound			* Westbound			Carmel Ridge Road Northbound			Stoney Gate Place Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	32	1	0	0	0	1	3	0	7	0	0	44
7:15	0	32	0	0	0	0	0	2	0	2	0	2	38
7:30	0	28	2	0	0	0	1	6	0	6	0	3	46
7:45	0	40	1	0	0	0	1	6	0	3	0	1	52
8:00	0	32	1	0	0	0	1	6	0	12	0	1	53
8:15	0	23	2	0	0	0	0	5	0	7	0	0	37
8:30	0	10	0	0	0	0	0	2	0	2	0	0	14
8:45	0	23	1	0	0	0	1	6	0	2	0	1	34
Total	0	220	8	0	0	0	5	36	0	41	0	8	318
Approach%	-	96.5	3.5	-	-	-	12.2	87.8	-	83.7	-	16.3	
Total%	-	69.2	2.5	-	-	-	1.6	11.3	-	12.9	-	2.5	
AM Intersection Peak Hour:	**07:15 to 08:15**												
Volume	-	132	4	-	-	-	3	20	-	23	-	7	189
Approach%	-	97.1	2.9	-	-	-	13.0	87.0	-	76.7	-	23.3	
Total%	-	69.8	2.1	-	-	-	1.6	10.6	-	12.2	-	3.7	
PHF			0.83			#DIV/0!			0.82			0.58	0.89

PM	Carmel Ridge Road Southbound			* Westbound			Carmel Ridge Road Northbound			Stoney Gate Place Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	0	13	0	0	0	0	0	4	0	10	0	1	28
16:15	0	14	1	0	0	0	2	4	0	8	0	1	30
16:30	0	10	4	0	0	0	0	3	0	5	0	1	23
16:45	0	7	0	0	0	0	2	3	0	6	0	0	18
17:00	0	10	2	0	0	0	0	4	0	9	0	1	26
17:15	0	9	2	0	0	0	0	6	0	10	0	0	27
17:30	0	11	3	0	0	0	1	2	0	12	0	0	29
17:45	0	9	2	0	0	0	1	4	0	9	0	0	25
Total	0	83	14	0	0	0	6	30	0	69	0	4	206
Approach%	-	85.6	14.4	-	-	-	16.7	83.3	-	94.5	-	5.5	
Total%	-	40.3	6.8	-	-	-	2.9	14.6	-	33.5	-	1.9	
PM Intersection Peak Hour:	**17:00 to 18:00**												
Volume	-	39	9	-	-	-	2	16	-	40	-	1	107
Approach%	-	81.3	18.8	-	-	-	11.1	88.9	-	97.6	-	2.4	
Total%	-	36.4	8.4	-	-	-	1.9	15.0	-	37.4	-	0.9	
PHF			0.86			#DIV/0!			0.75			0.85	0.92

Intersection Turning Movement - Bicycle & Pedestrian Count

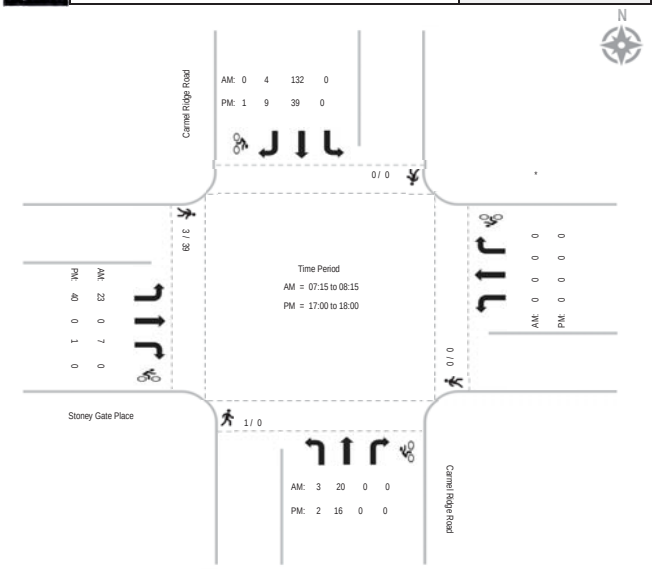
Location:	#06	File Name:	ITM-19-118-06
Intersection:	Stoney Gate Place & Carmel Ridge Road	Project:	LLG Ref. 3-18-2896
Date of Count:	Tuesday, October 1, 2019		Carmel Mountain

AM	Carmel Ridge Road Southbound				* Westbound				Carmel Ridge Road Northbound				Stoney Gate Place Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
7:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
8:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	0				0				1				3				4	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

PM	Carmel Ridge Road Southbound				* Westbound				Carmel Ridge Road Northbound				Stoney Gate Place 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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	36	0	0	0	36	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
Ped Total	0				0				0				39				39	
Bike Total		0	1	0		0	0	0		0	0	0		0	0	0		1

Intersection Turning Movement - Peak Hour Summary

Location:	#06	File Name:	ITM-19-118-06
Intersection:	Stoney Gate Place & Carmel Ridge Road	Project:	LLG Ref. 3-18-2896
Date of Count:	Tuesday, October 1, 2019		Carmel Mountain



Linscott, Law & Greenspan, Engineers

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

Average Daily Traffic

Location: **Ted Williams Pkwy, between I-15 and Rancho Carmel Drive**

Date: **Thursday, February 7, 2019** Total Daily Volume: **43971** 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
221	92	78	107	375	922	2315	3599	3172	2428	2050	2053	2168	2452	2969	3249	3691	3887	3026	1897	1353	986	570	311
55	28	21	17	43	119	388	905	860	656	482	495	514	563	675	802	826	976	818	575	392	266	187	83
57	7	21	25	69	195	539	924	811	642	515	543	543	631	681	767	925	1009	810	486	365	278	168	76
58	29	19	28	114	278	615	869	741	595	541	506	600	634	829	824	1000	961	763	446	280	220	110	85
51	28	17	37	149	330	773	901	760	535	512	509	511	624	784	856	940	941	635	390	316	222	105	67

Date: **Thursday, February 7, 2019** Total Daily Volume: **21683** 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
105	47	43	57	204	345	653	1238	1233	942	901	958	1114	1252	1594	1900	2142	2195	1758	1083	786	608	341	184
26	13	9	7	27	47	111	260	342	244	192	238	233	282	331	415	469	545	471	323	227	153	104	51
33	5	17	10	37	69	153	304	313	230	235	243	291	314	397	450	512	572	467	274	217	178	107	40
24	13	9	18	54	97	164	322	264	233	231	226	311	324	430	484	603	548	450	248	161	141	61	49
22	16	8	22	86	132	225	352	314	235	243	251	279	332	436	551	558	530	370	238	181	136	69	44

Date: **Thursday, February 7, 2019** Total Daily Volume: **22288** 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
116	45	35	50	171	577	1662	2361	1939	1486	1149	1095	1054	1200	1375	1349	1549	1692	1268	814	567	378	229	127
29	15	12	10	16	72	277	645	518	412	290	257	281	281	344	387	357	431	347	252	165	113	83	32
24	2	4	15	32	126	386	620	498	412	280	300	252	317	284	317	413	437	343	212	148	100	61	36
34	16	10	10	60	181	451	547	477	362	310	280	289	310	399	340	397	413	313	198	119	79	49	36
29	12	9	15	63	198	548	549	446	300	269	258	232	292	348	305	382	411	265	152	135	86	36	23

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Linscott, Law & Greenspan, Engineers

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

Average Daily Traffic

Location: **Ted Williams Pkwy, between Rancho Carmel Drive and Shoal Creek Drive**

Date: **Thursday, February 7, 2019** Total Daily Volume: **32195** 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
123	54	46	64	200	620	1661	2548	2235	1735	1545	1495	1604	1786	2197	2401	2655	2805	2393	1464	1061	816	464	223
28	17	7	15	23	76	285	663	579	450	364	373	384	395	484	573	582	717	621	460	303	232	136	55
36	4	17	17	38	145	397	644	580	472	385	361	413	448	542	584	658	693	637	376	300	242	138	60
31	13	11	16	61	179	436	616	536	420	404	395	409	469	577	581	708	713	597	322	219	165	104	60
28	20	11	16	78	220	543	625	540	393	392	366	398	474	594	663	707	682	538	306	239	177	86	48

Date: **Thursday, February 7, 2019** Total Daily Volume: **16832** 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
83	29	34	19	49	164	363	795	818	629	694	714	833	960	1337	1549	1763	1859	1578	966	644	525	280	147
21	9	6	6	8	20	44	181	197	151	134	179	179	196	283	329	375	467	400	303	193	136	76	36
25	3	14	2	7	38	82	205	210	160	184	160	224	236	353	376	421	460	423	252	191	153	87	37
23	7	8	8	14	42	93	196	192	159	173	183	216	263	350	403	476	458	406	203	132	116	58	37
14	10	6	3	20	64	144	213	219	159	203	192	214	265	351	441	491	474	349	208	128	120	59	37

Date: **Thursday, February 7, 2019** Total Daily Volume: **15363** 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
40	25	12	45	151	456	1298	1753	1417	1106	851	781	771	826	860	852	892	946	815	498	417	291	184	76
7	8	1	9	15	56	241	482	382	299	230	194	205	199	201	244	207	250	221	157	110	96	60	19
11	1	3	15	31	107	315	439	370	312	201	201	189	212	189	208	237	233	214	124	109	89	51	23
8	6	3	8	47	137	343	420	344	261	231	212	193	206	227	178	232	255	191	119	87	49	46	23
14	10	5	13	58	156	399	412	321	234	189	174	184	209	243	222	216	208	189	98	111	57	27	11

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

Average Daily Traffic

Location: **Ted Williams Pkwy, between Shoal Creek Drive and Carmel Ridge Road**

Date: **Thursday, February 7, 2019** Total Daily Volume: **31130** 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
103	53	46	60	185	594	1589	2780	2284	1670	1497	1466	1540	1776	2149	2315	2523	2660	2145	1374	951	737	420	213
24	13	6	13	24	72	268	699	638	439	352	367	370	388	495	552	584	698	584	426	273	207	131	58
31	5	18	16	33	130	392	696	575	449	366	356	378	452	490	572	619	671	572	346	260	218	126	56
29	13	11	15	59	179	409	637	556	397	396	385	393	467	539	545	686	688	490	304	196	156	93	56
19	22	11	16	69	213	520	748	515	385	383	358	399	469	625	646	634	603	499	298	222	156	70	43

Date: **Thursday, February 7, 2019** Total Daily Volume: **15376** 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
65	29	32	18	49	156	379	836	847	623	672	687	770	921	1206	1415	1553	1638	1304	845	520	444	238	129
15	6	5	5	9	14	45	211	195	154	131	167	172	181	248	296	348	432	348	258	151	117	70	32
20	4	14	2	6	35	85	230	235	163	171	157	198	238	303	356	379	404	337	217	155	127	74	33
20	7	8	7	14	44	94	198	192	143	169	186	194	258	291	345	426	413	308	175	110	102	48	32
10	12	5	4	20	63	155	197	225	163	201	177	206	244	364	418	400	389	311	195	104	98	46	32

Date: **Thursday, February 7, 2019** Total Daily Volume: **15754** 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
38	24	14	42	136	438	1210	1944	1437	1047	825	779	770	855	943	900	970	1022	841	529	431	293	182	84
9	7	1	8	15	58	223	488	443	285	221	200	198	207	247	256	236	266	236	168	122	90	61	26
11	1	4	14	27	95	307	466	340	286	195	199	180	214	187	216	240	267	235	129	105	91	52	23
9	6	3	8	45	135	315	439	364	254	227	199	199	209	248	200	260	275	182	129	86	54	45	24
9	10	6	12	49	150	365	551	290	222	182	181	193	225	261	228	234	214	188	103	118	58	24	11

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

Average Daily Traffic

Location: **Ted Williams Pkwy, between Carmel Ridge Road and Highland Rancho Road**

Date: **Thursday, February 7, 2019** Total Daily Volume: **29305** 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
101	50	48	56	172	552	1479	2361	1968	1567	1401	1419	1487	1695	2070	2242	2436	2520	2062	1348	921	729	411	210
22	11	8	12	21	60	248	610	496	422	320	346	353	373	475	543	587	641	565	412	268	208	132	53
32	5	16	15	30	116	362	568	524	405	348	368	377	413	481	544	591	635	545	344	255	214	124	60
30	13	12	14	55	168	367	594	495	372	367	366	380	462	524	538	603	654	479	304	190	153	86	55
17	21	12	15	66	208	502	589	453	368	366	339	377	447	590	617	655	590	473	288	208	154	69	42

Date: **Thursday, February 7, 2019** Total Daily Volume: **15172** 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
65	28	33	18	48	151	374	824	811	627	662	679	766	894	1203	1387	1548	1601	1273	850	520	443	237	130
15	6	6	5	9	13	45	213	185	159	128	155	164	179	260	299	368	408	329	260	158	117	67	29
20	4	13	2	6	32	87	217	229	161	168	167	203	220	300	350	369	389	342	222	154	128	76	37
20	7	9	7	13	44	86	206	189	141	162	184	197	262	298	341	388	408	306	176	105	99	48	32
10	11	5	4	20	62	156	188	208	166	204	173	202	233	345	397	423	396	296	192	103	99	46	32

Date: **Thursday, February 7, 2019** Total Daily Volume: **14133** 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
36	22	15	38	124	401	1105	1537	1157	940	739	740	721	801	867	855	888	919	789	498	401	286	174	80
7	5	2	7	12	47	203	397	311	263	192	191	189	194	215	244	219	233	236	152	110	91	65	24
12	1	3	13	24	84	275	351	295	244	180	201	174	193	181	194	222	246	203	122	101	86	48	23
10	6	3	7	42	124	281	388	306	231	205	182	183	200	226	197	215	246	173	128	85	54	38	23
7	10	7	11	46	146	346	401	245	202	162	166	175	214	245	220	232	194	177	96	105	55	23	10

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

Average Daily Traffic

Location: **Rancho Carmel Drive, between Provencal Place and Shoal Creek Drive**

Date: **Thursday, February 7, 2019** Total Daily Volume: **11194** 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
28	21	20	15	37	116	286	655	686	449	482	678	784	777	759	939	1043	1237	855	586	364	221	101	55
15	7	6	4	4	20	57	158	179	115	109	160	170	205	194	217	235	300	267	171	130	46	32	21
3	6	1	3	8	23	51	167	178	119	116	159	207	197	169	242	222	335	222	152	88	68	25	12
2	3	9	5	10	32	81	147	166	119	136	164	189	199	205	239	312	335	177	143	74	60	24	14
8	5	4	3	15	41	97	183	163	96	121	195	218	176	191	241	274	267	189	120	72	47	20	8

Date: **Thursday, February 7, 2019** Total Daily Volume: **5324** 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
18	13	9	6	20	45	107	304	310	227	255	344	391	362	366	464	522	617	395	249	146	81	48	25
12	5	2	2	1	5	19	83	89	52	64	79	97	89	78	103	108	152	117	89	57	20	15	8
2	5	1	0	5	7	18	79	62	60	55	85	103	96	93	124	108	155	103	46	28	21	15	6
2	1	4	3	6	12	25	57	75	63	73	91	93	98	100	107	165	171	84	60	29	19	11	6
2	2	2	1	8	21	45	85	84	52	63	89	98	79	95	130	141	139	91	54	32	21	7	5

Date: **Thursday, February 7, 2019** Total Daily Volume: **5870** 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
10	8	11	9	17	71	179	351	376	222	227	334	393	415	393	475	521	620	460	337	218	140	53	30
3	2	4	2	3	15	38	75	90	63	45	81	73	116	116	114	127	148	150	82	73	26	17	13
1	1	0	3	3	16	33	88	116	59	61	74	104	101	76	118	114	180	119	106	60	47	10	6
0	2	5	2	4	20	56	90	91	56	63	73	96	101	105	132	147	164	93	83	45	41	13	8
6	3	2	2	7	20	52	98	79	44	58	106	120	97	96	111	133	128	98	66	40	26	13	3

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

Average Daily Traffic

Location: **Rancho Carmel Drive, between Shoal Creek Drive and Windcrest Lane**

Date: **Thursday, February 7, 2019** Total Daily Volume: **11969** 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
31	23	19	16	31	115	273	683	734	471	531	725	843	829	817	1006	1125	1280	923	669	404	246	111	64
15	7	5	3	1	19	52	162	203	122	127	168	184	211	210	233	259	319	279	187	140	56	34	25
4	6	1	3	4	26	50	166	195	118	125	170	219	225	174	255	252	344	245	173	94	73	27	16
4	3	9	6	12	30	76	159	172	120	145	175	204	205	215	247	308	340	201	161	89	63	28	15
8	7	4	4	14	40	95	196	164	111	134	212	236	188	218	271	306	277	198	148	81	54	22	8

Date: **Thursday, February 7, 2019** Total Daily Volume: **5752** 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
18	13	8	6	20	45	119	339	362	253	302	371	422	379	394	497	561	625	423	283	157	81	47	27
11	5	2	1	0	6	19	91	109	61	76	83	107	93	83	114	125	159	126	92	64	22	16	8
2	5	1	0	3	9	22	85	84	58	64	96	103	107	89	127	114	153	114	58	29	22	15	7
2	1	3	4	8	11	28	66	81	71	86	96	99	98	104	110	163	170	92	67	31	16	11	7
3	2	2	1	9	19	50	97	88	63	76	96	113	81	118	146	159	143	91	66	33	21	5	5

Date: **Thursday, February 7, 2019** Total Daily Volume: **6217** 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
13	10	11	10	11	70	154	344	372	218	229	354	421	450	423	509	564	655	500	386	247	165	64	37
4	2	3	2	1	13	33	71	94	61	51	85	77	118	127	119	134	160	153	95	76	34	18	17
2	1	0	3	1	17	28	81	111	60	61	74	116	118	85	128	138	191	131	115	65	51	12	9
2	2	6	2	4	19	48	93	91	49	59	79	105	107	111	137	145	170	109	94	58	47	17	8
5	5	2	3	5	21	45	99	76	48	58	116	123	107	100	125	147	134	107	82	48	33	17	3

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

Average Daily Traffic

Location: **Rancho Carmel Drive, between Windcrest Lane and Carmel Mountain Road**

Date: **Thursday, February 7, 2019** Total Daily Volume: **13664** 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
34	22	22	16	47	120	370	904	870	550	575	806	972	932	896	1065	1213	1384	1051	752	488	326	152	97
19	6	6	2	6	17	58	190	235	160	140	196	199	238	236	271	283	318	285	216	168	97	55	28
4	8	3	6	5	28	79	249	257	129	137	188	269	254	200	264	293	373	284	185	119	90	33	24
5	2	9	4	10	31	102	234	173	139	143	197	237	240	222	264	309	365	242	193	101	78	39	31
6	6	4	4	26	44	131	231	205	122	155	225	267	200	238	266	328	328	240	158	100	61	25	14

Date: **Thursday, February 7, 2019** Total Daily Volume: **7072** 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
15	10	10	8	38	88	256	626	544	349	353	446	506	470	459	522	572	623	480	321	183	102	55	36
10	3	2	1	5	13	40	149	158	90	91	107	119	111	111	130	130	138	140	109	76	35	21	7
1	5	2	2	4	20	54	180	152	82	73	111	129	128	123	127	123	154	127	71	36	25	14	9
1	2	4	3	9	23	64	143	96	97	87	116	121	128	104	121	154	180	104	73	37	17	15	13
3	0	2	2	20	32	98	154	138	80	102	112	137	103	121	144	165	151	109	68	34	25	5	7

Date: **Thursday, February 7, 2019** Total Daily Volume: **6592** 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
19	12	12	8	9	32	114	278	326	201	222	360	466	462	437	543	641	761	571	431	305	224	97	61
9	3	4	1	1	4	18	41	77	70	49	89	80	127	125	141	153	180	145	107	92	62	34	21
3	3	1	4	1	8	25	69	105	47	64	77	140	126	77	137	170	219	157	114	83	65	19	15
4	0	5	1	1	8	38	91	77	42	56	81	116	112	118	143	155	185	138	120	64	61	24	18
3	6	2	2	6	12	33	77	67	42	53	113	130	97	117	122	163	177	131	90	66	36	20	7

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

Average Daily Traffic

Location: **Shoal Creek Drive, between Rancho Carmel Road and Windcrest Lane**

Date: **Thursday, February 7, 2019** Total Daily Volume: **3075** 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
13	11	4	4	10	28	106	264	276	102	137	136	155	157	248	239	226	294	240	173	113	80	42	17
5	5	0	1	2	2	14	62	129	23	32	32	43	36	69	49	59	71	57	48	38	19	11	7
7	6	1	0	1	9	11	52	72	22	37	36	40	48	38	50	52	78	61	45	27	21	11	5
0	0	0	3	5	7	34	60	41	26	32	38	31	40	75	60	58	82	70	40	24	20	6	4
1	0	3	0	2	10	47	90	34	31	36	30	41	33	66	80	57	63	52	40	24	20	14	1

Date: **Thursday, February 7, 2019** Total Daily Volume: **1646** 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	6	2	3	7	20	62	155	151	47	59	72	94	94	126	124	104	157	123	93	58	46	25	10
3	2	0	0	1	0	11	36	76	9	17	15	25	19	42	26	24	35	29	31	16	13	4	4
4	4	0	0	1	6	5	34	32	12	17	17	27	28	26	26	30	45	33	22	13	9	7	3
0	0	0	3	3	6	23	34	20	10	8	25	20	24	38	29	23	41	40	18	17	13	4	2
1	0	2	0	2	8	23	51	23	16	17	15	22	23	20	43	27	36	21	22	12	11	10	1

Date: **Thursday, February 7, 2019** Total Daily Volume: **1429** 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
5	5	2	1	3	8	44	109	125	55	78	64	61	63	122	115	122	137	117	80	55	34	17	7
2	3	0	1	1	2	3	26	53	14	15	17	18	17	27	23	35	36	28	17	22	6	7	3
3	2	1	0	0	3	6	18	40	10	20	19	13	20	12	24	22	33	28	23	14	12	4	2
0	0	0	0	2	1	11	26	21	16	24	13	11	16	37	31	35	41	30	22	7	7	2	2
0	0	1	0	0	2	24	39	11	15	19	15	19	10	46	37	30	27	31	18	12	9	4	0

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

Average Daily Traffic

Location: **Windcrest Lane, between Boulton Avenue and Shoal Creek Drive**

Date: **Thursday, February 7, 2019** Total Daily Volume: **1749** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
9	2	2	1	5	16	62	138	132	74	66	71	96	80	138	116	149	187	156	104	68	43	24	10
2	0	1	0	0	3	5	42	50	19	23	18	24	25	33	25	32	48	41	27	20	15	11	3
3	0	1	0	2	1	16	24	36	15	23	22	24	25	22	32	27	48	44	23	20	14	5	2
3	2	0	1	1	6	21	27	20	19	11	17	19	18	40	30	28	45	38	27	15	6	5	3
1	0	0	0	2	6	20	45	26	21	9	14	29	12	43	29	62	46	33	27	13	8	3	2

Date: **Thursday, February 7, 2019** Total Daily Volume: **944** 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	1	1	1	3	5	11	33	51	25	18	32	54	36	78	74	99	120	113	74	47	33	19	8
2	0	0	0	0	2	2	8	20	4	7	6	14	8	17	12	21	29	28	20	16	11	8	3
3	0	1	0	0	0	3	5	12	7	6	11	12	14	10	21	15	33	34	18	17	12	4	1
2	1	0	1	1	1	2	7	9	7	1	10	14	10	21	24	20	26	29	17	8	4	5	2
1	0	0	0	2	2	4	13	10	7	4	5	14	4	30	17	43	32	22	19	6	6	2	2

Date: **Thursday, February 7, 2019** Total Daily Volume: **805** 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	2	11	51	105	81	49	48	39	42	44	60	42	50	67	43	30	21	10	5	2
0	0	1	0	0	1	3	34	30	15	16	12	10	17	16	13	11	19	13	7	4	4	3	0
0	0	0	0	2	1	13	19	24	8	17	11	12	11	12	11	12	15	10	5	3	2	1	1
1	1	0	0	0	5	19	20	11	12	10	7	5	8	19	6	8	19	9	10	7	2	0	1
0	0	0	0	0	4	16	32	16	14	5	9	15	8	13	12	19	14	11	8	7	2	1	0

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

Average Daily Traffic

Location: **Carmel Ridge Road, between Ted Williams Pkwy and Boulton Avenue**

Date: **Thursday, February 7, 2019** Total Daily Volume: **1214** 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
5	2	4	0	11	35	105	196	136	91	59	53	42	60	76	54	77	70	59	30	25	16	6	2
1	2	1	0	2	7	19	40	50	27	22	14	5	10	20	13	15	18	14	9	10	8	1	0
2	0	3	0	2	8	26	48	31	24	11	9	13	18	18	14	21	17	12	11	6	3	0	2
2	0	0	0	2	12	26	41	31	13	14	15	10	17	23	12	21	25	19	4	3	4	3	0
0	0	0	0	5	8	34	67	24	27	12	15	14	15	15	15	20	10	14	6	6	1	2	0

Date: **Thursday, February 7, 2019** Total Daily Volume: **285** 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	2	0	2	6	7	20	15	9	7	15	13	16	32	19	27	28	27	11	14	11	0	2
0	0	1	0	0	0	0	4	2	6	4	4	2	3	4	4	4	7	8	0	4	6	0	0
2	0	1	0	0	2	2	4	3	1	3	1	6	4	8	5	4	7	5	8	2	2	0	2
0	0	0	0	0	0	1	3	2	0	0	6	1	5	15	6	8	11	9	0	2	3	0	0
0	0	0	0	2	4	4	9	8	2	0	4	4	4	5	4	11	3	5	3	6	0	0	0

Date: **Thursday, February 7, 2019** Total Daily Volume: **929** 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	2	0	9	29	98	176	121	82	52	38	29	44	44	35	50	42	32	19	11	5	6	0
1	2	0	0	2	7	19	36	48	21	18	10	3	7	16	9	11	11	6	9	6	2	1	0
0	0	2	0	2	6	24	44	28	23	8	8	7	14	10	9	17	10	7	3	4	1	0	0
2	0	0	0	2	12	25	38	29	13	14	9	9	12	8	6	13	14	10	4	1	1	3	0
0	0	0	0	3	4	30	58	16	25	12	11	10	11	10	11	9	7	9	3	0	1	2	0

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

Average Daily Traffic

Location: **Carmel Ridge Road, between Tivoli Park Row and Highland Ranch Road**

Date: **Thursday, February 7, 2019** Total Daily Volume: **2018** 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
5	6	5	1	1	20	74	204	151	101	95	89	95	115	160	128	174	172	162	108	74	43	28	7
0	1	0	0	1	0	13	58	40	33	24	30	25	28	25	29	37	34	46	35	20	16	6	1
1	2	5	0	0	6	10	50	41	26	22	17	22	27	48	27	48	50	35	29	17	11	7	3
3	3	0	1	0	6	25	53	33	23	21	25	20	33	41	38	35	48	44	27	19	10	8	1
1	0	0	0	0	8	26	43	37	19	28	17	28	27	46	34	54	40	37	17	18	6	7	2

Date: **Thursday, February 7, 2019** Total Daily Volume: **876** 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
3	4	3	1	0	11	40	109	70	45	49	34	46	43	78	62	65	69	69	29	29	8	6	3
0	0	0	0	0	0	8	41	16	15	11	11	11	7	13	14	15	13	21	3	6	3	0	0
1	2	3	0	0	2	3	27	15	8	14	8	13	11	28	10	20	21	15	10	7	2	1	2
1	2	0	1	0	3	16	24	17	12	12	9	10	15	14	18	11	22	18	8	9	2	4	1
1	0	0	0	0	6	13	17	22	10	12	6	12	10	23	20	19	13	15	8	7	1	1	0

Date: **Thursday, February 7, 2019** Total Daily Volume: **1142** 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
2	2	2	0	1	9	34	95	81	56	46	55	49	72	82	66	109	103	93	79	45	35	22	4
0	1	0	0	1	0	5	17	24	18	13	19	14	21	12	15	22	21	25	32	14	13	6	1
0	0	2	0	0	4	7	23	26	18	8	9	9	16	20	17	28	29	20	19	10	9	6	1
2	1	0	0	0	3	9	29	16	11	9	16	10	18	27	20	24	26	26	19	10	8	4	0
0	0	0	0	0	2	13	26	15	9	16	11	16	17	23	14	35	27	22	9	11	5	6	2

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

Average Daily Traffic

Location: **Carmel Mountain, Road between I-15 and Rancho Carmel Drive**

Date: **Thursday, February 7, 2019** Total Daily Volume: **46898** 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
288	185	182	201	391	923	1517	2577	2621	2380	2457	2870	3178	3262	3163	3342	3420	3615	3490	2647	1755	1331	671	432
97	81	44	36	60	134	266	584	660	604	594	675	816	823	742	831	871	860	921	715	480	359	225	121
51	38	24	50	65	183	326	674	691	559	566	721	776	808	770	836	798	955	857	702	513	345	156	109
94	32	78	45	113	260	381	648	630	603	612	737	776	817	866	837	891	933	876	615	408	326	153	116
46	34	36	70	153	346	544	671	640	614	685	737	810	814	785	838	860	867	836	615	354	301	137	86

Date: **Thursday, February 7, 2019** Total Daily Volume: **23994** 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
106	59	80	108	263	591	930	1536	1651	1496	1393	1484	1667	1597	1497	1599	1607	1741	1696	1163	732	558	283	157
33	15	24	16	29	72	165	337	400	356	344	355	418	409	346	381	429	378	443	304	194	145	78	38
22	20	13	24	37	113	194	407	418	351	327	368	415	411	353	424	365	469	431	331	224	157	69	42
29	12	20	23	76	161	227	366	400	383	334	377	419	384	405	386	403	455	407	263	168	127	56	43
22	12	23	45	121	245	344	426	433	406	388	384	415	393	393	408	410	439	415	265	146	129	80	34

Date: **Thursday, February 7, 2019** Total Daily Volume: **22904** 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
182	126	102	93	128	332	587	1041	970	884	1064	1386	1511	1665	1666	1743	1813	1874	1794	1484	1023	773	388	275
64	66	20	20	31	62	101	247	260	248	250	320	398	414	396	450	442	482	478	411	286	214	147	83
29	18	11	26	28	70	132	267	273	208	239	353	361	397	417	412	433	486	426	371	289	188	87	67
65	20	58	22	37	99	154	282	230	220	278	360	357	433	461	451	488	478	469	352	240	199	97	73
24	22	13	25	32	101	200	245	207	208	297	353	395	421	392	430	450	428	421	350	208	172	57	52

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

Average Daily Traffic

Location: **Carmel Mountain Road, between Rancho Carmel Drive and Stoney Peak Drive**

Date: **Thursday, February 7, 2019** Total Daily Volume: **34979** 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
184	122	105	142	227	531	888	1584	1669	1495	1809	2397	2674	2592	2620	2521	2609	2785	2690	2137	1437	994	474	293
78	45	17	34	44	88	154	369	416	371	425	545	646	652	664	642	654	607	693	561	399	280	166	66
35	27	25	34	48	122	197	409	459	354	398	638	670	649	605	628	629	740	656	559	408	250	116	76
37	22	26	29	55	139	220	398	396	362	450	630	635	645	675	622	668	762	667	510	311	235	97	80
34	28	37	45	80	182	317	408	398	408	536	584	723	646	676	629	658	676	674	507	319	229	95	71

Date: **Thursday, February 7, 2019** Total Daily Volume: **16548** 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
84	46	58	73	144	306	434	755	864	818	943	1147	1221	1154	1183	1241	1317	1367	1272	881	541	399	187	113
33	10	10	15	22	48	75	176	216	179	211	265	305	285	295	317	320	287	333	227	168	118	54	21
18	16	11	14	28	60	93	209	223	195	201	297	307	297	269	320	294	368	331	238	133	104	51	30
16	11	14	18	33	79	104	179	197	207	238	283	290	286	308	293	371	370	302	205	131	85	37	31
17	9	23	26	61	119	162	191	228	237	293	302	319	286	311	311	332	342	306	211	109	92	45	31

Date: **Thursday, February 7, 2019** Total Daily Volume: **18431** 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
100	76	47	69	83	225	454	829	805	677	866	1250	1453	1438	1437	1280	1292	1418	1418	1256	896	595	287	180
45	35	7	19	22	40	79	193	200	192	214	280	341	367	369	325	334	320	360	334	231	162	112	45
17	11	14	20	20	62	104	200	236	159	197	341	363	352	336	308	335	372	325	321	275	146	65	46
21	11	12	11	22	60	116	219	199	155	212	347	345	359	367	329	297	392	365	305	180	150	60	49
17	19	14	19	19	63	155	217	170	171	243	282	404	360	365	318	326	334	368	296	210	137	50	40

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

Average Daily Traffic

Location: **Carmel Mountain Road, between Stoney Peak Drive and Highland Ranch Road**

Date: **Thursday, February 7, 2019** Total Daily Volume: **25483** 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
119	96	93	120	163	413	665	1270	1243	1118	1382	1821	2030	1958	1873	1791	1982	2080	1931	1449	965	530	243	148
43	25	18	25	25	54	105	315	332	281	301	421	501	498	461	434	510	469	475	424	299	172	83	43
22	28	22	36	38	91	155	295	355	241	323	425	474	491	418	444	485	562	483	351	261	137	76	44
29	18	14	24	36	130	164	351	277	292	353	459	506	505	470	403	489	537	471	352	204	112	41	38
25	25	39	35	64	138	241	309	279	304	405	516	549	464	524	510	498	512	502	322	201	109	43	23

Date: **Thursday, February 7, 2019** Total Daily Volume: **13939** 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
56	50	55	71	111	258	367	716	738	626	759	980	1079	1028	1015	1013	1155	1168	1143	697	404	265	124	61
13	9	10	14	13	37	59	183	210	149	167	205	260	270	249	246	291	260	281	199	127	85	35	18
13	18	10	17	23	50	91	174	186	139	160	216	255	259	212	242	272	322	295	170	99	67	43	17
15	12	10	16	25	82	91	188	164	174	205	247	261	253	271	228	292	297	287	175	96	57	19	13
15	11	25	24	50	89	126	171	178	164	227	312	303	246	283	297	300	289	280	153	82	56	27	13

Date: **Thursday, February 7, 2019** Total Daily Volume: **11544** 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
63	46	38	49	52	155	298	554	505	492	623	841	951	930	858	778	827	912	788	752	561	265	119	87
30	16	8	11	12	17	46	132	122	132	134	216	241	228	212	188	219	209	194	225	172	87	48	25
9	10	12	19	15	41	64	121	169	102	163	209	219	232	206	202	213	240	188	181	162	70	33	27
14	6	4	8	11	48	73	163	113	118	148	212	245	252	199	175	197	240	184	177	108	55	22	25
10	14	14	11	14	49	115	138	101	140	178	204	246	218	241	213	198	223	222	169	119	53	16	10

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

Average Daily Traffic

Location: **Highland Ranch Road, between Carmel Ridge Road and Eastbourne Road**

Date: **Thursday, February 7, 2019** Total Daily Volume: **11770** 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	23	7	8	32	106	254	786	581	517	555	659	742	850	947	989	1033	1150	942	674	468	238	126	54
9	2	3	1	4	15	41	177	155	131	111	175	169	217	233	238	232	289	258	225	136	77	44	14
6	8	0	1	6	26	43	175	137	144	134	155	182	209	204	231	256	293	239	150	140	63	31	16
12	8	0	4	10	32	78	257	134	126	158	176	206	196	230	262	246	287	226	153	95	52	27	12
2	5	4	2	12	33	92	177	155	116	152	153	185	228	280	258	299	281	219	146	97	46	24	12

Date: **Thursday, February 7, 2019** Total Daily Volume: **5827** 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
12	18	3	6	17	66	144	408	324	290	284	314	357	432	453	480	534	577	449	305	200	84	46	24
2	1	2	1	1	8	21	109	84	55	68	82	75	101	106	108	114	138	122	97	52	30	15	3
2	5	0	1	4	15	24	101	83	86	63	85	98	112	98	116	120	139	109	66	70	27	13	9
8	8	0	2	3	17	42	101	68	74	80	79	96	105	115	115	140	146	108	70	40	16	9	4
0	4	1	2	9	26	57	97	89	75	73	68	88	114	134	141	160	154	110	72	38	11	9	8

Date: **Thursday, February 7, 2019** Total Daily Volume: **5943** 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
17	5	4	2	15	40	110	378	257	227	271	345	385	418	494	509	499	573	493	369	268	154	80	30
7	1	1	0	3	7	20	68	71	76	43	93	94	116	127	130	118	151	136	128	84	47	29	11
4	3	0	0	2	11	19	74	54	58	71	70	84	97	106	115	136	154	130	84	70	36	18	7
4	0	0	2	7	15	36	156	66	52	78	97	110	91	115	147	106	141	118	83	55	36	18	8
2	1	3	0	3	7	35	80	66	41	79	85	97	114	146	117	139	127	109	74	59	35	15	4

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

Average Daily Traffic

Location: **Ted Williams Parkway, between Pomerado Road and Twin Peaks Road**

Date: **Tuesday, October 1, 2019** Total Daily Volume: **15869** 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
48	23	21	34	142	375	866	1169	1133	948	724	721	820	886	949	1042	1450	1492	1165	799	488	324	168	82
8	7	3	6	13	64	143	327	272	231	169	168	196	212	223	215	374	332	358	196	135	100	68	26
15	0	4	7	38	82	182	301	319	280	176	189	243	221	253	267	381	395	335	213	134	89	35	20
19	3	10	9	29	113	241	287	268	239	183	177	184	223	219	277	375	345	249	207	114	80	42	13
6	13	4	12	62	116	300	254	274	198	196	187	197	230	254	283	320	420	223	183	105	55	23	23

Date: **Tuesday, October 1, 2019** Total Daily Volume: **7904** 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
31	10	9	10	35	88	182	302	425	367	303	314	394	436	520	667	978	965	713	491	288	212	113	51
5	2	3	4	5	19	26	57	101	95	57	71	91	114	106	128	264	214	197	114	78	57	47	17
9	0	2	1	6	28	33	62	96	117	73	82	106	94	138	179	256	271	214	118	76	60	23	11
12	1	4	3	4	24	41	94	101	90	81	71	80	116	116	178	251	223	161	141	72	58	29	8
5	7	0	2	20	17	82	89	127	65	92	90	117	112	160	182	207	257	141	118	62	37	14	15

Date: **Tuesday, October 1, 2019** Total Daily Volume: **7965** 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
17	13	12	24	107	287	684	867	708	581	421	407	426	450	429	375	472	527	452	308	200	112	55	31
3	5	0	2	8	45	117	270	171	136	112	97	105	98	117	87	110	118	161	82	57	43	21	9
6	0	2	6	32	54	149	239	223	163	103	107	137	127	115	88	125	124	121	95	58	29	12	9
7	2	6	6	25	89	200	193	167	149	102	106	104	107	103	99	124	122	88	66	42	22	13	5
1	6	4	10	42	99	218	165	147	133	104	97	80	118	94	101	113	163	82	65	43	18	9	8

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

Average Daily Traffic

Location: **Rancho Carmel Drive, between Carmel Mountain Express Drive and Ted Williams Parkway**

Date: **Tuesday, October 1, 2019** Total Daily Volume: **16526** 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
134	40	33	52	187	271	694	1348	1321	774	635	805	947	894	1149	1170	1467	1641	1193	760	479	311	158	63
20	13	7	10	11	65	124	314	365	235	171	182	228	233	221	293	334	422	380	218	133	104	54	12
19	13	7	11	40	50	148	346	363	198	146	216	216	240	227	301	340	419	310	192	119	87	46	18
82	4	13	14	48	74	185	333	319	191	141	183	264	210	379	299	400	383	261	205	121	71	25	17
13	10	6	17	88	82	237	355	274	150	177	224	239	211	322	277	393	417	242	145	106	49	33	16

Date: **Tuesday, October 1, 2019** Total Daily Volume: **8220** 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
101	22	22	16	36	104	315	577	573	370	323	435	483	413	582	663	824	933	648	333	209	126	81	31
7	6	6	5	4	24	36	168	133	99	77	106	117	105	109	165	186	257	231	105	69	37	26	5
7	11	5	4	9	21	61	120	168	101	84	115	121	116	120	173	181	238	160	90	33	33	22	9
77	1	9	2	7	27	87	155	144	96	75	84	132	95	213	173	231	218	140	83	63	36	14	9
10	4	2	5	16	32	131	134	128	74	87	130	113	97	140	152	226	220	117	55	44	20	19	8

Date: **Tuesday, October 1, 2019** Total Daily Volume: **8306** 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
33	18	11	36	151	167	379	771	748	404	312	370	464	481	567	507	643	708	545	427	270	185	77	32
13	7	1	5	7	41	88	146	232	136	94	76	111	128	112	128	148	165	149	113	64	67	28	7
12	2	2	7	31	29	87	226	195	97	62	101	95	124	107	128	159	181	150	102	86	54	24	9
5	3	4	12	41	47	98	178	175	95	66	99	132	115	166	126	169	165	121	122	58	35	11	8
3	6	4	12	72	50	106	221	146	76	90	94	126	114	182	125	167	197	125	90	62	29	14	8

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

Average Daily Traffic

Location: **Rancho Carmel Drive, between Ted Williams Parkway and Provencal Place**

Date: **Tuesday, October 1, 2019** Total Daily Volume: **12919** 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
36	17	9	19	55	153	417	800	753	588	559	689	855	809	901	943	1217	1346	1116	809	386	290	110	42
13	4	4	2	5	26	75	200	216	172	152	145	202	222	225	207	302	354	334	204	115	113	49	8
6	5	1	3	13	37	68	190	175	151	130	167	211	181	213	252	304	352	293	208	94	75	29	12
14	4	4	7	15	38	122	212	191	155	138	173	219	223	222	255	314	301	235	226	97	43	13	10
3	4	0	7	22	52	152	198	171	110	139	204	223	183	241	229	297	339	254	171	80	59	19	12

Date: **Tuesday, October 1, 2019** Total Daily Volume: **5677** 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
19	9	3	7	16	41	101	245	267	244	226	341	405	353	402	461	599	674	525	351	168	133	58	29
6	2	0	1	1	7	16	62	64	66	60	73	103	99	79	92	155	170	162	92	49	47	25	7
2	4	1	2	6	8	19	60	64	67	52	82	90	76	104	124	141	186	142	96	36	35	19	10
10	3	2	1	2	8	21	63	61	64	61	76	105	92	101	115	150	141	105	105	50	21	8	7
1	0	0	3	7	18	45	60	78	47	53	110	107	86	118	130	153	177	116	58	33	30	6	5

Date: **Tuesday, October 1, 2019** Total Daily Volume: **7242** 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
17	8	6	12	39	112	316	555	486	344	333	348	450	456	499	482	618	672	591	458	218	157	52	13
7	2	4	1	4	19	59	138	152	106	92	72	99	123	146	115	147	184	172	112	66	66	24	1
4	1	0	1	7	29	49	130	111	84	78	85	121	105	109	128	163	166	151	112	58	40	10	2
4	1	2	6	13	30	101	149	130	91	77	97	114	131	121	140	164	160	130	121	47	22	5	3
2	4	0	4	15	34	107	138	93	63	86	94	116	97	123	99	144	162	138	113	47	29	13	7

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

Average Daily Traffic

Location: **Rancho Carmel Drive, between Carmel Mountain Road and Shopping Center Driveways**

Date: **Tuesday, October 1, 2019** Total Daily Volume: **23072** 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
102	81	79	56	164	407	650	1337	1294	1202	1251	1473	1777	1654	1689	1785	1974	1965	1593	1109	735	386	179	130
21	37	13	14	26	61	131	307	336	283	313	324	437	414	410	469	506	538	397	314	208	143	60	40
14	11	16	5	18	82	125	329	321	296	332	370	446	374	409	414	415	500	394	309	209	89	31	19
45	23	33	20	52	112	161	337	313	297	314	385	443	472	434	467	559	483	422	246	155	89	43	42
22	10	17	17	68	152	233	364	324	326	292	394	451	394	436	435	494	444	380	240	163	65	45	29

Date: **Tuesday, October 1, 2019** Total Daily Volume: **11545** 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
30	15	24	37	123	284	475	997	930	831	692	766	930	835	782	737	677	694	616	483	332	134	81	40
7	0	7	7	13	31	92	217	248	205	180	179	216	213	187	195	170	162	146	136	108	43	22	14
6	4	8	3	12	56	95	242	226	202	185	202	228	196	208	186	155	188	158	133	104	31	15	3
13	6	3	12	40	68	110	256	218	193	171	179	242	232	182	193	159	167	163	112	68	31	18	9
4	5	6	15	58	129	178	282	238	231	156	206	244	194	205	163	193	177	149	102	52	29	26	14

Date: **Tuesday, October 1, 2019** Total Daily Volume: **11527** 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
72	66	55	19	41	123	175	340	364	371	559	707	847	819	907	1048	1297	1271	977	626	403	252	98	90
14	37	6	7	13	30	39	90	88	78	133	145	221	201	223	274	336	376	251	178	100	100	38	26
8	7	8	2	6	26	30	87	95	94	147	168	218	178	201	228	260	312	236	176	105	58	16	16
32	17	30	8	12	44	51	81	95	104	143	206	201	240	252	274	400	316	259	134	87	58	25	33
18	5	11	2	10	23	55	82	86	95	136	188	207	200	231	272	301	267	231	138	111	36	19	15

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

Average Daily Traffic

Location: **Carmel Mountain Road, between Penasquitos Drive and I-15**

Date: **Tuesday, October 1, 2019** Total Daily Volume: **27524** 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
167	103	63	84	206	468	1087	1685	1707	1588	1363	1536	1708	1640	1921	2057	2122	2183	2023	1436	1019	656	436	266
44	28	18	18	28	77	194	497	367	424	359	342	452	403	454	514	492	513	527	408	312	214	123	84
40	30	15	12	42	99	227	467	381	443	308	383	402	435	470	535	522	566	527	345	257	189	126	61
57	27	14	30	70	116	316	390	475	331	355	412	400	387	490	537	547	554	481	373	244	132	110	65
26	18	16	24	66	176	350	331	484	390	341	399	454	415	507	471	561	550	488	310	206	121	77	56

Date: **Tuesday, October 1, 2019** Total Daily Volume: **13808** 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	51	29	44	132	311	663	973	1012	950	731	776	929	855	964	1105	910	891	903	608	427	224	156	100
17	14	9	7	16	54	117	313	183	272	210	160	230	212	229	286	198	206	235	163	140	78	43	32
19	15	8	6	23	65	129	287	205	243	169	206	225	232	217	302	233	211	224	153	104	72	54	20
20	13	6	12	45	79	196	229	315	203	174	190	218	208	244	297	243	244	219	168	105	44	38	27
8	9	6	19	48	113	221	144	309	232	178	220	256	203	274	220	236	230	225	124	78	30	21	21

Date: **Tuesday, October 1, 2019** Total Daily Volume: **13716** 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
103	52	34	40	74	157	424	712	695	638	632	760	779	785	957	952	1212	1292	1120	828	592	432	280	166
27	14	9	11	12	23	77	184	184	152	149	182	222	191	225	228	294	307	292	245	172	136	80	52
21	15	7	6	19	34	98	180	176	200	139	177	177	203	253	233	289	355	303	192	153	117	72	41
37	14	8	18	25	37	120	161	160	128	181	222	182	179	246	240	304	310	262	205	139	88	72	38
18	9	10	5	18	63	129	187	175	158	163	179	198	212	233	251	325	320	263	186	128	91	56	35

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

Average Daily Traffic

Location: **Stoney Peak Drive, between Carmel Mountain Road and World Trade Drive**

Date: **Tuesday, October 1, 2019** Total Daily Volume: **11973** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
54	36	17	28	35	135	280	548	539	574	633	851	876	875	868	932	914	992	923	758	527	304	191	83
23	13	6	7	4	15	50	134	144	148	143	188	198	242	220	220	220	213	230	241	146	93	66	27
10	13	4	10	5	48	68	134	132	153	178	225	229	202	213	229	241	246	238	179	160	90	63	21
13	5	3	5	9	35	68	132	135	131	152	239	221	230	208	237	217	278	236	178	116	77	34	23
8	5	4	6	17	37	94	148	128	142	160	199	228	201	227	246	236	255	219	160	105	44	28	12

Date: **Tuesday, October 1, 2019** Total Daily Volume: **7175** Description: **Northbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
32	21	11	15	25	97	204	400	378	340	388	518	513	516	501	507	510	567	543	438	337	165	102	47
13	8	6	3	3	7	33	105	104	87	90	106	114	142	134	117	129	117	119	138	97	53	36	13
7	8	0	4	4	37	53	91	89	93	115	134	128	125	138	121	128	131	145	100	107	47	28	13
8	3	2	3	4	25	47	94	93	69	86	151	134	130	111	130	110	158	143	105	73	38	22	13
4	2	3	5	14	28	71	110	92	91	97	127	137	119	118	139	143	161	136	95	60	27	16	8

Date: **Tuesday, October 1, 2019** Total Daily Volume: **4798** Description: **Southbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
22	15	6	13	10	38	76	148	161	234	245	333	363	359	367	425	404	425	380	320	190	139	89	36
10	5	0	4	1	8	17	29	40	61	53	82	84	100	86	103	91	96	111	103	49	40	30	14
3	5	4	6	1	11	15	43	43	60	63	91	101	77	75	108	113	115	93	79	53	43	35	8
5	2	1	2	5	10	21	38	42	62	66	88	87	100	97	107	107	120	93	73	43	39	12	10
4	3	1	1	3	9	23	38	36	51	63	72	91	82	109	107	93	94	83	65	45	17	12	4

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

Average Daily Traffic

Location: **World Trade Drive, between Stoney Peak Drive and Highland Ranch Road**

Date: **Tuesday, October 1, 2019** Total Daily Volume: **4714** 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	11	4	5	7	41	118	193	182	187	209	306	356	349	380	416	384	482	411	281	202	83	51	38
7	3	0	3	1	2	23	41	42	48	34	70	75	81	96	101	99	113	122	85	54	25	20	17
3	0	1	0	1	5	34	43	43	48	58	83	80	79	94	91	104	117	105	70	61	28	20	7
4	6	0	0	1	17	20	64	42	45	51	81	103	99	96	107	87	136	99	66	44	20	6	11
4	2	3	2	4	17	41	45	55	46	66	72	98	90	94	117	94	116	85	60	43	10	5	3

Date: **Tuesday, October 1, 2019** Total Daily Volume: **2002** 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	3	2	2	4	22	50	78	55	67	79	137	142	175	172	183	165	217	174	116	77	33	20	21
2	1	0	1	0	0	12	23	11	16	10	33	23	38	35	46	45	48	51	34	25	4	9	11
2	0	1	0	1	3	16	26	12	15	23	36	34	35	53	33	45	52	44	31	22	15	7	5
2	2	0	0	0	8	6	21	11	20	19	35	36	62	44	48	39	61	39	25	17	9	2	4
2	0	1	1	3	11	16	8	21	16	27	33	49	40	40	56	36	56	40	26	13	5	2	1

Date: **Tuesday, October 1, 2019** Total Daily Volume: **2712** 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
10	8	2	3	3	19	68	115	127	120	130	169	214	174	208	233	219	265	237	165	125	50	31	17
5	2	0	2	1	2	11	18	31	32	24	37	52	43	61	55	54	65	71	51	29	21	11	6
1	0	0	0	0	2	18	17	31	33	35	47	46	44	41	58	59	65	61	39	39	13	13	2
2	4	0	0	1	9	14	43	31	25	32	46	67	37	52	59	48	75	60	41	27	11	4	7
2	2	2	1	1	6	25	37	34	30	39	39	49	50	54	61	58	60	45	34	30	5	3	2

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

Average Daily Traffic

Location: **World Trade Drive, between Highland Ranch Road and Conference Way**

Date: **Tuesday, October 1, 2019** Total Daily Volume: **9667** 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
25	8	7	18	31	122	243	642	546	446	508	584	750	766	767	872	744	888	713	489	303	115	64	16
14	1	1	10	0	15	50	166	150	127	114	139	165	192	165	190	173	203	215	143	97	39	22	8
4	1	1	3	8	28	48	155	132	105	135	127	185	192	205	205	183	227	177	110	83	34	21	3
3	2	1	3	5	39	49	173	125	121	118	158	189	166	195	214	197	246	157	123	66	26	9	5
4	4	4	2	18	40	96	148	139	93	141	160	211	216	202	263	191	212	164	113	57	16	12	0

Date: **Tuesday, October 1, 2019** Total Daily Volume: **5373** 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	4	14	21	99	139	414	349	258	277	287	382	405	437	495	400	489	389	277	147	44	28	9
1	1	0	8	0	13	28	119	110	72	59	64	72	96	102	118	81	104	107	76	45	14	8	4
1	0	1	2	4	25	29	86	73	65	73	60	97	87	127	123	97	123	95	63	49	22	10	2
1	1	0	2	4	29	24	94	83	69	66	79	94	84	100	94	98	138	94	68	27	5	3	3
2	2	3	2	13	32	58	115	83	52	79	84	119	138	108	160	124	124	93	70	26	3	7	0

Date: **Tuesday, October 1, 2019** Total Daily Volume: **4294** 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
20	4	3	4	10	23	104	228	197	188	231	297	368	361	330	377	344	399	324	212	156	71	36	7
13	0	1	2	0	2	22	47	40	55	55	75	93	96	63	72	92	99	108	67	52	25	14	4
3	1	0	1	4	3	19	69	59	40	62	67	88	105	78	82	86	104	82	47	34	12	11	1
2	1	1	1	1	10	25	79	42	52	52	79	95	82	95	120	99	108	63	55	39	21	6	2
2	2	1	0	5	8	38	33	56	41	62	76	92	78	94	103	67	88	71	43	31	13	5	0

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

Average Daily Traffic

Location: **Pomerado Road, North of Ted Williams Parkway**

Date: **Tuesday, October 1, 2019** Total Daily Volume: **23852** 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
72	35	26	48	163	400	841	1736	1851	1342	1306	1351	1359	1434	1693	1987	2080	2011	1520	1148	683	409	232	125
20	14	8	10	26	55	119	381	422	345	303	363	382	306	367	526	491	516	393	339	185	126	80	34
17	8	4	10	45	97	183	418	487	313	317	329	344	360	375	404	543	524	439	280	192	128	49	36
22	8	5	11	43	96	239	483	534	341	302	291	329	356	449	512	516	471	354	287	159	77	69	37
13	5	9	17	49	152	300	454	408	343	384	368	304	412	502	545	530	500	334	242	147	78	34	18

Date: **Tuesday, October 1, 2019** Total Daily Volume: **12772** 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
41	14	10	30	67	157	434	837	976	674	672	729	725	771	933	1112	1173	1104	866	675	368	229	123	52
11	6	4	7	17	22	58	196	213	159	152	200	210	175	198	288	246	303	225	198	88	71	44	12
10	2	1	8	16	41	89	199	270	168	163	169	189	199	213	227	325	278	252	168	98	74	28	18
12	3	2	6	11	33	116	228	280	169	173	167	168	192	247	299	293	262	201	181	94	41	34	11
8	3	3	9	23	61	171	214	213	178	184	193	158	205	275	298	309	261	188	128	88	43	17	11

Date: **Tuesday, October 1, 2019** Total Daily Volume: **11080** 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
31	21	16	18	96	243	407	899	875	668	634	622	634	663	760	875	907	907	654	473	315	180	109	73
9	8	4	3	9	33	61	185	209	186	151	163	172	131	169	238	245	213	168	141	97	55	36	22
7	6	3	2	29	56	94	219	217	145	154	160	155	161	162	177	218	246	187	112	94	54	21	18
10	5	3	5	32	63	123	255	254	172	129	124	161	164	202	213	223	209	153	106	65	36	35	26
5	2	6	8	26	91	129	240	195	165	200	175	146	207	227	247	221	239	146	114	59	35	17	7

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

Average Daily Traffic

Location: **Pomerado Road, South of Ted Williams Parkway**

Date: **Tuesday, October 1, 2019** Total Daily Volume: **25998** 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
52	45	25	62	163	404	916	1733	2127	1362	1241	1365	1341	1512	1987	2177	2244	2382	1806	1397	744	500	270	143
13	13	6	6	24	53	128	416	475	353	284	353	377	340	430	548	533	619	486	374	225	192	85	41
15	10	4	12	32	83	188	427	601	332	315	339	335	400	416	461	535	602	512	373	203	150	71	40
14	13	5	18	44	113	249	439	590	326	303	307	316	370	596	608	562	554	425	369	149	84	68	37
10	9	10	26	63	155	351	451	461	351	339	366	313	402	545	560	614	607	383	281	167	74	46	25

Date: **Tuesday, October 1, 2019** Total Daily Volume: **13762** 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
33	22	11	43	79	217	568	939	1147	714	625	742	680	771	1034	1175	1192	1243	917	772	392	266	123	57
10	8	4	5	17	32	78	263	245	174	152	197	201	158	215	283	275	342	229	208	108	113	43	14
8	5	1	8	11	46	110	234	326	190	150	184	183	234	199	225	289	326	265	185	105	81	35	19
7	4	2	13	17	60	151	218	325	166	170	169	151	202	344	364	309	293	224	228	86	42	27	9
8	5	4	17	34	79	229	224	251	184	153	192	145	177	276	303	319	282	199	151	93	30	18	15

Date: **Tuesday, October 1, 2019** Total Daily Volume: **12236** 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
19	23	14	19	84	187	348	794	980	648	616	623	661	741	953	1002	1052	1139	889	625	352	234	147	86
3	5	2	1	7	21	50	153	230	179	132	156	176	182	215	265	258	277	257	166	117	79	42	27
7	5	3	4	21	37	78	193	275	142	165	155	152	166	217	236	246	276	247	188	98	69	36	21
7	9	3	5	27	53	98	221	265	160	133	138	165	168	252	244	253	261	201	141	63	42	41	28
2	4	6	9	29	76	122	227	210	167	186	174	168	225	269	257	295	325	184	130	74	44	28	10

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

Average Daily Traffic

Location: **Shoal Creek Drive, between Windcrest Lane and Ted Williams Parkway**

Date: **Tuesday, October 1, 2019** Total Daily Volume: **5489** 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
24	7	2	16	23	61	168	457	534	205	168	239	246	278	447	364	444	530	466	326	220	142	99	23
10	0	0	3	0	9	15	83	220	56	29	57	72	62	89	65	94	142	124	100	70	54	38	6
2	0	1	5	6	18	24	90	149	42	48	51	62	83	81	107	107	130	124	95	59	41	24	2
10	5	1	4	6	17	46	99	90	59	32	71	42	58	131	92	123	134	119	75	47	25	20	10
2	2	0	4	11	17	83	185	75	48	59	60	70	75	146	100	120	124	99	56	44	22	17	5

Date: **Tuesday, October 1, 2019** Total Daily Volume: **2476** 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	4	1	9	16	43	109	290	278	126	84	117	94	146	203	159	152	194	164	112	64	65	30	8
2	0	0	3	0	8	9	45	114	31	15	26	31	30	51	33	46	63	35	25	18	17	10	4
2	0	0	2	4	13	17	52	77	24	29	30	22	39	51	56	31	39	47	34	20	19	9	0
3	4	1	2	5	9	35	67	47	46	10	34	19	30	51	37	39	43	39	33	17	18	5	4
1	0	0	2	7	13	48	126	40	25	30	27	22	47	50	33	36	49	43	20	9	11	6	0

Date: **Tuesday, October 1, 2019** Total Daily Volume: **3013** 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
16	3	1	7	7	18	59	167	256	79	84	122	152	132	244	205	292	336	302	214	156	77	69	15
8	0	0	0	0	1	6	38	106	25	14	31	41	32	38	32	48	79	89	75	52	37	28	2
0	0	1	3	2	5	7	38	72	18	19	21	40	44	30	51	76	91	77	61	39	22	15	2
7	1	0	2	1	8	11	32	43	13	22	37	23	28	80	55	84	91	80	42	30	7	15	6
1	2	0	2	4	4	35	59	35	23	29	33	48	28	96	67	84	75	56	36	35	11	11	5

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

Average Daily Traffic

Location: **Windcrest Lane, between Rancho Carmel Drive and Seabridge Lane**

Date: **Tuesday, October 1, 2019** Total Daily Volume: **3778** 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
22	10	9	4	25	69	169	279	240	180	148	157	185	179	218	206	260	373	350	265	159	159	77	35
10	4	4	1	3	14	36	84	61	42	40	42	35	44	54	38	60	90	106	73	56	48	27	8
5	2	0	0	3	16	29	47	71	41	43	35	51	53	49	59	76	99	87	75	35	40	13	8
3	2	3	3	8	18	50	76	62	47	31	32	38	43	55	40	62	94	86	74	40	33	19	5
4	2	2	0	11	21	54	72	46	50	34	48	61	39	60	69	62	90	71	43	28	38	18	14

Date: **Tuesday, October 1, 2019** Total Daily Volume: **1961** 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	6	4	2	6	14	28	47	78	60	59	76	118	103	114	122	181	263	229	161	95	107	50	23
7	3	3	1	1	5	8	10	19	15	10	15	22	25	30	18	45	67	73	40	32	31	20	6
3	1	0	0	2	1	4	7	22	10	14	22	39	32	23	33	48	72	51	52	20	27	9	6
2	0	1	1	2	4	10	19	16	17	16	12	30	19	31	24	46	66	61	41	25	22	13	3
3	2	0	0	1	4	6	11	21	18	19	27	27	27	30	47	42	58	44	28	18	27	8	8

Date: **Tuesday, October 1, 2019** Total Daily Volume: **1817** 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
7	4	5	2	19	55	141	232	162	120	89	81	67	76	104	84	79	110	121	104	64	52	27	12
3	1	1	0	2	9	28	74	42	27	30	27	13	19	24	20	15	23	33	33	24	17	7	2
2	1	0	0	1	15	25	40	49	31	29	13	12	21	26	26	28	27	36	23	15	13	4	2
1	2	2	2	6	14	40	57	46	30	15	20	8	24	24	16	16	28	25	33	15	11	6	2
1	0	2	0	10	17	48	61	25	32	15	21	34	12	30	22	20	32	27	15	10	11	10	6

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

Average Daily Traffic

Location: **Windcrest Lane, between Seabridge Lane and Boulton Avenue**

Date: **Tuesday, October 1, 2019** Total Daily Volume: **1791** 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
5	4	0	2	6	16	50	116	134	71	69	93	89	99	125	117	140	207	150	128	85	49	26	10
3	0	0	1	0	5	8	31	37	20	16	24	16	22	23	31	35	54	46	35	27	12	11	3
0	1	0	1	0	3	7	18	44	14	14	19	25	24	28	32	39	55	39	47	15	17	4	2
1	2	0	0	3	7	16	29	26	19	13	24	24	31	30	27	35	61	36	30	21	11	3	4
1	1	0	0	3	1	19	38	27	18	26	26	24	22	44	27	31	37	29	16	22	9	8	1

Date: **Tuesday, October 1, 2019** Total Daily Volume: **886** 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
4	2	0	1	4	2	13	59	52	27	37	42	50	39	68	57	83	105	87	75	40	20	13	6
2	0	0	0	0	1	4	16	20	8	10	13	9	8	11	11	19	26	23	19	11	6	6	1
0	1	0	1	0	0	1	10	13	4	5	6	16	10	15	15	27	36	27	28	7	9	1	2
1	0	0	0	2	1	6	14	11	7	8	8	8	14	12	13	23	27	21	16	10	2	2	3
1	1	0	0	2	0	2	19	8	8	14	15	17	7	30	18	14	16	16	12	12	3	4	0

Date: **Tuesday, October 1, 2019** Total Daily Volume: **905** 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	2	0	1	2	14	37	57	82	44	32	51	39	60	57	60	57	102	63	53	45	29	13	4
1	0	0	1	0	4	4	15	17	12	6	11	7	14	12	20	16	28	23	16	16	6	5	2
0	0	0	0	0	3	6	8	31	10	9	13	9	14	13	17	12	19	12	19	8	8	3	0
0	2	0	0	1	6	10	15	15	12	5	16	16	17	18	14	12	34	15	14	11	9	1	1
0	0	0	0	1	1	17	19	19	10	12	11	7	15	14	9	17	21	13	4	10	6	4	1

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

Average Daily Traffic

Location: **Boulton Avenue, between Windcrest Lane and Carmel Ridge Road**

Date: **Tuesday, October 1, 2019** Total Daily Volume: **837** 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	1	2	1	6	18	65	69	30	29	44	42	48	66	58	60	81	81	56	34	30	11	1
3	0	1	2	0	0	2	12	23	7	2	16	7	7	14	14	19	21	21	20	10	9	4	0
0	1	0	0	0	2	1	13	14	9	13	11	6	7	20	12	12	15	17	18	5	6	0	0
0	0	0	0	1	0	11	24	14	5	5	7	13	20	15	15	11	26	25	11	9	9	3	1
0	0	0	0	0	4	4	16	18	9	9	10	16	14	17	17	18	19	18	7	10	6	4	0

Date: **Tuesday, October 1, 2019** Total Daily Volume: **505** 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	1	1	0	5	9	31	32	17	15	18	25	28	44	32	37	57	55	37	26	21	11	1
2	0	1	1	0	0	0	4	9	3	2	6	3	6	9	8	11	15	14	15	9	7	4	0
0	0	0	0	0	2	0	9	5	5	6	3	4	3	13	8	9	7	8	10	4	4	0	0
0	0	0	0	0	0	6	11	6	4	1	5	7	12	12	9	7	19	20	9	6	6	3	1
0	0	0	0	0	3	3	7	12	5	6	4	11	7	10	7	10	16	13	3	7	4	4	0

Date: **Tuesday, October 1, 2019** Total Daily Volume: **332** 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	1	1	9	34	37	13	14	26	17	20	22	26	23	24	26	19	8	9	0	0
1	0	0	1	0	0	2	8	14	4	0	10	4	1	5	6	8	6	7	5	1	2	0	0
0	1	0	0	0	0	1	4	9	4	7	8	2	4	7	4	3	8	9	8	1	2	0	0
0	0	0	0	1	0	5	13	8	1	4	2	6	8	3	6	4	7	5	2	3	3	0	0
0	0	0	0	0	1	1	9	6	4	3	6	5	7	7	10	8	3	5	4	3	2	0	0

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

Average Daily Traffic

Location: **Seabridge Lane, between Windcrest Lane and Stoney Peak Drive**

Date: **Tuesday, October 1, 2019** Total Daily Volume: **1433** 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	6	7	33	78	91	66	59	73	82	78	115	114	121	166	125	91	60	36	17	9
0	0	0	1	0	3	4	19	25	26	18	22	19	19	30	25	30	47	41	26	17	8	8	3
1	0	0	0	1	0	7	17	33	18	14	21	24	20	29	33	34	45	34	28	17	12	4	2
2	1	0	1	2	2	10	22	19	9	16	9	20	18	25	23	29	46	25	23	12	7	5	2
0	0	0	0	3	2	12	20	14	13	11	21	19	21	31	33	28	28	25	14	14	9	0	2

Date: **Tuesday, October 1, 2019** Total Daily Volume: **626** 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
3	1	0	0	4	1	4	41	28	20	27	28	38	34	49	53	57	87	59	39	23	17	8	5
0	0	0	0	0	1	0	12	11	11	8	8	9	9	13	10	19	24	23	9	7	4	5	0
1	0	0	0	0	0	0	10	8	4	4	5	14	8	15	14	10	23	8	15	7	6	0	2
2	1	0	0	1	0	2	9	6	1	10	5	8	7	7	8	16	25	14	10	6	2	3	1
0	0	0	0	3	0	2	10	3	4	5	10	7	10	14	21	12	15	14	5	3	5	0	2

Date: **Tuesday, October 1, 2019** Total Daily Volume: **807** 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	0	0	2	2	6	29	37	63	46	32	45	44	44	66	61	64	79	66	52	37	19	9	4
0	0	0	1	0	2	4	7	14	15	10	14	10	10	17	15	11	23	18	17	10	4	3	3
0	0	0	0	1	0	7	7	25	14	10	16	10	12	14	19	24	22	26	13	10	6	4	0
0	0	0	1	1	2	8	13	13	8	6	4	12	11	18	15	13	21	11	13	6	5	2	1
0	0	0	0	0	2	10	10	11	9	6	11	12	11	17	12	16	13	11	9	11	4	0	0

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

Average Daily Traffic

Location: **Eastbourne Road, North of Highland Ranch Road**

Date: **Tuesday, October 1, 2019** Total Daily Volume: **5104** 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
10	1	7	9	11	26	126	1267	239	200	133	188	188	531	406	335	367	394	296	154	119	61	25	11
2	1	1	3	2	4	14	132	72	69	32	42	48	52	158	115	66	91	91	56	34	23	11	3
5	0	3	0	0	4	29	280	60	49	38	56	37	107	110	74	85	87	74	48	22	15	9	3
2	0	1	2	5	10	35	579	44	39	29	52	47	115	62	86	101	113	67	25	38	12	3	2
1	0	2	4	4	8	48	276	63	43	34	38	56	257	76	60	115	103	64	25	25	11	2	3

Date: **Tuesday, October 1, 2019** Total Daily Volume: **2192** 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	1	2	3	1	6	36	405	86	78	51	102	104	254	131	153	188	205	151	85	77	44	16	6
2	1	1	2	0	2	4	62	20	26	14	26	22	35	39	45	34	50	53	36	29	13	8	3
2	0	1	0	0	0	8	130	28	20	14	40	21	85	28	31	48	49	34	21	13	13	4	1
2	0	0	1	0	1	10	190	11	14	10	22	25	87	19	47	51	45	36	13	21	11	2	1
1	0	0	0	1	3	14	23	27	18	13	14	36	47	45	30	55	61	28	15	14	7	2	1

Date: **Tuesday, October 1, 2019** Total Daily Volume: **2912** 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	5	6	10	20	90	862	153	122	82	86	84	277	275	182	179	189	145	69	42	17	9	5
0	0	0	1	2	2	10	70	52	43	18	16	26	17	119	70	32	41	38	20	5	10	3	0
3	0	2	0	0	4	21	150	32	29	24	16	16	22	82	43	37	38	40	27	9	2	5	2
0	0	1	1	5	9	25	389	33	25	19	30	22	28	43	39	50	68	31	12	17	1	1	1
0	0	2	4	3	5	34	253	36	25	21	24	20	210	31	30	60	42	36	10	11	4	0	2

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

Average Daily Traffic

Location: **Eastbourne Road, South of Highland Ranch Road**

Date: **Tuesday, October 1, 2019** Total Daily Volume: **485** 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	5	0	2	9	12	46	39	17	12	27	24	24	41	47	37	34	30	40	14	15	5	2
0	0	0	0	0	0	2	10	17	8	1	8	5	3	13	12	12	11	2	3	2	5	0	0
1	0	0	0	0	2	2	3	8	5	1	10	6	7	10	12	6	7	12	16	3	5	0	0
1	1	1	0	1	3	5	14	10	3	4	3	4	5	8	12	10	7	6	10	5	4	1	1
0	0	4	0	1	4	3	19	4	1	6	6	9	9	10	11	9	9	10	11	4	1	4	1

Date: **Tuesday, October 1, 2019** Total Daily Volume: **245** Description: **Northbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
2	0	3	0	2	6	8	39	24	13	7	14	9	12	16	20	18	15	9	16	4	8	0	0
0	0	0	0	0	0	1	9	12	5	1	3	3	2	7	7	7	6	0	1	1	3	0	0
1	0	0	0	0	1	2	2	4	4	1	4	1	4	3	5	3	5	2	8	1	2	0	0
1	0	1	0	1	2	2	14	5	3	1	2	1	2	3	4	2	1	1	3	1	2	0	0
0	0	2	0	1	3	3	14	3	1	4	5	4	4	3	4	6	3	6	4	1	1	0	0

Date: **Tuesday, October 1, 2019** Total Daily Volume: **240** 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	2	0	0	3	4	7	15	4	5	13	15	12	25	27	19	19	21	24	10	7	5	2
0	0	0	0	0	0	1	1	5	3	0	5	2	1	6	5	5	5	2	2	1	2	0	0
0	0	0	0	0	1	0	1	4	1	0	6	5	3	7	7	3	2	10	8	2	3	0	0
0	1	0	0	0	1	3	0	5	0	3	1	3	3	5	8	8	6	5	7	4	2	1	1
0	0	2	0	0	1	0	5	1	0	2	1	5	5	7	7	3	6	4	7	3	0	4	1

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

Average Daily Traffic

Location: **Ted Williams Parkway, between Highland Ranch Road and Pomerado Road**

Date: **Tuesday, September 17, 2019** Total Daily Volume: **28510** 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
92	59	36	51	191	550	1349	2097	2131	1566	1343	1489	1588	1653	1976	2188	2354	2366	1937	1442	885	653	354	160
26	19	8	9	21	69	231	490	504	391	323	348	399	399	452	569	554	583	519	414	270	201	109	51
23	12	10	12	32	125	293	522	559	402	315	379	398	407	492	519	577	671	490	369	229	176	101	37
28	15	14	8	56	169	377	587	567	410	359	395	397	419	482	520	602	559	492	347	209	149	70	35
15	13	4	22	82	187	448	498	501	363	346	367	394	428	550	580	621	553	436	312	177	127	74	37

Date: **Tuesday, September 17, 2019** Total Daily Volume: **14532** 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
58	34	20	24	58	146	384	831	977	689	652	725	798	874	1117	1307	1402	1381	1145	788	449	378	205	90
14	10	6	5	3	15	52	165	239	176	149	174	203	219	258	329	332	353	291	224	130	103	57	27
14	8	7	3	8	42	74	186	265	172	164	167	200	191	286	331	350	399	297	191	129	101	54	26
19	10	5	6	17	37	97	266	267	164	164	192	189	206	245	280	364	302	286	201	101	96	48	15
11	6	2	10	30	52	161	214	206	177	175	192	206	258	328	367	356	327	271	172	89	78	46	22

Date: **Tuesday, September 17, 2019** Total Daily Volume: **13978** 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
34	25	16	27	133	404	965	1266	1154	877	691	764	790	779	859	881	952	985	792	654	436	275	149	70
12	9	2	4	18	54	179	325	265	215	174	174	196	180	194	240	222	230	228	190	140	98	52	24
9	4	3	9	24	83	219	336	294	230	151	212	198	216	206	188	227	272	193	178	100	75	47	11
9	5	9	2	39	132	280	321	300	246	195	203	208	213	237	240	238	257	206	146	108	53	22	20
4	7	2	12	52	135	287	284	295	186	171	175	188	170	222	213	265	226	165	140	88	49	28	15

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

Average Daily Traffic

Location: **Carmel Mountain Road, between Highland Ranch Road and Conference Way**

Date: **Tuesday, September 17, 2019** Total Daily Volume: **25896** 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	108	91	104	195	392	777	1528	1311	1230	1538	1774	2037	1932	1856	1869	1903	2020	1775	1526	982	469	236	145
28	28	14	27	33	66	151	365	343	294	324	429	503	490	423	480	448	448	466	399	317	162	64	52
24	26	20	16	28	91	185	412	352	343	390	455	516	490	449	472	515	522	418	425	262	167	61	36
23	22	27	34	65	106	199	368	318	299	376	454	513	492	509	467	465	528	463	372	231	82	66	31
23	32	30	27	69	129	242	383	298	294	448	436	505	460	475	450	475	522	428	330	172	58	45	26

Date: **Tuesday, September 17, 2019** Total Daily Volume: **12738** 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
39	47	41	50	89	241	409	840	725	617	746	806	960	929	894	942	931	981	856	731	469	223	104	68
10	11	8	10	18	38	86	206	195	142	176	195	225	238	206	239	221	215	223	193	152	82	33	25
11	12	14	4	6	47	97	192	199	176	193	212	241	224	213	245	258	244	195	219	117	77	18	17
12	10	6	16	27	67	102	177	169	144	181	182	250	227	248	230	214	277	224	173	101	39	28	14
6	14	13	20	38	89	124	265	162	155	196	217	244	240	227	228	238	245	214	146	99	25	25	12

Date: **Tuesday, September 17, 2019** Total Daily Volume: **13158** 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
59	61	50	54	106	151	368	688	586	613	792	968	1077	1003	962	927	972	1039	919	795	513	246	132	77
18	17	6	17	15	28	65	159	148	152	148	234	278	252	217	241	227	233	243	206	165	80	31	27
13	14	6	12	22	44	88	220	153	167	197	243	275	266	236	227	257	278	223	206	145	90	43	19
11	12	21	18	38	39	97	191	149	155	195	272	263	265	261	237	251	251	239	199	130	43	38	17
17	18	17	7	31	40	118	118	136	139	252	219	261	220	248	222	237	277	214	184	73	33	20	14

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

Average Daily Traffic

Location: **Carmel Mountain Road, between Conference Way and Rancho Carmel Drive**

Date: **Tuesday, September 17, 2019** Total Daily Volume: **24795** 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
74	86	82	85	130	284	678	1446	1286	1230	1421	1787	2105	1904	1817	1777	1892	1956	1779	1385	827	418	206	140
26	25	22	24	24	34	106	348	348	297	308	383	544	510	418	439	441	449	494	386	248	149	64	49
19	28	22	15	24	58	158	377	367	330	363	449	559	485	439	415	489	519	430	385	243	133	53	37
14	13	17	22	36	76	163	363	272	298	338	462	498	446	461	477	450	502	433	326	189	80	46	31
15	20	21	24	46	116	251	358	299	305	412	493	504	463	499	446	512	486	422	288	147	56	43	23

Date: **Tuesday, September 17, 2019** Total Daily Volume: **10964** 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
35	40	46	25	43	90	279	706	558	469	545	618	931	881	845	830	856	903	781	650	444	207	103	79
14	16	13	5	6	12	38	179	164	118	120	144	221	238	206	218	203	214	213	172	135	78	40	32
9	9	16	8	5	15	70	160	157	131	142	168	234	218	211	204	234	218	176	180	120	55	20	21
7	7	5	6	14	28	54	149	116	105	134	157	219	203	214	193	187	261	191	151	101	49	22	12
5	8	12	6	18	35	117	218	121	115	149	149	257	222	214	215	232	210	201	147	88	25	21	14

Date: **Tuesday, September 17, 2019** Total Daily Volume: **13831** 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
39	46	36	60	87	194	399	740	728	761	876	1169	1174	1023	972	947	1036	1053	998	735	383	211	103	61
12	9	9	19	18	22	68	169	184	179	188	239	323	272	212	221	238	235	281	214	113	71	24	17
10	19	6	7	19	43	88	217	210	199	221	281	325	267	228	211	255	301	254	205	123	78	33	16
7	6	12	16	22	48	109	214	156	193	204	305	279	243	247	284	263	241	242	175	88	31	24	19
10	12	9	18	28	81	134	140	178	190	263	344	247	241	285	231	280	276	221	141	59	31	22	9

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

Average Daily Traffic

Location: **Carmel Mountain Road, between Rancho Carmel Drive and Camino Del Norte**

Date: **Tuesday, September 17, 2019** Total Daily Volume: **35165** 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
100	103	121	93	170	437	1056	2184	2072	1870	1987	2345	2664	2569	2615	2768	2673	2797	2463	1859	1185	589	258	187
34	36	23	27	26	59	174	509	565	484	442	560	674	706	637	659	651	696	684	506	348	214	81	68
24	29	25	18	33	84	242	536	531	455	495	576	673	660	619	672	641	722	630	488	337	189	63	47
20	18	45	22	48	105	250	551	472	444	494	590	637	594	643	745	651	698	597	471	271	116	63	40
22	20	28	26	63	189	390	588	504	487	556	619	680	609	716	692	730	681	552	394	229	70	51	32

Date: **Tuesday, September 17, 2019** Total Daily Volume: **16937** 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
58	60	80	29	43	109	339	742	663	612	803	1050	1228	1228	1357	1549	1562	1649	1334	1038	772	363	142	127
18	28	14	6	7	21	54	217	199	152	172	269	340	329	340	374	372	440	383	272	222	147	56	48
13	11	15	9	8	16	81	168	158	161	203	260	304	300	316	368	398	403	332	268	210	103	30	31
16	10	34	7	13	30	76	149	159	138	208	262	269	287	343	409	378	419	312	259	184	81	29	24
11	11	17	7	15	42	128	208	147	161	220	259	315	312	358	398	414	387	307	239	156	32	27	24

Date: **Tuesday, September 17, 2019** Total Daily Volume: **18228** 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
42	43	41	64	127	328	717	1442	1409	1258	1184	1295	1436	1341	1258	1219	1111	1148	1129	821	413	226	116	60
16	8	9	21	19	38	120	292	366	332	270	291	334	377	297	285	279	256	301	234	126	67	25	20
11	18	10	9	25	68	161	368	373	294	292	316	369	360	303	304	243	319	298	220	127	86	33	16
4	8	11	15	35	75	174	402	313	306	286	328	368	307	300	336	273	279	285	212	87	35	34	16
11	9	11	19	48	147	262	380	357	326	336	360	365	297	358	294	316	294	245	155	73	38	24	8

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

Average Daily Traffic

Location: **Highland Ranch Road, between Carmel Mountain Road and World Trade Drive**

Date: **Tuesday, September 17, 2019** Total Daily Volume: **10485** 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
41	17	9	14	30	97	260	779	462	530	495	730	802	835	777	764	807	914	755	616	410	213	77	51
20	4	1	5	5	8	42	157	134	120	124	156	200	208	209	204	179	205	207	174	129	64	21	16
15	4	3	3	0	20	48	207	109	132	117	168	189	204	185	164	222	223	184	156	101	76	22	17
3	4	3	3	9	32	65	214	114	137	124	193	210	220	187	184	202	250	188	177	89	43	19	9
3	5	2	3	16	37	105	201	105	141	130	213	203	203	196	212	204	236	176	109	91	30	15	9

Date: **Tuesday, September 17, 2019** Total Daily Volume: **4783** 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
26	8	4	4	14	48	167	427	249	286	234	330	374	360	359	326	347	369	297	276	166	73	21	18
16	4	0	2	2	4	27	91	75	65	73	64	105	83	108	89	87	84	87	78	58	25	8	4
8	1	1	1	0	5	33	84	58	67	48	80	86	95	83	80	82	84	64	75	36	26	8	7
1	1	2	1	3	18	38	101	58	75	58	82	87	83	82	69	89	111	74	66	34	8	2	4
1	2	1	0	9	21	69	151	58	79	55	104	96	99	86	88	89	90	72	57	38	14	3	3

Date: **Tuesday, September 17, 2019** Total Daily Volume: **5702** 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
15	9	5	10	16	49	93	352	213	244	261	400	428	475	418	438	460	545	458	340	244	140	56	33
4	0	1	3	3	4	15	66	59	55	51	92	95	125	101	115	92	121	120	96	71	39	13	12
7	3	2	2	0	15	15	123	51	65	69	88	103	109	102	84	140	139	120	81	65	50	14	10
2	3	1	2	6	14	27	113	56	62	66	111	123	137	105	115	113	139	114	111	55	35	17	5
2	3	1	3	7	16	36	50	47	62	75	109	107	104	110	124	115	146	104	52	53	16	12	6

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

Average Daily Traffic

Location: **Highland Ranch Road, between World Trade Drive and Eastbourne Road**

Date: **Tuesday, September 17, 2019** Total Daily Volume: **14946** 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
23	13	11	9	26	126	343	1421	793	661	618	862	917	1083	1117	1222	1249	1423	1195	885	482	288	109	70
13	4	2	2	3	16	54	277	225	174	143	170	245	232	304	307	292	340	306	251	157	103	36	25
5	2	4	3	4	18	63	378	207	176	154	217	197	245	251	303	340	363	312	225	124	88	28	20
3	3	3	1	5	38	92	420	175	157	157	228	218	287	273	296	282	353	296	231	95	59	26	13
2	4	2	3	14	54	134	346	186	154	164	247	257	319	289	316	335	367	281	178	106	38	19	12

Date: **Tuesday, September 17, 2019** Total Daily Volume: **7592** 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
9	7	4	7	23	94	234	838	509	387	343	417	466	518	576	608	618	698	543	388	176	77	31	21
7	4	0	2	3	13	40	193	159	110	95	74	150	88	175	156	150	171	129	110	60	36	14	7
0	0	2	2	4	11	44	151	121	108	78	117	93	106	119	155	172	172	133	102	42	23	8	7
1	2	2	1	4	32	55	207	112	83	86	110	93	125	138	135	133	176	145	98	30	9	4	4
1	1	0	2	12	38	95	287	117	86	84	116	130	199	144	162	163	179	136	78	44	9	5	3

Date: **Tuesday, September 17, 2019** Total Daily Volume: **7354** 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
14	6	7	2	3	32	109	583	284	274	275	445	451	565	541	614	631	725	652	497	306	211	78	49
6	0	2	0	0	3	14	84	66	64	48	96	95	144	129	151	142	169	177	141	97	67	22	18
5	2	2	1	0	7	19	227	86	68	76	100	104	139	132	148	168	191	179	123	82	65	20	13
2	1	1	0	1	6	37	213	63	74	71	118	125	162	135	161	149	177	151	133	65	50	22	9
1	3	2	1	2	16	39	59	69	68	80	131	127	120	145	154	172	188	145	100	62	29	14	9

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

Average Daily Traffic

Location: **Highland Ranch Road, between Carmel Ridge Road and Ted Williams Parkway**

Date: **Tuesday, September 17, 2019** Total Daily Volume: **11281** 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
24	14	19	8	26	105	311	692	671	545	508	682	667	776	842	931	1009	1063	929	690	412	206	98	53
11	7	1	0	2	14	38	149	175	136	125	144	149	184	199	233	246	245	233	191	124	69	36	19
5	1	8	1	6	14	65	174	171	131	116	175	172	187	191	228	257	285	228	164	107	62	25	12
4	2	7	1	8	27	95	182	160	134	126	169	166	222	217	211	250	261	247	187	89	43	19	13
4	4	3	6	10	50	113	187	165	144	141	194	180	183	235	259	256	272	221	148	92	32	18	9

Date: **Tuesday, September 17, 2019** Total Daily Volume: **5690** 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
11	10	9	5	15	59	127	296	333	265	258	342	326	402	395	469	556	579	476	380	209	98	47	23
7	6	0	0	0	8	16	58	84	63	75	62	75	93	83	107	135	142	110	113	58	30	16	9
0	0	4	1	3	4	26	87	85	65	49	103	87	108	80	110	146	152	118	83	54	34	13	5
2	2	5	0	3	17	33	86	80	66	67	83	73	121	100	107	132	153	135	102	49	15	8	6
2	2	0	4	9	30	52	65	84	71	67	94	91	80	132	145	143	132	113	82	48	19	10	3

Date: **Tuesday, September 17, 2019** Total Daily Volume: **5591** 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
13	4	10	3	11	46	184	396	338	280	250	340	341	374	447	462	453	484	453	310	203	108	51	30
4	1	1	0	2	6	22	91	91	73	50	82	74	91	116	126	111	103	123	78	66	39	20	10
5	1	4	0	3	10	39	87	86	66	67	72	85	79	111	118	111	133	110	81	53	28	12	7
2	0	2	1	5	10	62	96	80	68	59	86	93	101	117	104	118	108	112	85	40	28	11	7
2	2	3	2	1	20	61	122	81	73	74	100	89	103	103	114	113	140	108	66	44	13	8	6

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Appendix C: Signal Timing

INTERSECTION: CARMEL MOUNTAIN RD & RANCHO CARMEL DR (WEST)

223 Program

Group Assignment:
Field Master Assignment:

N/S Street Name: RANCHO CARMEL Dr (WEST)
E/W Street Name: CARMEL MTN Rd

Last Database Change:
System Ref. Number:

N

Row	Column # ---->	1	2	3	4	5	6	7	8
			CARMEL MTN		RANCHO CARMEL (W)		CARMEL MTN		RANCHO CARMEL (W)
	Phase # ---->	1	2	3	4	5	6	7	8
0	Ped Walk		7				7		7
1	Ped FDW		24				27		32
2	Min Green	4	10	4	7	4	10	4	7
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	6.7	2.0	4.3	2.0	7.5	2.0	4.8
6	Max Gap	2.0	6.7	2.0	4.3	2.0	7.5	2.0	4.8
7	Min Gap	2.0	0.2	2.0	0.2	2.0	0.2	2.0	0.2
8	Max Limit	30	60	30	40	30	60	30	40
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1		0.1		0.1		0.1
D	Every		0.5		0.7		0.4		0.6
E	Yellow	3.4	4.0	3.4	4.8	3.4	3.9	3.4	4.7
F	Red Clear	1.5	1.0	1.0	1.0	1.5	1.0	1.0	1.0
	Grade								

Phase Timing - Bank 1
F + Phase + 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 + E + Row

Row		F
0	Permit	12345678
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	__3___7_

Phase Functions <F Page>
F + F + Row

<F 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

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		C + 0 + 0
Zone Number		C + 0 + 1
Area Number		C + 0 + 2
Area Address		C + 0 + 3
QuicNet Channel	DIGI:	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6_8	0

Lag Phases <C Page>

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: WXW
Approved By: EFF
Drawing Number:
Timing Implemented On: 5/19/05

6

USED PED WALKING SPEED OF 3.5 FPS

City of San Diego

INTERSECTION: CARMEL MOUNTAIN RD & RANCHO CARMEL DR (WEST) — 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 <D Page>

7 + ROW 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

Day of Week

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

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 7
C	EV-C Phases	1 6
D	EV-D Phases	3 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

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 =

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: CARMEL MOUNTAIN RD & RANCHO CARMEL DR (WEST) 223 Program

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1		2.5		2I2U	1
2		1.8		2I2L	5
3		1.8		2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7		1.8		4I6U	3
8	10.0			4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		2.5		6J2U	2
2		2.0		6J2L	6
3		2.0		6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7		1.8		8J6U	4
8				8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

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

System Detectors <D Page>

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

Detector Failure Monitor

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

Advance Warning Beacon - Sign 1

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

Advance Warning Beacon - Sign 2

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

Power Cycle Correction (Default = 0.5)

INTERSECTION: CARMEL MOUNTAIN RD & RANCHO CARMEL DR (WEST) — 223 Program

Row	Column # ---->	Plan 1	2	3	4	5	6	7	8	9
	Plan Name ---->									
0	Cycle Length	120		125						
1	Phase 1 - ForceOff	80		81						
2	Phase 2 - ForceOff	0		0						
3	Phase 3 - ForceOff	27		26						
4	Phase 4 - ForceOff	59		59						
5	Phase 5 - ForceOff	92		92						
6	Phase 6 - ForceOff	0		0						
7	Phase 7 - ForceOff	27		26						
8	Phase 8 - ForceOff	59		59						
9	Ring Offset									
A	Offset A	23		62						
B	Offset B									
C	Offset C									
D	Permissive	12		12						
E	Hold Release	255		255						
F	Ped Shift	5		5						

Coordination Timing By: EFF
Implemented On: 11/29/2000

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

Coordination <C Page>

C + Plan + ROW

Row	Time	Plan	Offset	Day of Week
0	06 : 50	1	A	_23456_
1	08 : 30	E	A	_23456_
2	16 : 00	3	A	_23456_
3	18 : 15	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	_2___6__	1	Plan 1 - Lag	_2_4_6_8
Plan 2		2	Plan 2 - Lag	
Plan 3	_2___6__	3	Plan 3 - Lag	_2_4_6_8
Plan 4		4	Plan 4 - Lag	
Plan 5		5	Plan 5 - Lag	
Plan 6		6	Plan 6 - Lag	
Plan 7		7	Plan 7 - Lag	
Plan 8		8	Plan 8 - Lag	
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: Carmel Mountain Road and Stoney Peak Drive

223 Program

Group Assignment:
Field Master Assignment:

N/S Street Name: **Carmel Mountain Road**
E/W Street Name: **Stoney Peak Drive**

Last Database Change:
System Ref. Number: **946**

Row	Column # ---->	Carmel Mtn					Carmel Mtn	Shop Ctr Dwy	Stoney Peak
	Phase # ---->	1	2	3	4	5	6	7	8
	Phase								
0	Ped Walk		7				7		7
1	Ped FDW		16				17		26
2	Min Green	4	10			4	10	4	4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	6.9			2.0	6.1	2.0	2.0
6	Max Gap	2.0	6.9			2.0	6.1	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		0.4				0.5		
E	Yellow	3.4	3.9			3.4	4.4	3.9	3.9
F	Red Clear	1.0	1.0			1.0	1.0	1.0	1.0

Phase Timing - Bank 1
F + Phase + 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 + E + Row

	F	Row
Permit	12__5678	0
Red Lock		1
Yellow Lock		2
Min Recall	_2___6__	3
Ped Recall		4
Peds (View)		5
Rest In Walk		6
Red Rest		7
Dbl Entry		8
Max Recall		9
Soft Recall	_2___6__	A
Max 2		B
Cond Serv		C
Ped Lock	12345678	D
Yellow Start	_____8	E
1st Phases	_2___6__	F

Phase Functions <F Page>
F + F + Row

<F Page>

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	12	C + 0 + 0
Zone Number	12	C + 0 + 1
Area Number	1	C + 0 + 2
Area Address	110	C + 0 + 3
QuicNet Channel	COM64:	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2___67_	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: EML
Approved By: EM
Drawing Number: 27393
Timing Implemented On:

INTERSECTION: Carmel Mountain Road and Stone Peak Drive — 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 + F + ROW

<E Page>

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	
C	EV-C Phases	1 6
D	EV-D Phases	8
E	Extra 1 Config. Bits	1 4 5
F	IC Select (Interconnect)	2

Configuration — E + E + ROW

For access, set F + 9 + E = 1

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 =

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	Detector Name	332 Input File	Detector Number
0				1I1	14
1		1.8		2I2U	1
2				2I2L	5
3				2I3U	21
4		1.8		2I3L	25
5				2I4	9
6				3I5	16
7				4I6U	3
8				4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E			---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.8		6J2U	2
2				6J2L	6
3				6J3U	22
4		1.8		6J3L	26
5				6J4	10
6				7J5	15
7				8J6U	4
8	10.0			8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D	10.0			7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

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)		D+A+E
Max OFF (min)		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		F+0+6
Short Failure		F+0+7

Power Cycle Correction (Default = 0.5)

INTERSECTION: Carmel Mountain Road and Stoney Peak Drive — 223 Program

Coordination Timing By: EFI
Implemented On: 11/29/2000

Row	Plan Name --->	Plan 1	2	3	4	5	6	7	8	9
0	Cycle Length	120		125						
1	Phase 1 - ForceOff	78		72						
2	Phase 2 - ForceOff	0		0	10					
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff									
5	Phase 5 - ForceOff	73		86						
6	Phase 6 - ForceOff	0		0						
7	Phase 7 - ForceOff	57		56						
8	Phase 8 - ForceOff	39		40						
9	Ring Offset									
A	Offset A	35		97						
B	Offset B									
C	Offset C									
D	Permissive	12		12						
E	Hold Release	255		255						
F	Ped Shift	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 : 50	1	A	_23456_
1	08 : 30	E	A	_23456_
2	16 : 00	3	A	_23456_
3	18 : 15	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	_2___67_
Plan 1	_2___6__	1	Plan 1 - Lag	_2___67_
Plan 2		2	Plan 2 - Lag	
Plan 3	_2___6__	3	Plan 3 - Lag	_2___67_
Plan 4		4	Plan 4 - Lag	
Plan 5		5	Plan 5 - Lag	
Plan 6		6	Plan 6 - Lag	
Plan 7		7	Plan 7 - Lag	
Plan 8		8	Plan 8 - Lag	
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: Carmel Mountain Road and Highland Ranch Road

223 Program

Group Assignment:
Field Master Assignment:

N/S Street Name: **Carmel Mountain Road**
E/W Street Name: **Highland Ranch Road**

Last Database Change:
System Ref. Number: **947**

Row	Column # ---->	Carmel Mtn					Carmel Mtn	Shop Ctr Dwy	Highland Rch
	Phase # ---->	1	2	3	4	5	6	7	8
0	Ped Walk		7				7		7
1	Ped FDW		20				18		27
2	Min Green	4	10			4	10	4	4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	6.9			2.0	6.1	2.0	2.0
6	Max Gap	2.0	6.9			2.0	6.1	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		0.4				0.5		
E	Yellow	3.4	3.9			3.4	4.1	3.4	4.1
F	Red Clear	1.0	1.0			1.0	1.0	1.0	1.0

Phase Timing - Bank 1
F + Phase + Row

		E			F	
	RR-1 Delay			Permit	12__5678	0
	RR-1 Clear			Red Lock		1
	EV-A Delay	0		Yellow Lock		2
	EV-A Clear	0		Min Recall		3
	EV-B Delay			Ped Recall		4
	EV-B Clear			Peds (View)	_2___6_8	5
	EV-C Delay	0		Rest In Walk		6
	EV-C Clear	0		Red Rest		7
	EV-D Delay	0		Dbl Entry		8
	EV-D Clear	0		Max Recall		9
	RR-2 Delay			Soft Recall	_2___6__	A
	RR-2 Clear			Max 2		B
	View EV Delay	---		Cond Serv		C
	View EV Clear	---		Ped Lock	12345678	D
	View RR Delay	---		Yellow Start	_2___6__	E
	View RR Clear	---		1st Phases	_____8	F

<F Page>

Preempt Timing
F + E + Row

Phase Functions <F Page>
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	13
Zone Number	13
Area Number	1
Area Address	111
QuicNet Channel	COM64:

C + 0 + 0
C + 0 + 1
C + 0 + 2
C + 0 + 3
(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: EML
Approved By: EFF
Drawing Number: 26163-5
Timing Implemented On:

NTERSECTION: Carmel Mountain Road and Highlar Ranch Road 223 Proc n

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 <D Page>

7 + ROW 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

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 =

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	
C	EV-C Phases	1 6
D	EV-D Phases	8
E	Extra 1 Config. Bits	1 45
F	IC Select (Interconnect)	2

For access, set F + 9 + E = 1

Configuration

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

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: Carmel Mountain Road and Highland Ranch Road — 223 Program

Row	1 Delay	3 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		
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		2.0
2		2.0
3		
4		
5		
6		
7		
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)		D+A+E
Max OFF (min)		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		F+0+6
Short Failure		F+0+7

Power Cycle Correction (Default = 0.5)

INTERSECTION: Carmel Mountain Road and Highland Ran[illegible] Road

223 Progra[illegible]

Coordination Timing By: EFF
Implemented On: 11/29/2000

Row	Column # ---->	Plan 1	2	3	4	5	6	7	8	9
	Plan Name ---->									
0	Cycle Length	120		125						
1	Phase 1 - ForceOff	85		90						
2	Phase 2 - ForceOff	0		0						
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff									
5	Phase 5 - ForceOff	72		90						
6	Phase 6 - ForceOff	0		0						
7	Phase 7 - ForceOff	16		25						
8	Phase 8 - ForceOff	56		64						
9	Ring Offset									
A	Offset A	19		120						
B	Offset B									
C	Offset C									
D	Permissive	15		12						
E	Hold Release	100		90						
F	Ped Shift	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 : 50	1	A	_23456_
1	08 : 30	E	A	_23456_
2	16 : 00	3	A	_23456_
3	18 : 15	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
Plan 1	_2___6__
Plan 2	
Plan 3	_2___6__
Plan 4	
Plan 5	
Plan 6	
Plan 7	
Plan 8	
Plan 9	
Coord Ped*	
NEMA Hold	

Sync Phases
C + E + FUNCTION #

Row		F
0	Free Lag	_2___6_8
1	Plan 1 - Lag	_2___6_8
2	Plan 2 - Lag	
3	Plan 3 - Lag	_2___6_8
4	Plan 4 - Lag	
5	Plan 5 - Lag	
6	Plan 6 - Lag	
7	Plan 7 - Lag	
8	Plan 8 - Lag	
9	Plan 9 - Lag	
A	Coord Max *	
B	Coord Lag *	
C		
D		
E		
F		

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

Transition Type	0

TBC Transition
C + D + D

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

Transition Type
0 = Shortway
Non-zero = Lengthen

INTERSECTION: CARMEL MOUNTAIN Rd & CONFEREN Wy 223 gram

Group Assignment:
Field Master Assignment:

N/S Street Name: CARMEL MOUNTAIN Rd
E/W Street Name: CONFERENCE Wy

Last Database Change:
System Ref. Number:

N

Row	Column # --->	1	2	3	4	5	6	7	8
			CARMEL MOUNTAIN				CARMEL MOUNTAIN	CONFERENCE	CONFERENCE
	Phase # --->	1	2	3	4	5	6	7	8
0	Ped Walk		7				7		7
1	Ped FDW		20				21		27
2	Min Green	4	10			4	10	4	4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	6.7			2.0	7.3	2.0	2.0
6	Max Gap	2.0	6.7			2.0	7.3	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	30	40
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1				0.1		
D	Every		0.5				0.4		
E	Yellow	3.4	3.9			3.4	3.9	3.9	3.9
F	Red Clear	1.0	1.0			1.0	1.0	1.0	1.0
	Grade								

Phase Timing - Bank 1
F + Phase + 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 + 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_

Phase Functions <F Page>
F + F + Row

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		C + 0 + 0
Zone Number		C + 0 + 1
Area Number		C + 0 + 2
Area Address		C + 0 + 3
QuicNet Channel	DIGI51:	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_ 67_	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: WXW
Approved By: EFF
Drawing Number:
Timing Implemented On: 1/24/05

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 <D Page>

7 + ROW 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

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 =

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	
C	EV-C Phases	1____6__
D	EV-D Phases	_____8
E	Extra 1 Config. Bits	1_34____
F	IC Select (Interconnect)	_2_____

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

Configuration

For access, set F + 9 + E = 1 E + E + ROW

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	Detector Name	332 Input File	Detector Number
0				1I1	14
1		1.8		2I2U	1
2				2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7				4I6U	3
8				4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.8		6J2U	2
2				6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6	10.0			7J5	15
7				8J6U	4
8				8J6L	8
9	10.0			8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

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

System Detectors <D Page>

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

Detector Failure Monitor

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

Advance Warning Beacon - Sign 1

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

Advance Warning Beacon - Sign 2

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

Power Cycle Correction (Default = 0.5)

INTERSECTION: CARMEL MOUNTAIN Rd & CONFERENCE Wy — 223 Program

Coordination Timing By: EFF
Implemented On: 11/29/2000

Row	Column # ---->	Plan 1	2	3	4	5	6	7	8	9
	Plan Name ---->									
0	Cycle Length	120		125						
1	Phase 1 - ForceOff	74		85						
2	Phase 2 - ForceOff	0		0						
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff									
5	Phase 5 - ForceOff	74		87						
6	Phase 6 - ForceOff	0		0						
7	Phase 7 - ForceOff	55		59						
8	Phase 8 - ForceOff	41		40						
9	Ring Offset									
A	Offset A	5		19						
B	Offset B									
C	Offset C									
D	Permissive	12		12						
E	Hold Release	255		255						
F	Ped Shift	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 : 50	1	A	_23456_
1	08 : 30	E	A	_23456_
2	16 : 00	3	A	_23456_
3	18 : 15	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	_2__6__	1	Plan 1 - Lag	_2_●_67_
Plan 2		2	Plan 2 - Lag	
Plan 3	_2__6__	3	Plan 3 - Lag	_2_●_67_
Plan 4		4	Plan 4 - Lag	
Plan 5		5	Plan 5 - Lag	
Plan 6		6	Plan 6 - Lag	
Plan 7		7	Plan 7 - Lag	
Plan 8		8	Plan 8 - Lag	
Plan 9		9	Plan 9 - Lag	
Coord Ped*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases **Lag Phases** <C Page>

C + E + FUNCTION # C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

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

Transition Type
0 = Shortway
Non-zero = Lengthen

INTERSECTION: RANCHO CARMEL & WINDCREST

27 ogram

Group Assignment:
Field Master Assignment:

Street Name: RANCHO CARMEL
E/W Street Name: WINDCREST

Last Database Change:
Timing Sheet By: MBF
Approved By: mm
System Ref. Number:
Drawing Number: 22838-11
Timing Implemented On:

N

Row	Column # ---->	1	2	3	4	5	6	7	8
		RANCHO CARMEL DR			WINDCREST LN		RANCHO CARMEL DR		WINDCREST LN
	Phase # ---->	1	2	3	4	5	6	7	8
0	Ped Walk		7		7		7		7
1	Ped FDW		10		20		17		20
2	Min Green	4	10		4	4	10		4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	3.9		2.0	2.0	4.8		2.0
6	Max Gap	2.0	3.9		2.0	2.0	4.8		2.0
7	Min Gap	2.0	0.2		2.0	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		
D	Every		0.8				0.7		
E	Yellow	3.0	4.5		3.0	3.0	4.1		3.4
F	Red Clear	1.0	1.0		1.0	1.0	1.0		1.0

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

Row		F
0	Permit	12_456_8
1	Red Lock	
2	Yellow Lock	
3	Min Recall	
4	Ped Recall	
5	Peds (View)	_2_4_6_8
6	Rest In Walk	
7	Red Rest	
8	Dbl Entry	___4___8
9	Max Recall	
A	Soft Recall	_2___6__
B	Max 2	
C	Cond Serv	
D	Ped Lock	
E	Yellow Start	_2___6__
F	1st Phases	___4___8

Phase Functions <F Page>
F + F + Row

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	5	C + 0 + 0
Zone Number		C + 0 + 1
Area Number		C + 0 + 2
Area Address		C + 0 + 3
QuicNet Channel		(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6_8	0

Lag Phases <C Page>

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

Overlap Timing <F Page> <D Page>
F + COLOR + 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

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 <D Page>

7 + ROW 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

Day of Week

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

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	
C	EV-C Phases	1____6__
D	EV-D Phases	_____8
E	Extra 1 Config. Bits	1_34____
F	IC Select (Interconnect)	_2_____

For access, set F + 9 + E = 1

Configuration

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

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 =

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	Detector Name	332 Input File	Detector Number
0				1I1	14
1		1.8		2I2U	1
2				2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7	10.0			4I6U	3
8				4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.8		6J2U	2
2				6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7				8J6U	4
8				8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

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)

Coordination Timing By: MBF
Implemented On: 3/20/01

Row	Plan Name --->	Plan 1	2	3	4	5	6	7	8	9
0	Cycle Length		80		80					
1	Phase 1 - ForceOff		48		48					
2	Phase 2 - ForceOff									
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff		33		33					
5	Phase 5 - ForceOff		48		47					
6	Phase 6 - ForceOff									
7	Phase 7 - ForceOff									
8	Phase 8 - ForceOff		33		33					
9	Ring Offset									
A	Offset A		7		59					
B	Offset B									
C	Offset C									
D	Permissive		10		15					
E	Hold Release		255		255					
F	Ped Shift		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	07 : 00	2	A	_23456_
1	08 : 00	E	A	_23456_
2	16 : 00	4	A	_23456_
3	18 : 15	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
Plan 1	
Plan 2	_2___6__
Plan 3	
Plan 4	_2___6__
Plan 5	
Plan 6	
Plan 7	
Plan 8	
Plan 9	
Coord Ped*	
NEMA Hold	

Sync Phases

C + E + FUNCTION #

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

Lag Phases <C Page>

C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

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

Transition Type
0 = Shortway
Non-zero = Lengthen

INTERSECTION: RANCHO CARMEL & SHOAL CREEK

Program

Group Assignment:
Field Master Assignment:

N/S Street Name: RANCHO CARMEL
E/W Street Name: SHOAL CREEK

Timing Sheet By: MBF
Approved By: MM

Last Database Change:
System Ref. Number:
Drawing Number:
Timing Implemented On:

Row	Column # ---> / Phase # --->	1	2	3	4	5	6	7	8
		RANCHO CARMEL DR				RANCHO CARMEL DR			SHOAL CREEK DR
0	Ped Walk		7						7
1	Ped FDW		10						19
2	Min Green	4	10			4	10		4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	4.0			2.0	4.8		2.0
6	Max Gap	2.0	4.0			2.0	4.8		2.0
7	Min Gap	2.0	0.2			2.0	0.2		2.0
8	Max Limit	30	60			30	60		40
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1				0.1		
D	Every		0.8				0.7		
E	Yellow	3.0	4.5			3.0	4.2		3.0
F	Red Clear	1.0	1.0			1.0	1.0		1.0

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

Row		F
0	Permit	12__56_8
1	Red Lock	
2	Yellow Lock	
3	Min Recall	_2___6__
4	Ped Recall	
5	Peds (View)	_2_____8
6	Rest In Walk	
7	Red Rest	
8	Dbl Entry	
9	Max Recall	
A	Soft Recall	
B	Max 2	
C	Cond Serv	
D	Ped Lock	
E	Yellow Start	_2___6__
F	1st Phases	_____8

Phase Functions <F Page>
F + F + Row

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	4	C + 0 + 0
Zone Number		C + 0 + 1
Area Number		C + 0 + 2
Area Address		C + 0 + 3
QuicNet Channel		(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2___6_8	0

Lag Phases <C Page>

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

Overlap Timing <F Page> <D Page>
F + COLOR + 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

INTERSECTION: RANCHO CARMEL & SHOAL CREEK

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 <D Page>

7 + ROW 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	
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

Day of Week

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

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	
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

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 =

Time and Date

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

Disable Parity	0	C+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	Detector Name	332 Input File	Detector Number
0				1I1	14
1		1.8		2I2U	1
2				2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7				4I6U	3
8				4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.8		6J2U	2
2				6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7				8J6U	4
8	10.0			8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

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)

Coordination Timing By: MBF
Implemented On: 3/26/01

Row	Column # ---> / Plan Name --->	Plan 1	2	3	4	5	6	7	8	9
0	Cycle Length		80		80					
1	Phase 1 - ForceOff		47		46					
2	Phase 2 - ForceOff									
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff									
5	Phase 5 - ForceOff		47		46					
6	Phase 6 - ForceOff									
7	Phase 7 - ForceOff									
8	Phase 8 - ForceOff		32		32					
9	Ring Offset									
A	Offset A		53		32					
B	Offset B									
C	Offset C									
D	Permissive		10		15					
E	Hold Release		255		255					
F	Ped Shift		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	07 : 00	2	A	_23456_
1	08 : 00	E	A	_23456_
2	16 : 00	4	A	_23456_
3	18 : 15	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
Plan 1	
Plan 2	_2___6__
Plan 3	
Plan 4	_2___6__
Plan 5	
Plan 6	
Plan 7	
Plan 8	
Plan 9	
Coord Ped*	
NEMA Hold	

Sync Phases

C + E + FUNCTION #

Row		F
0	Free Lag	_2___6_8
1	Plan 1 - Lag	
2	Plan 2 - Lag	_2___6_8
3	Plan 3 - Lag	
4	Plan 4 - Lag	_2___6_8
5	Plan 5 - Lag	
6	Plan 6 - Lag	
7	Plan 7 - Lag	
8	Plan 8 - Lag	
9	Plan 9 - Lag	
A	Coord Max *	
B	Coord Lag *	
C		
D		
E		
F		

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: PROVENCIAL & RANCHO CARMEL

2. rogram

Group Assignment:
Field Master Assignment:

Street Name: RANCHO CARMEL
E/W Street Name: PROVENCIAL

Last Database Change:
Timing Sheet By: MBF
Approved By: MM
System Ref. Number:
Drawing Number: 22917-19
Timing Implemented On: 1/17/02

N

Row	Column # ---> / Phase # --->	1	2	3	4	5	6	7	8
		RANCHO CARMEL DR			PROVENCIAL PL	RANCHO CARMEL DR			PROVENCIAL PL
		Phase							
0	Ped Walk		7				7		7
1	Ped FDW		17				5		19
2	Min Green	4	10		4	4	10		4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	4.0		2.0	2.0	5.1		2.0
6	Max Gap	2.0	4.0		2.0	2.0	5.1		2.0
7	Min Gap	2.0	0.2		2.0	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		
D	Every		0.8				0.6		
E	Yellow	①3.4 ~~3.0~~	4.8		①3.9 ~~3.0~~	①3.4 ~~3.0~~	①4.7 ~~3.9~~		①3.9 ~~3.2~~
F	Red Clear	1.0	1.0		1.0	1.0	1.0		1.0

JMI 12/9/10

Phase Timing - Bank 1 <F Page>
F + 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	
	EV-D Clear	
	RR-2 Delay	
	RR-2 Clear	
	View EV Delay	---
	View EV Clear	---
	View RR Delay	---
	View RR Clear	---

Preempt Timing
F + E + Row

Row		F
0	Permit	12_456_8
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	___4___8
9	Max Recall	
A	Soft Recall	_2___6__
B	Max 2	
C	Cond Serv	
D	Ped Lock	
E	Yellow Start	_2___6__
F	1st Phases	___4___8

Phase Functions <F Page>
F + F + Row

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	3	C + 0 + 0
Zone Number		C + 0 + 1
Area Number		C + 0 + 2
Area Address		C + 0 + 3
QuicNet Channel		(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6_8	0

Lag Phases <C Page>

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

Overlap Timing <F Page> <D Page>
F + COLOR + 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

INTERSECTION: PROVENCIAL & RANCHO CARMEL

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 <D Page>

7 + ROW 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

Day of Week

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

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	
C	EV-C Phases	1 6
D	EV-D Phases	
E	Extra 1 Config. Bits	1 34
F	IC Select (Interconnect)	1

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

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 =

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	Detector Name	332 Input File	Detector Number
0				1I1	14
1		1.8		2I2U	1
2				2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7				4I6U	3
8				4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.8		6J2U	2
2				6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J8	15
7				8J6U	4
8				8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

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)

Coordination Timing By: MBF
Implemented On: 3/26/01

Row	Plan Name --->	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6	Plan 7	Plan 8	Plan 9
0	Cycle Length		80		80					
1	Phase 1 - ForceOff		0 50 ~~49~~		0 49 ~~48~~					
2	Phase 2 - ForceOff									
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff		34		34					
5	Phase 5 - ForceOff		0 50 ~~49~~		0 49 ~~48~~					
6	Phase 6 - ForceOff									
7	Phase 7 - ForceOff									
8	Phase 8 - ForceOff		34		34					
9	Ring Offset									
A	Offset A		78		65					
B	Offset B									
C	Offset C									
D	Permissive		10		15					
E	Hold Release		65		65					
F	Ped Shift		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

0 JM1
12/9/10

Row	Time	Plan	Offset	Day of Week
0	07 : 00	2	A	_23456_
1	08 : 00	E	A	_23456_
2	16 : 00	4	A	_23456_
3	18 : 15	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
Plan 1	
Plan 2	_2__6__
Plan 3	
Plan 4	_2__6__
Plan 5	
Plan 6	
Plan 7	
Plan 8	
Plan 9	
Coord Ped*	
NEMA Hold	

Sync Phases
C + E + FUNCTION #

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

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

Transition Type	0

TBC Transition
C + D + D

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

Transition Type
0 = Shortway
Non-zero = Lengthen

INTERSECTION: Rancho Carmel Drive & Ted Williams Py WB

233 Program

Group Assignment:
Field Master Assignment:
System Reference Number:

N/S Street: Rancho Carmel Drive
E/W Street: Ted Williams WB

Last Database Change:

Timing sheets by: FA1
Approved by: EFF
Timing implemented on: 10/15/17

Row	Phase Numbers---->	1	2	3	4	5	6	7	8
0	Ped Walk		7				7		7
1	Ped FDW		6				5		
2	Min Green		10			4	10		10
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension		2.3			2.0	3.7		2.0
6	Max Gap		2.3			2.0	3.7		2.0
7	Min Gap		0.2			2.0	0.2		2.0
8	Max Limit		60			30	60		40
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW		1				1		
C	Cond Serv Check								
D	Reduce Every		1.5				0.9		
E	Yellow Change		4.5			3.4	4.7		6.0
F	Red Clear		1.0			1.0	1.0		1.0

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

	F	Row
Permit	_2__56_8	0
Red Lock		1
Yellow Lock		2
Min Recall	_2___6__	3
Ped Recall		4
View Set Peds	_2___6__	5
Rest In Walk		6
Red Rest		7
Double Entry		8
Max Recall		9
Soft Recall		A
Max 2		B
Cond. Service	0 ~~5~~	C
Man Cntrl Calls	12345678	D
Yellow Start	_2___6	E
First Phases	_____8	F

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	7	<C/0+0+0>
Zone Number	7	<C/0+0+1>
Area Number	1	<C/0+0+2>
Area Address	109	<C/0+0+3>
QuicNet Channel	COM63:	(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	0 ~~0~~ ~~14~~	<C/0+A+1>
Manual Offset	0	<C/0+B+1>

Manual Selection

0 AL3
4/4/17

Free Lag	_2___6_8	<C/1+F+0>

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

Notes: Drawing: 24451-2-D

INTERSECTION: Rancho Carmel Drive & Ted Williams Py WB

233 Program

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								

Overlap Assignments <E/29+Column+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

Specials <F/2+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	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	
C	EV-C Phases	1 6
D	EV-D Phases	8
E	Extra 1 Config. Bits	1 34
F	IC Select (Interconnect)	2

Configuration <E/125+E+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	
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	

Configuration <E/125+F+Row>

	C
EV-A	
EV-B	
EV-C	
EV-D	
RR-1 *	- - -
RR-2 *	- - -
SE-1	0
SE-2	0

<E/125+C+Row>

Preemption Priority

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

Row		2
0		
1	Phase 1	0
2	Phase 2	0
3	Phase 3	0
4	Phase 4	0
5	Phase 5	0
6	Phase 6	0
7	Phase 7	0
8	Phase 8	0

<C/5+2+Row>

Coordination Transition Minimums

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

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

Time and Date

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 Time

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

INTERSECTION: Rancho Carmel Drive & Ted Williams P[illegible]/B — 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		42	45_7_	8	123 8		
4		43	45_7_	2	123 8		
5		44	45_7_	6	123 8		
6		45	45_7_	4	123 8		
7	8J6L	46	45_7_	8	123 8	10.0	
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		57	45_7_	7	123 8		
F		58	45_7_	3	123 8		

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		63	45_7_	2	123 8		
5	6J3U	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		76	45_7_	2	123 8		
D		77	45_7_	6	123 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>

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>

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)

INTERSECTION: Rancho Carmel Drive & Ted Williams Py WB

Row	Time	Plan	Offset	Day of Week
0	07 : 00	2	A	_23456_
1	08 : 00	E	A	_23456_
2	16 : 00	4	A	_23456_
3	18 : 15	E	A	1234567
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
07 : 00	3	_23456_	_2__5___
07 : 45	3	_23456_	_2__6__
16 : 20	3	_23456_	_2__5___
18 : 15	3	_23456_	_2__6__

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

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

T.O.D. Fu[illegible]s:
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	Row
				0
				1
				2
				3
				4
				5
				6
				7
				8
				9
				A
				B
				C
				D
				E
				F

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

INTERSECTION: Rancho Carmel Drive & Ted Williams Py W

233 Program

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

Row	Plan Name ---->	1	2	3	4	5	6	7	8	9	Row
0	Cycle Length		80		80						0
1	Phase 1 - ForceOff										1
2	Phase 2 - ForceOff		0		0						2
3	Phase 3 - ForceOff										3
4	Phase 4 - ForceOff										4
5	Phase 5 - ForceOff		37		31						5
6	Phase 6 - ForceOff		0		0						6
7	Phase 7 - ForceOff										7
8	Phase 8 - ForceOff		22		16						8
9	Ring Offset										9
A	Offset 1		32		62						A
B	Offset 2										B
C	Offset 3										C
D	Perm 1 - End		10		15						D
E	Hold Release		255 70		255 70						E
F	Zone Offset		0		0						F

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

Row		E	Row
0			0
1	Plan 1 - Sync		1
2	Plan 2 - Sync	_2___6__	2
3	Plan 3 - Sync		3
4	Plan 4 - Sync	_2___6__	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>

① ALJ
4/4/17

Row		1	2	3	4	5	6	7	8	9	Row
0	Ped Adjustment		① 10		① 10						0
1	Perm 2 - Start										1
2	Perm 2 - End										2
3	Perm 3 - Start										3
4	Perm 3 - End										4
5	Reservice Time		① 52		① 52						5
6	Reservice Phases		5		5						6
7											7
8	Pretimed Phases										8
9	Max Recall										9
A	Perm 1 Veh Phase		12345678		12345678						A
B	Perm 1 Ped Phase		12345678		12345678						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	_2___6_8	0
1	Plan 1 - Lag		1
2	Plan 2 - Lag	_2___6_8	2
3	Plan 3 - Lag		3
4	Plan 4 - Lag	_2___6_8	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:MBF
3/26/01

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>**

RA[illegible]IO CARMEL Dr/SABRE SPRINGS Pkwy & TED WILL[illegible]MS Pkwy EB

233 P[illegible]ram

Group Assignment:
Field Master Assignment:
System Reference Number:

N/S Street: RCH CARMEL/SABRE SPRINGS
E/W Street: TED WILLIAMS Pkwy

Last Database Change:

Timing sheets by: WXW
Approved by: EFF
Timing implemented on: 1/18/05

Row	Phase Numbers--->	1	2	3	4	5	6	7	8
		SABRE SPRINGS			TED WILLIAMS		RANCHO CARMEL		
0	Ped Walk		7		7		7		
1	Ped FDW		5		19		12		
2	Min Green	4	10		4		10		
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension	2.0	4.0		3.0		2.2		
6	Max Gap	2.0	4.0		3.0		2.2		
7	Min Gap	2.0	0.2		3.0		0.2		
8	Max Limit	30	60		50		60		
9	Max Limit 2								
A	Adv. / Delay Walk				10				
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every		0.8				1.5		
E	Yellow Change	3.4	4.6		3.9		4.7		
F	Red Clear	1.0	1.0		1.0		1.0		

Phase Timing - Bank 1 <F/1+Phase+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	
EV-D Clear	
RR-2 Delay	
RR-2 Clear	
View EV Delay	- - -
View EV Clear	- - -
View RR Delay	- - -
View RR Clear	- - -

Preempt Timing <F/1+E+Row>

	F	Row
Permit	12_4_6__	0
Red Lock		1
Yellow Lock		2
Min Recall	_2___6__	3
Ped Recall		4
View Set Peds	_2_4_6__	5
Rest In Walk		6
Red Rest		7
Double Entry		8
Max Recall		9
Soft Recall		A
Max 2		B
Cond. Service		C
Man Cntrl Calls		D
Yellow Start	_2___6__	E
First Phases	___4____	F

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	9	<C/0+0+0>
Zone Number	9	<C/0+0+1>
Area Number	1	<C/0+0+2>
Area Address	108	<C/0+0+3>
QuicNet Channel	59	(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	0	<C/0+A+1>
Manual Offset	0	<C/0+B+1>

Manual Selection

Free Lag	_2_4_6__	<C/1+F+0>

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

Notes: 233 PROGRAM IMPLEMENTED TO ALLOW FOR LEAD WALK INTERVAL

RANCHO CARMEL Dr/SABRE SPRINGS Pkwy & TED WILLIAMS Pkwy EB

233 Program

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								

Overlap Assignments <E/29+Column+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	4	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		E
Start-up Ped Calls		F

Specials <F/2+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	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
C	EV-C Phases	1 6
D	EV-D Phases	
E	Extra 1 Config. Bits	1 34
F	IC Select (Interconnect)	2

Configuration <E/125+E+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	
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	

Configuration <E/125+F+Row>

	C
EV-A	
EV-B	
EV-C	
EV-D	
RR-1 *	---
RR-2 *	---
SE-1	0
SE-2	0

<E/125+C+Row>

Preemption Priority

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

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

	2
Phase 1	0
Phase 2	0
Phase 3	0
Phase 4	0
Phase 5	0
Phase 6	0
Phase 7	0
Phase 8	0

<C/5+2+Row>

Coordination Transition Minimums

Row
0
1
2
3
4
5
6
7
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

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

Time and Date

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 Time

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

Row	Detector Name	0 C1 Pin Number	1 Attributes	2 Phase(s)	3 Assign	1 Delay	3 Carry-Over
0							
1	2I2U						1.8
2	2I2L						
3	2I3U						
4	2I3L						
5	2I4						
6	3I5						
7	4I6U					10.0	
8	4I6L						
9	4I7U						
A	4I7L						
B							
C							
D							
E							
F							

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	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

	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							
1	6J2U						1.8
2	6J2L						
3	6J3U						
4	6J3L						
5	6J4						
6	7J5						
7	8J6U						
8	8J6L						
9	8J7U						
A	8J7L						
B							
C							
D							
E							
F							

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	0	A
DELAY-B	0	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)

RANCHO CARMEL Dr/SABRE SPRINGS Pkwy & TED WILLIAMS Pkwy EB

233 Program

Row	Time	Plan	Offset	Day of Week
0	07 : 00	2	A	_23456_
1	08 : 00	E	A	_23456_
2	16 : 00	4	A	_23456_
3	18 : 15	E	A	1234567
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	Row
				0
				1
				2
				3
				4
				5
				6
				7
				8
				9
				A
				B
				C
				D
				E
				F

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

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

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

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

Row	Plan Name ---->	Plan 1	2	3	4	5	6	7	8	9
0	Cycle Length		80		80					
1	Phase 1 - ForceOff		50		49					
2	Phase 2 - ForceOff									
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff		34		34					
5	Phase 5 - ForceOff									
6	Phase 6 - ForceOff									
7	Phase 7 - ForceOff									
8	Phase 8 - ForceOff									
9	Ring Offset									
A	Offset 1		7		69					
B	Offset 2									
C	Offset 3									
D	Perm 1 - End		10		10					
E	Hold Release		255		65					
F	Zone Offset		0		0					

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

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

Sync Phases <C/1+E+Row>

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

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

Row		F
0	Free Lag	
1	Plan 1 - Lag	
2	Plan 2 - Lag	_2_4_6__
3	Plan 3 - Lag	
4	Plan 4 - Lag	_2_4_6__
5	Plan 5 - Lag	
6	Plan 6 - Lag	
7	Plan 7 - Lag	
8	Plan 8 - Lag	
9	Plan 9 - Lag	
A	External Lag	
B		
C		
D		
E		
F		

Lag Phases <C/1+F+Row>

Coordination Timing B MBF 3/26/2001

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		1
2	Spec. Funct. 3		OR-4 (a)		System Det 2		Plan 2		Ext. Perm 2		Offset 1 (7-Wire)		EV-B		2
3	Spec. Funct. 4		OR-4 (b)		System Det 3		Plan 3		Dimming		Offset 2 (7-Wire)		EV-C		3
4	NAND-3 (a)		OR-5 (a)		System Det 4		Plan 4		Set Clock		Offset 3 (7-Wire)		EV-D		4
5	NAND-3 (b)		OR-5 (b)		System Det 5		Plan 5		Stop Time		Free (7-Wire)		RR-1		5
6	NAND-4 (a)		OR-6 (a)		System Det 6		Plan 6		Flash Sense	81	Flash (7-Wire)		RR-2		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)	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: SHOAL CREEK DR & TED WILLIAMS PY

233 Program

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								

Overlap Assignments <E/29+Column+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	4	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		E
Start-up Ped Calls		F

Specials <F/2+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	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
C	EV-C Phases	1 6
D	EV-D Phases	3
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration <E/125+E+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	
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

Configuration <E/125+F+Row>

	C
EV-A	
EV-B	
EV-C	
EV-D	
RR-1 *	- - -
RR-2 *	- - -
SE-1	0
SE-2	0

<E/125+C+Row>

Preemption Priority

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

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

	2
Phase 1	0
Phase 2	0
Phase 3	0
Phase 4	0
Phase 5	0
Phase 6	0
Phase 7	0
Phase 8	0

<C/5+2+Row>

Coordination Transition Minimums

Row
0
1
2
3
4
5
6
7
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

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

Time and Date

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 Time

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

INTERSECTION: SHOAL CREEK DR & TED WILLIAMS PY

233 Program

Group Assignment:
Field Master Assignment:
System Reference Number:

N/S Street: **Shoal Creek Dr**
E/W Street: **Ted Williams Py**

Last Database Change:

Timing sheets by: **JMV**
Approved by:
Timing implemented on: 9/11/2014

		Ted Williams Py		Shoal Creek Dr		Ted Williams Py			
		Phase							
	Phase Numbers---->	1	2	3	4	5	6	7	8
Row									
0	Ped Walk		7		7		7		
1	Ped FDW		11		33		15		
2	Min Green	4	10	4	4	4	10		
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension	2.0	4.0	2.0	2.0	2.0	4.0		
6	Max Gap	2.0	4.0	2.0	2.0	2.0	4.0		
7	Min Gap	2.0	0.2	2.0	2.0	2.0	0.2		
8	Max Limit	30	60	35	35	30	60		
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every		1.1				1.0		
E	Yellow Change	3.4	6.0	3.9	3.9	3.4	5.6		
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0		

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

	F	Row
Permit	123456__	0
Red Lock		1
Yellow Lock		2
Min Recall	_2___6__	3
Ped Recall		4
View Set Peds		5
Rest In Walk		6
Red Rest		7
Double Entry		8
Max Recall		9
Soft Recall		A
Max 2		B
Cond. Service		C
Man Cntrl Calls		D
Yellow Start	_2___6__	E
First Phases	__3_____	F

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		<C/0+0+0>
Zone Number		<C/0+0+1>
Area Number		<C/0+0+2>
Area Address		<C/0+0+3>
QuicNet Channel		(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

Free Lag	_2_4_6__	<C/1+F+0>

How to Set Page Access Code:
F/1 – C + 0 + F = 1
F + 9 + E = 1

Notes: Ped FDW calculated assuming 3.5 FPS walking speed due to school on southwest corner.
Use phase bank 2 as a TOD function to provide longer walk time during school hours.

INTERSECTION: SHOAL CREEK DR & TED WILLIAMS PY

233 Program

Row	Detector Name	0 C1 Pin Number	1 Attributes	2 Phase(s)	3 Assign	1 Delay	3 Carry-Over
0	2I2U	39					
1	6J2U	40					1.8
2	4I6U	41					
3	8J6U	42					
4	2I2L	43					
5	6J2L	44					
6	4I6L	45					
7	8J6L	46					
8	2I4	47					
9	6J4	48					
A	4I8	49					
B	8J8	50					
C	5J1U	55					
D	1I1U	56					
E	7J5	57					
F	3I5	58					

Row	Detector Name	4 C1 Pin Number	5 Attributes	6 Phase(s)	7 Assign	2 Delay	4 Carry-Over
0	5J9U	59					
1	1I9U	60					1.8
2	7J9L	61					
3	3I9L	62					
4	2I3U	63					
5	6J3U	64					
6	4I7U	65					
7	8J7U	66					
8	2 PPB	67					
9	6 PPB	68					
A	4 PPB	69					
B	8 PPB	70					
C	2I3L	76					
D	6J3L	77					
E	4I7L	78					
F	8J7L	79					

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

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	30

<E/125+D+0>

Enable Redirection

(Enable Redirection = 30)

Max OFF (minutes)	20	<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>

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)

INTERSECTION: SHOAL CREEK DR & TED WILLIAMS PY

233 Program

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
07 : 00	F	_23456_	_2_____
09 : 00	F	_23456_	
13 : 00	F	_23456_	_2_____
16 : 00	F	_23456_	

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

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

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	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		Flash (7-Wire)	81	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	201	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	201	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: SHOAL CREEK DR & TED WILLIAMS PY

233 Program

Row		Phase 1	2	3	4	5	6	7	8
0	Ped Walk		7		11		7		
1	Ped FDW		11		33		15		
2	Min Green	4	10	4	4	4	10		
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension	2.0	4.0	2.0	2.0	2.0	4.0		
6	Max Gap	2.0	4.0	2.0	2.0	2.0	4.0		
7	Min Gap	2.0	0.2	2.0	2.0	2.0	0.2		
8	Max Limit	40	60	40	40	30	60		
9	Max Limit 2								
A	Adv. / Delay Walk			6	6				
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every		1.1				1.0		
E	Yellow Change	3.4	6.0	3.9	3.9	3.4	5.6		
F	Red Clear	1.0	2.0	1.0	1.0	1.0	2.0		

Phase Timing - Bank 2 <C+0+F=2>

	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

Transition Type
0.X = Shortway
1.X = Lengthen
X.1 thru X.4 = Number of cycles when lengthing

Transition Type	0.0	<C/5+1+9>

TBC Transition

Lag Hold Phases		<C/5+1+A>

Coordinated Lag Hold Phases

Sync Output Time	0.0	<C/5+1+C>

7-Wire Master

Time B4 Yellow	0.0	<F/1+C+E>
Phase Number	0	<F/1+C+F>

Advance Warning Beacon - Sign 1

Time B4 Yellow	0.0	<F/1+D+E>
Phase Number	0	<F/1+D+F>

Advance Warning Beacon - Sign 2

Row		1	2	3	4	5	6	7	8
0	Ped Walk								
1	Ped FDW								
2	Min Green								
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension								
6	Max Gap								
7	Min Gap								
8	Max Limit								
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every								
E	Yellow Change								
F	Red Clear								

Phase Timing - Bank 3 <C+0+F=3>

	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

Long Failure	0.5	<F/1+0+6>
Short Failure	0.5	<F/1+0+7>

Power Cycle Correction (Default = 0.7)

Min Time (seconds)	0	<F/1+0+8>

Min Green Before PE Force Off

Max Time (minutes)	0	<F/1+0+9>

Max Preempt Time Before Failure

Min Time (seconds)	0	<F/1+0+A>

Min Time Between Same Preempts
(Does Not Apply To Railroad Preempt)

Low Priority
1 = Channel A
2 = Channel B
3 = Channel C
4 = Channel D

Low Pri. Channel	#NAME?	<E/125+C+8>

Disable Low Priority Channel

INTERSECTION: HIGHLAND RANCH RD @ TED WILLI/ PKWY 22 rogram

Group Assignment: NONE
Field Master Assignment: NONE
N/S Street Name: TED WILLIAMS
E/W Street Name: HIGHLAND RANCH RD
Last Database Change: 4/27/2005 12:17
System Ref. Number: 951

N

Row	Column # --->	1	2	3	4	5	6	7	8
		TED WILLIAMS					TED WILLIAMS	H.R.R.	ESPRIT AVE
	Phase # --->	1	2	3	4	5	6	7	8
0	Ped Walk		7				7		7
1	Ped FDW		13				19		28
2	Min Green	4	10			4	10	4	4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	5.4			2.0	4.7	4.0	4.0
6	Max Gap	2.0	5.4			2.0	4.7	4.0	4.0
7	Min Gap	2.0	0.2			2.0	0.2	4.0	4.0
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				0.7		
E	Yellow	3.4	5.0			3.4	(1) 5.0 5.6	(1) 5.0 3.9	3.9
F	Red Clear	1.0	1.0			1.0	1.0	1.0	1.0
	Grade								

(1) AL3
2/3/16

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	---

Preempt Timing
F + E + Row

Row		F
0	Permit	12__5678
1	Red Lock	
2	Yellow Lock	
3	Min Recall	_2___6__
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	
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	_2___6__
F	1st Phases	_____7_

Phase Functions <F Page>
F + F + Row

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	16	C + 0 + 0
Zone Number	16	C + 0 + 1
Area Number	1	C + 0 + 2
Area Address	115	C + 0 + 3
QuicNet Channel	COM 63:	(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	14	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: MC1
Approved By: EFF
Drawing Number: 25086-2-D
Timing Implemented On: 8/3/2010

INTERSECTION: HIGHLAND RANCH RD @ TED WILLIAMS 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 <D Page>

7 + ROW 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

Day of Week

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

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 45
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

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 =

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: HIGHLAND RANCH RD @ TED ' .LIAMS PKWY 223 Program

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1		1.8		2I2U	1
2				2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7				4I6U	3
8				4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.8		6J2U	2
2				6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7				8J6U	4
8				8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D	10.0			7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

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)

Name	Type	EWStreet	NSStreet	Group	Drop#	Area	AreaAddr	Channel	Sys Ref #	Last Change	FM Name
102 Ted Will	233RV2.X	Ted Williams	Pomerado R	4011	2	0	101	COM106:	21	#########	NONE

		Coord Minimums														Bar Hour	Bar Minute
0	4	0	4	0	4	0	4	0	0	0	0	10	0	0	0	0	0
0	28	10	27	0	32	0	28	0	0	0	0	0	0	0	0	0	0
4	10	10	6	4	10	4	6	0	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	35	10	35	20	35	20	35	0	0	0	0	0	0	0	2	0	0
20	50	10	50	20	50	20	50	0	0	0	0	0	0	0	32	0	0
20	20	10	20	20	20	20	20	0	0	0	0	0	0	0	8	0	0
12	50	10	40	15	50	30	40	0	0	0	0	0	0	0	128	0	0
12	11	20	40	15	50	20	40	0	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0
0	0	1	0	0	0	0	0	0	0	0	0	0	0	132	0	0	0
1	0	10	1	1	1	1	1	0	0	0	0	0	0	33	0	0	0
10	10	5	10	10	10	10	10	0	0	0	0	0	0	72	0	0	0
30	46	30	51	35	43	35	42	0	0	0	0	0	0	5	0	0	0
5	20	5	20	10	15	10	15	0	0	0	0	0	0	2	0	0	0

0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F		
Page 0 <C/5>																0	1

Notes are in Column A, Rows 32 to 40

Minimum yellow time for any signal phase is 3.1 sec.

INTERSECTION: 102 Ted Williams @ Pomerado

Group Assignment: **4011**
Field Master Assignment: **NONE**
System Reference Number: **21**

N/S Street Name: **Pomerado Road**
E/W Street Name: **Ted Williams Parkway**

Last Database Change: **11/8/2017 15:45**

Change Record					
Change	By	Date	Change	By	Date

Notes: ***Minimum yellow time for any signal phase is 3.1 sec.***

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

Drop Number	2	<C/0+0+0>
Zone Number	1	<C/0+0+1>
Area Number	0	<C/0+0+2>
Area Address	101	<C/0+0+3>
QuicNet Channel	COM106:	(QuicNet)

Communication Addresses

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

Manual Selection

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

Start / Revert Times

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

Row	Column Numbers ---->	Phase 1	2	3	4	5	6	7	8
	Phase Names ----->								
0	Ped Walk	0	4	0	4	0	7	0	4
1	Ped FDW	0	28	0	27	0	32	0	28
2	Min Green	4	10	4	6	6	10	4	6
3	Type 3 Disconnect	0	0	0	0	0	0	0	0
4	Added per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Veh Extension	2.0	3.5	2.0	3.5	2.0	3.5	2.0	3.5
6	Max Gap	2.0	5.0	2.0	5.0	2.0	5.0	2.0	5.0
7	Min Gap	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
8	Max Limit	12	50	30	40	30	50	30	40
9	Max Limit 2	12	50	30	40	15	50	30	40
A	Adv. / Delay Walk	0	0	0	0	0	0	0	0
B	PE Min Ped FDW	7	7	7	7	7	7	7	7
C	Cond Serv Check	10	10	10	10	10	10	10	10
D	Reduce Every	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
E	Yellow Change	3.1	4.6	3.1	5.1	3.5	4.3	3.5	4.2
F	Red Clear	0.5	2.0	0.5	2.0	1.0	1.5	1.0	1.5

Phase Timing - Bank 1 <C+0+F=1>

	9	A	B	C	D
	- - -	- - -	- - -	- - -	- - -
Phase 1	0	0	0	0	0.0
Phase 2	20	0	0	0	0.0
Phase 3	0	0	0	0	0.0
Phase 4	20	0	0	0	0.0
Phase 5	0	0	0	0	0.0
Phase 6	20	0	0	0	0.0
Phase 7	0	0	0	0	0.0
Phase 8	20	0	0	0	0.0
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing <C+0+F=1>

	E
RR-1 Delay	2
RR-1 Clear	0
EV-A Delay	0
EV-A Clear	10
EV-B Delay	0
EV-B Clear	10
EV-C Delay	0
EV-C Clear	10
EV-D Delay	0
EV-D Clear	10
RR-2 Delay	0
RR-2 Clear	0
View EV Delay	- - -
View EV Clear	- - -
View RR Delay	- - -
View RR Clear	- - -

Preempt Timing

Row		F
0	Permit	12345678
1	Red Lock	_____
2	Yellow Lock	___4____
3	Min Recall	_2___6__
4	Ped Recall	_____
5	*View Set Peds*	- - - - -
6	Rest In Walk	_____
7	Red Rest	_____
8	Dual Entry	___4___8
9	Max Recall	_____
A	Soft Recall	_____
B	Max 2	_____
C	Cond. Service	_____
D	Man Cntrl Calls	_____
E	Yellow Start	___4___8
F	First Phases	_2___6__

Phase Functions <C+0+F=1>

Row	Column Numbers ---->	Overlap 1	2	3	4	5	6	7	8
	Overlap Name ----->								
0	Load Switch Number	0	0	0	0	0	0	0	0
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	Yellow Change	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
F	Red Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Overlap Assignments <C+0+E=29>

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

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 =

	C
EV-A	0
EV-B	0
EV-C	0
EV-D	0
RR-1 *	- - -
RR-2 *	- - -
SE-1	0
SE-2	0

Preempt Priority
<C+0+E=125>
(* RR-1 is always Highest, and RR-2 is always Second Highest)

Row	Column Numbers ---->	E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	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	__3____8
C	EV-C Phases	1____6__
D	EV-D Phases	___4__7_
E	Extra 1 Config. Bits	1_3_____
F	IC Select (Interconnect)	_2_____

Configuration <C+0+E=125>

	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	___4____

Configuration <C+0+E=125>

	F
Fast Green Flash Phase	
Green Flash Phases	
Flashing Walk Phases	
Guaranteed Passage	
Simultaneous Gap Term	12345678
Sequential Timing	
Advance Walk Phases	
Delay Walk Phases	
External Recall	
Start-up Overlap Green	
Max Extension	
Inhibit Ped Reservice	
Semi-Actuated	
Start-up Overlap Yellow	
Start-up Vehicle Calls	12345678
Start-up Ped Calls	_2_4_6_8

Specials <C+0+F=2>

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

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

	2
Phase 1	10
Phase 2	10
Phase 3	10
Phase 4	10
Phase 5	10
Phase 6	10
Phase 7	10
Phase 8	10

Coordination Transition Minimums
<C+0+C=5>

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

Row	Column Numbers ---->	Plan 1	2	3	4	5	6	7	8	9	Row
	Plan Name ----->										
0	Cycle Length	135	150	145	155	135	150	140	150	0	0
1	Phase 1 - ForceOff	82	89	87	88	85	96	90	84	0	1
2	Phase 2 - ForceOff	0	0	0	0	0	0	0	0	0	2
3	Phase 3 - ForceOff	17	21	23	25	30	30	30	28	0	3
4	Phase 4 - ForceOff	67	72	71	74	70	80	75	69	0	4
5	Phase 5 - ForceOff	90	106	101	103	91	106	96	89	0	5
6	Phase 6 - ForceOff	0	0	0	0	0	0	0	0	0	6
7	Phase 7 - ForceOff	70	30	74	77	73	37	78	72	0	7
8	Phase 8 - ForceOff	40	73	39	39	41	81	41	39	0	8
9	Ring Offset	0	0	0	0	0	0	0	0	0	9
A	Offset 1	28	3	10	1	86	142	16	26	0	A
B	Offset 2	0	0	0	0	0	0	0	0	0	B
C	Offset 3	0	0	0	0	0	0	0	0	0	C
D	Perm 1 - End	15	15	15	15	15	15	15	15	15	D
E	Hold Release	255	255	255	255	255	255	255	255	255	E
F	Zone Offset	0	0	0	0	0	0	0	0	0	F

Coordination - Bank 1 <C+0+C=1>

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

Sync Phases <C+0+C=1>

Row											Row
0	Ped Adjustment	0	0	0	0	0	0	0	0	0	0
1	Perm 2 - Start	0	0	0	0	0	0	0	0	0	1
2	Perm 2 - End	0	0	0	0	0	0	0	0	0	2
3	Perm 3 - Start	0	0	0	0	0	0	0	0	0	3
4	Perm 3 - End	0	0	0	0	0	0	0	0	0	4
5	Reservice Time	0	0	0	0	0	0	0	0	0	5
6	Reservice Phases	_____	_____	_____	_____	_____	_____	_____	_____	_____	6
7											7
8	Pretimed Phases	_____	_____	_____	_____	_____	_____	_____	_____	_____	8
9	Max Recall	_____	_____	_____	_____	_____	_____	_____	_____	_____	9
A	Perm 1 Veh Phase	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	A
B	Perm 1 Ped Phase	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	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 - Bank 2 <C+0+C=2>

	F	Row
Free Lag	_2_4_6_8	0
Plan 1 - Lag	_2_4_6_8	1
Plan 2 - Lag	_2_4_6_8	2
Plan 3 - Lag	_2_4_6_8	3
Plan 4 - Lag	_2_4_67_	4
Plan 5 - Lag	_2_4_67_	5
Plan 6 - Lag	_2_4_6_8	6
Plan 7 - Lag	_2_4_6_8	7
Plan 8 - Lag	_2_4_6_8	8
Plan 9 - Lag	_2_4_6_8	9
External Lag	_____	A
		B
		C
		D
		E
		F

Lag Phases <C+0+C=1>

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

Assignable Inputs <C+0+E=126>

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

Assignable Outputs <C+0+E=127>

Row	Column Numbers ----> / Phase Names ---->	Phase 1	2	3	4	5	6	7	8
0	Ped Walk	0	7	0	7	0	7	0	7
1	Ped FDW	0	15	0	15	0	15	0	15
2	Min Green	4	7	4	4	4	7	4	4
3	Type 3 Disconnect	0	20	0	20	0	20	0	20
4	Added per Vehicle	0.0	2.0	0.0	2.0	0.0	2.0	0.0	2.0
5	Veh Extension	2.0	4.0	2.0	2.5	2.0	4.0	2.0	2.5
6	Max Gap	3.0	6.0	3.0	3.0	3.0	6.0	3.0	3.0
7	Min Gap	0.5	2.0	0.5	1.5	0.5	2.0	0.5	1.5
8	Max Limit	20	30	20	25	20	30	20	25
9	Max Limit 2	30	50	30	40	30	50	30	40
A	Adv. / Delay Walk	0	0	0	0	0	0	0	0
B	PE Min Ped FDW	7	7	7	7	7	7	7	7
C	Cond Serv Check	10	10	10	10	10	10	10	10
D	Reduce Every	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
E	Yellow Change	3.0	4.0	3.0	3.0	3.0	4.0	3.0	3.0
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 2 <C+0+F=2>

	9	A	B	C	D
	- - -	- - -	- - -	- - -	- - -
Phase 1	0	0	0	0	0.0
Phase 2	20	0	0	0	0.0
Phase 3	0	0	0	0	0.0
Phase 4	20	0	0	0	0.0
Phase 5	0	0	0	0	0.0
Phase 6	20	0	0	0	0.0
Phase 7	0	0	0	0	0.0
Phase 8	20	0	0	0	0.0
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing

Transition Type
0.X = Shortway
1.X = Lengthen
X.1 thru X.4 = Number of cycles when lengthing

Transition Type	1.1	<C/5+1+9>

TBC Transition

Lag Hold Phases	_____	<C/5+1+A>

Coordinated Lag Hold Phases

Sync Output Time	0.0	<C/5+1+C>

7-Wire Master

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

Begin Month	4	<C/5+2+A>
Begin Week	1	<C/5+2+B>
End Month	10	<C/5+2+C>
End Week	5	<C/5+2+D>

Daylight Savings Time

Time B4 Yellow	0.0	<F/1+C+E>
Phase Number	0	<F/1+C+F>

Advance Warning Beacon - Sign 1

Time B4 Yellow	0.0	<F/1+D+E>
Phase Number	0	<F/1+D+F>

Advance Warning Beacon - Sign 2

Long Failure	0.7	<F/1+0+6>
Short Failure	0.7	<F/1+0+7>

Power Cycle Correction (Default = 0.7)

Row		1	2	3	4	5	6	7	8
0	Ped Walk	0	7	0	7	0	7	0	7
1	Ped FDW	0	15	0	15	0	15	0	15
2	Min Green	4	7	4	4	4	7	4	4
3	Type 3 Disconnect	0	20	0	20	0	20	0	20
4	Added per Vehicle	0.0	2.0	0.0	2.0	0.0	2.0	0.0	2.0
5	Veh Extension	2.0	4.0	2.0	2.5	2.0	4.0	2.0	2.5
6	Max Gap	3.0	6.0	3.0	3.0	3.0	6.0	3.0	3.0
7	Min Gap	0.5	2.0	0.5	1.5	0.5	2.0	0.5	1.5
8	Max Limit	20	30	20	25	20	30	20	25
9	Max Limit 2	30	50	30	40	30	50	30	40
A	Adv. / Delay Walk	0	0	0	0	0	0	0	0
B	PE Min Ped FDW	7	7	7	7	7	7	7	7
C	Cond Serv Check	10	10	10	10	10	10	10	10
D	Reduce Every	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
E	Yellow Change	3.0	4.0	3.0	3.0	3.0	4.0	3.0	3.0
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 3 <C+0+F=3>

	9	A	B	C	D
	- - -	- - -	- - -	- - -	- - -
Phase 1	0	0	0	0	0.0
Phase 2	20	0	0	0	0.0
Phase 3	0	0	0	0	0.0
Phase 4	20	0	0	0	0.0
Phase 5	0	0	0	0	0.0
Phase 6	20	0	0	0	0.0
Phase 7	0	0	0	0	0.0
Phase 8	20	0	0	0	0.0
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing

Row	Detector Name	C1 Pin Number (0)	Attributes (1)	Phase(s) (2)	Assign (3)	Delay (1)	Carry-over (3)
0		39	___4____	_____8	123____8	0.0	0.0
1		40	___4____	___4____	123____8	0.0	0.0
2		41	___45_7_	___4____	123____8	0.0	0.0
3		42	___45_7_	_____8	123____8	0.0	0.0
4		43	___4____	_____8	123____8	0.0	0.0
5		44	___4____	___4____	123____8	0.0	0.0
6		45	___45_7_	___4____	123____8	0.0	0.0
7		46	___45_7_	_____8	123____8	0.0	0.0
8		47	_____67_	_2_____	123____8	0.0	0.0
9		48	_____67_	_____6__	123____8	0.0	0.0
A		49	_____67_	___4____	123____8	0.0	0.0
B		50	_____67_	_____8	123____8	0.0	0.0
C		55	___45_7_	____5___	123____8	0.0	0.0
D		56	___45_7_	1_____	123____8	0.0	0.0
E		57	___45_7_	_____7_	123____8	0.0	0.0
F		58	___45_7_	__3_____	123____8	0.0	0.0

Row	Detector Name	C1 Pin Number (4)	Attributes (5)	Phase(s) (6)	Assign (7)	Delay (2)	Carry-over (4)
0		59	___4____	_____6__	123____8	0.0	0.0
1		60	___4____	_2_____	123____8	0.0	0.0
2		61	___4____	_____6__	123____8	0.0	0.0
3		62	___4____	_2_____	123____8	0.0	0.0
4		63	___4____	___4____	123____8	0.0	0.0
5		64	___45_7_	_____6__	123____8	0.0	0.0
6		65	___45_7_	___4____	123____8	0.0	0.0
7		66	___45_7_	_____8	123____8	0.0	0.0
8		67	_2_____	_2_____	123____8	0.0	0.0
9		68	_2_____	_____6__	123____8	0.0	0.0
A		69	_2_____	___4____	123____8	0.0	0.0
B		70	_2_____	_____8	123____8	0.0	0.0
C		76	___4____	_____8	123____8	0.0	0.0
D		77	___45_7_	_____6__	123____8	0.0	0.0
E		78	___45_7_	___4____	123____8	0.0	0.0
F		79	___45_7_	_____8	123____8	0.0	0.0

Detector Assignments <C+0+E=126> <C+0+D=0>

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

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

Redirect Phase Outputs <C+0+E=127>

Cabinet Type	0	<E/125+D+0>

Enable Redirection
(Enable Redirection = 30)

Max OFF (minutes)	20	<D/0+0+1>
Max ON (minutes)	7	<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 <C+0+E=125>

	D
Number of Digits	0
1 st Digit	0
2 ed Digit	0
3 ed Digit	0
4 th Digit	0
5 th Digit	0
6 th Digit	0
7 th Digit	0
8 th Digit	0
9 th Digit	0
10 th Digit	0
11 th Digit	0
12 th Digit	0
13 th Digit	0
14 th Digit	0
15 th Digit	0

<C+0+C=5>

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

Delay Logic Times
<C+0+D=0> (seconds)

Omit Alarm	_____	<C/5+F+0>

Disable Alarm Reporting

Time	10	<C/5+C+0>

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

Row	Time	Plan	Offset	Day of Week
0	06 : 30	2	A	_23456_
1	09 : 30	E	A	_23456_
2	15 : 30	6	A	_23456_
3	18 : 30	E	A	_23456_
4	00 : 00	0	0	_____
5	00 : 00	0	0	_____
6	00 : 00	0	0	_____
7	00 : 00	0	0	_____
8	00 : 00	0	0	_____
9	00 : 00	0	0	_____
A	00 : 00	0	0	_____
B	00 : 00	0	0	_____
C	00 : 00	0	0	_____
D	00 : 00	0	0	_____
E	00 : 00	0	0	_____
F	00 : 00	0	0	_____

TOD Coordination <C+0+9=0.1>
(Bank 1)

Time	Funct.	Day of Week	Column 4 Phases/Bits
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____

TOD Function <C+0+7=0.1> <C+0+E=27>

Day	Year	Month	Holiday Type
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____

Holiday Dates <C+0+8=1.1>
(Bank 1)

Time	Plan	Offset	Holiday Type
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____

Holiday Events <C+0+9=1.1>
(Bank 1)

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 5 - Disable Low Priority Preempt
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

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

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

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

TOD Coordination <C+0+9=0.2>
(Bank 2)

Time	Funct.	Holiday Type	Column 4 Phases/Bits
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____
00 : 00	0	_____	_____

Holiday TOD Function <C+0+7=0.2> <C+0+E=28>

Day	Year	Month	Holiday Type
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____
00	00	0	_____

Holiday Dates <C+0+8=1.2>
(Bank 2)

Time	Plan	Offset	Holiday Type
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____
00 : 00	0	0	_____

Holiday Events <C+0+9=1.2>
(Bank 2)

Row	6 Clear	7 Time	8 Ped Call	9 Hold	A Advance	B Force Off	C Vehicle Call	D Permit Phases	E Ped Omit	F Output
0		0								
1		0								
2		0								
3		0								
4		0								
5		0								
6		0								
7		0								
8		0								
9		0								
A		0								
B		0								
C		0								
D		0								
E		0								
F		0								

Notes:

0 <E/27+5+F>
Limited Service Interval

Special Event Schedule -- Table 1 <C+0+E=27>

Row	6 Clear	7 Time	8 Ped Call	9 Hold	A Advance	B Force Off	C Vehicle Call	D Permit Phases	E Ped Omit	F Output
0		0								
1		0								
2		0								
3		0								
4		0								
5		0								
6		0								
7		0								
8		0								
9		0								
A		0								
B		0								
C		0								
D		0								
E		0								
F		0								

Notes:

0 <E/28+5+F>
Limited Service Interval

Special Event Schedule -- Table 2 <C+0+E=28>

Min Time (seconds) | **0** | <F/1+0+8>

Min Green Before PE Force Off

Max Time (minutes) | **255** | <F/1+0+9>

Max Preempt Time Before Failure

Min Time (seconds) | **0** | <F/1+0+A>

Min Time Between Same Preempts

(Does Not Apply To Railroad Preempt)

Low Pri. Channel | _____ | <E/125+C+8>

Disable Low Priority Channel

Low Priority
1 = Channel A
2 = Channel B
3 = Channel C
4 = Channel D

Delay Time (seconds) | **0** | <F/1+A+D>

Bus Delay

Max Time (seconds) | **0** | <F/1+A+E>

Max Early Green

Max Time (seconds) | **0** | <F/1+A+F>

Max Green Extension

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

Headway <C+0+9=2.1>

Headway Time
(minutes)
1 thru 9 = 1 thru 9
A = 10
B = 11
C = 12
D = 13
E = 14
F = 15

Low Priority Preemption (Bus Priority)

Only available with *Program 233RV2.B* (and above)

Note: Also see "Time of Day Functions", Function E, Bit 5 (Disable Low Priority)

NTERSECTION: CARMEL RIDGE RD @ HIGHLAND RANC RD

223 Pro

Group Assignment:
Field Master Assignment:

N/S Street Name: HIGHLAND RANCH RD
E/W Street Name: CARMEL RIDGE RD

Last Database Change: N/A
System Ref. Number: N/A

Row	Column # ---> / Phase # --->	1	2	3	4	5	6	7	8
		HIGHLAND RANCH			CARMEL RIDGE		HIGHLAND RANCH		CARMEL RIDGE
0	Ped Walk		7		7		7		7
1	Ped FDW		①13 ~~11~~		①25 ~~21~~		①12 ~~10~~		①24 ~~21~~
2	Min Green	6	7		4	6	7		4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	4.8		2.0	2.0	4.4		2.0
6	Max Gap	2.0	4.8		2.0	2.0	4.4		2.0
7	Min Gap	2.0	0.2		2.0	2.0	0.2		2.0
8	Max Limit	30	60		40	30	60		40
9	Max Limit 2	30	70		70	30	70		70
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1				0.1		
D	Every		0.7				0.8		
E	Yellow	3.4	4.6		3.9	3.4	4.7		①4.6 ~~4.4~~
F	Red Clear	1.0	1.0		1.0	1.0	1.0		1.0
	Grade								

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	---

Preempt Timing
F + E + 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	___4___8
1st Phases	_2___6__

Phase Functions <F Page>
F + F + Row

****PPLT FOR EB & WB TRAFFIC**** **Overlap Timing**

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	17	C + 0 + 0
Zone Number		C + 0 + 1
Area Number		C + 0 + 2
Area Address		C + 0 + 3
QuicNet Channel	DIGI5:	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6_8	0

Lag Phases <C Page>

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

Manual Selection

Manual Plan	Manual Offset
0 = Automatic	0 = Automatic
1-9 = Plan 1-9	1 = Offset A
14 = Free	2 = Offset B
15 = Flash	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: SB
Approved By: G.P.
Drawing Number: 24011-1-D
Timing Implemented On:

①yellow time update 03/01/2019 - Shaikh.

INTERSECTION: CARMEL RIDGE RD @ HIGHLAND RANCH RD

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 <D Page>

7 + ROW 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

Day of Week

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

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	1 345
F	IC Select (Interconnect)	2

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

Configuration

For access, set F + 9 + E = 1 E + E + ROW

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 =

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		
3		
4		
5		
6		
7		
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		
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)

Group Assignment: NONE
Field Master Assignment:
System Reference Number: 949

N/S Street Name: HIGHLAND RANCH RD
E/W Street Name: EASTBOURNE RD

Last Database Change:

Change Record		
Timing Sheet By	Approved By	Date
AL3	DRH	7.13.17

Notes:
1. PH 2 AND PH 8 LPI
2. PH 2 AND PH 8 ACTIVATE "NO TURN ON RED" BLANK OUT SIGN
3. DUMMY PH 7 PRHIBITS PH 2 PED TO COME UP WITH PH 2 GREEN
4. DUMMY PH 3 PROHIBITS PH 4 GREEN WITH PED 8 LPI

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

Free Lag <C/1+F+0> _2_4_6_8

Drop Number	15	<C/0+0+0>
Zone Number	15	<C/0+0+1>
Area Number	1	<C/0+0+2>
Area Address	113	<C/0+0+3>
QuicNet Channel	COM64:	(QuicNet)

Communication Addresses

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

Manual Selection

Flash Start	0	<F/1+0+E>
Red Revert	5.0	<F/1+0+F>
All Red Start	0.0	<F/1+C+0>
FYA Red Revert	0.0	<F/1+0+5>
OVLP CHG Red	0.0	<F/1+0+3>

Start / Revert Times

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

Phase

Row	Column Numbers →	1	2	3	4	5	6	7	8
		HIGHLAND RANCH			EASTBOURNE		HIGHLAND RANCH		EASTBOURNE
	Phase Names →			DUMMY				DUMMY	
0	Ped Walk		7		7		7		7
1	Ped FDW		12		25		12		25
2	Min Green	4	10	3	7	4	10	0	7
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension	2.0	4.3		2.0	2.0	3.9		2.0
6	Max Gap	2.0	4.3		2.0	2.0	3.9		2.0
7	Min Gap	2.0	0.2		2.0	2.0	0.2		2.0
8	Max Limit	30	60		40	30	60		40
9	Max Limit 2								
A	Adv. / Delay Walk		7						7
B	PE Min Ped FDW		1		1		1		1
C	Cond Serv Check								
D	Reduce Every		0.7				0.8		
E	Yellow Change	3.4	4.3	3.0	3.9	3.4	4.7	1.0	3.9
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0

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

	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 Timing <F/1+Column+Phase>

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

Preempt Timing <F/1+E+Row>

	F	Row
Permit	12345678	0
Red Lock		1
Yellow Lock	_3__7_	2
Min Recall	_2__6__	3
Ped Recall		4
View Set Peds	_2_4_6_8	5
Rest In Walk		6
Red Rest		7
Dual Entry	__4__8	8
Max Recall		9
Soft Recall		A
Max 2		B
Cond. Service		C
Man Cntrl Calls		D
Yellow Start	_2__6__	E
First Phases	__4__8	F

Phase Functions <F/1+F+Row>

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

INTERSECTION: EASTBOURNE RD @ HIGHLAND RANCH RD

		Overlap							
	Column Numbers --->	1	2	3	4	5	6	7	8
Row	Overlap Name --->								
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	Overlap Recall								
9	Queue Jump Phase								
A	Queue Jump Time								
B	Minimum Green								
C	Maximum Green								
D	Green Clear								
E	Yellow Change								
F	Red Clear								

Overlap Assignments <E/29+Column+Row>

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

Extra 2 Flags
1 = AWB During Initial
2 = Reserved
3 = Disable Min Walk
4 = QuicNet System
5 = Ignore P/P on EV
6 = Manual Hold in FDW
7 = Allow QuicNet PE
8 = Flash Grn B4 Yellow

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

Preempt Priority <E/125+C+Row>

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

Row	Column Numbers --->	E
0	Exclusive Phases	7
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	7
8	Disable Ovp Yel Range	
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	1 345
F	IC Select (Interconnect)	2

Configuration <E/125+E+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

Configuration <E/125+F+Row>

	F
Fast Green Flash Phase	
Green Flash Phases	
Flashing Walk Phases	
Guaranteed Passage	
Simultaneous Gap Term	12345678
Sequential Timing	
Advance Walk Phases	2 8
Delay Walk Phases	
External Recall	
Start-up Overlap Green	
Max Extension	
Inhibit Ped Reservice	
Semi-Actuated	
Start-up Overlap Yellow	
Start-up Vehicle Calls	12 456 8
Start-up Ped Calls	2 4 6 8

Specials <F/2+F+Row>

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

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

	2	Row
Phase 1	10	0
Phase 2	10	1
Phase 3	10	2
Phase 4	10	3
Phase 5	10	4
Phase 6	10	5
Phase 7	10	6
Phase 8	10	7
		8
		9
		A
		B
		C
		D
		E
		F

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

INTERSECTION: EASTBOURNE RD @ HIGHLAND RANCH RD

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	4I6U	41	45 7	4	123 8		
3	8J6U	42	45 7	8	123 8		
4	2I2L	43	45 7	2	123 8		
5	6J2L	44	45 7	6	123 8		
6	4I6L	45	45 7	4	123 8	10.0	
7	8J6L	46	45 7	8	123 8	10.0	
8	2I4	47	67	2	123		
9	6J4	48	67	6	123		
A	4I8	49	67	4	123		
B	8J8	50	67	8	123		
C	5J1	55	45 7	5	123		
D	1I1	56	45 7	1	123 8		
E	7J5	57	45 7	7	123 8		
F	3I5	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	5J9U	59	45 7	5	123		
1	1I9U	60	45 7	1	123		
2	7J9L	61	45 7	7	123		
3	3I9L	62	45 7	3	123		
4	2I3U	63	45 7	2	123		
5	6J3U	64	45 7	6	123		
6	4I7U	205	45 7	4	123		
7	8J7U	66	45 7	8	123		
8	2P I 12 U	67	2 7	2 7	123		
9	6P I 13 U	68	2	6	123		
A	4P I 12 L	69	2	4	123		
B	8P I 13 L	70	2 7	3 8	123		
C	2I3L	76	45 7	2	123		
D	6J3L	77	45 7	6	123		
E	4I7L	78	45 7	4	123		
F	8J7L	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 = Overlap
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

Column Numbers --->	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	30	<E/125+D+0>

Enable Redirection
(Enable Redirection = 30)

Max OFF (minutes)	20	<D/0+0+1>
Max ON (minutes)	7	<D/0+0+2>
Chatter Fail Time	0	<D/0+0+4>

Detector Failure Monitor

	B	Row
One-Shot	0	8
Ext. Timer	8	9
DELAY-A	0	A
DELAY-B	0	B
DELAY-C	0	C
DELAY-D	0	D
DELAY-E	0	E
DELAY-F	0	F

Delay Logic Times
<D/0+B+Row> (seconds)

INTERSECTION: EASTBOURNE RD @ HIGHLAND RANCH RD

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>

Day	Year	Month	Holiday Type

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

Time	Plan	Offset	Holiday Type

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

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 4 - Disable Detector OFF Monitor
Bit 5 - Disable Low Priority Preempt
Bit 6 - FYA Inhibit
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 8

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 <C+0+9=0.2>
(Bank 2)

Time	Funct.	Holiday Type	Column 4 Phases/Bits

Holiday TOD Function <C+0+7=0.2> <C+0+E=28>

Day	Year	Month	Holiday Type

Holiday Dates <C+0+8=1.2>
(Bank 2)

Time	Plan	Offset	Holiday Type

Holiday Events <C+0+9=1.2>
(Bank 2)

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

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

Month Select: October = A, November = B, Decmber = C

INTERSECTION: EASTBOURNE RD @ HIGHLAND RANCH RD

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

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

Coordination - Bank 1 <C/1+Plan+Row>

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	
7	Plan 7 - Sync	
8	Plan 8 - Sync	
9	Plan 9 - Sync	
A	NEMA Sync	
B	NEMA Hold	
C		
D		
E	Coord Extra	
F		

Sync Phases <C/1+E+Row>

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

Coordination - Bank 2 <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	
7	Plan 7 - Lag	
8	Plan 8 - Lag	
9	Plan 9 - Lag	
A	External Lag	
B	Lag Hold	
C		
D		
E		
F		

Lag Phases <C/1+F+Row>

Coordination Timing By:
Date:

Row	Column 8		Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	One-Shot Timer		Latch 1 Set	70	NOT-3		Max 2		Pretimed		Set Monday		Dial 2 (7-Wire)		Sim Term	0	0
1	AND-5 (a)		Latch 1 Reset	23	NOT-4		Reserved		Plan 1		Ext. Perm 1		Dial 3 (7-Wire)		EV-A	71	1
2	AND-5 (b)		Latch 2 Set	20	OR-4 (a)		Reserved		Plan 2		Ext. Perm 2		Offset 1 (7-Wire)		EV-B	72	2
3	AND-6 (a)		Latch 2 Reset	6	OR-4 (b)		Reserved		Plan 3		Gate Down		Offset 2 (7-Wire)		EV-C	73	3
4	AND-6 (b)		NAND-3 (a)		OR-5 (a)		Reserved		Plan 4		Set Clock		Offset 3 (7-Wire)		EV-D	74	4
5	Reserved		NAND-3 (b)		OR-5 (b)		Reserved		Plan 5		Stop Time	82	Free (7-Wire)		RR-1	51	5
6	Reserved		NAND-4 (a)		OR-6 (a)		Reserved		Plan 6		Flash Sense	81	Flash (7-Wire)		RR-2	52	6
7	Reserved		NAND-4 (b)		OR-6 (b)		Reserved		Plan 7		Manual Enable		Excl. Ped Omit		Spec. Event 1		7
8	Spec. Funct. 1		OR-7 (a)		EXTMR	201	Reserved		Plan 8		Man. Advance		NOT-1	201	Spec. Event 2		8
9	Spec. Funct. 2		OR-7 (b)		Reserved		Max Inhibit (nema)		Plan 9		External Alarm		NOT-2		External Lag		9
A	Spec. Funct. 3		OR-7 (c)		AND-4 (a)		Force A (nema)		DELAY-A		Phase Bank 2		OR-1 (a)	203	AND-1 (a)	200	A
B	Spec. Funct. 4		OR-7 (d)		AND-4 (b)		Force B (nema)		DELAY-B		Phase Bank 3		OR-1 (b)	204	AND-1 (b)	30	B
C	Reserved		OR-8 (a)		NAND-1 (a)		C.N.A. (nema)		DELAY-C		Overlap Set 2		OR-2 (a)		AND-2 (a)	202	C
D	Reserved		OR-8 (b)		NAND-1 (b)		Hold (nema)		DELAY-D		Overlap Set 3		OR-2 (b)		AND-2 (b)	20	D
E	Reserved		OR-8 (c)		NAND-2 (a)		Max Recall		DELAY-E		Detector Set 2		OR-3 (a)		AND-3 (a)	11	E
F	Reserved		OR-8 (d)		NAND-2 (b)		Min Recall		DELAY-F		Detector Set 3		OR-3 (b)		AND-3 (b)	12	F

Assignable Inputs <E/126+Column+Row>

Row	Column 8		Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Reserved		Phase ON - 1		Preempt Fail		Flasher 0		Free		NOT-1	202	TOD Out 1		Dial 2 (7-Wire)		0
1	Reserved		Phase ON - 2		Sp Evnt Out 1		Flasher 1		Plan 1		OR-1	38	TOD Out 2		Dial 3 (7-Wire)		1
2	Reserved		Phase ON - 3		Sp Evnt Out 2		Fast Flasher		Plan 2		OR-2		TOD Out 3		Offset 1 (7-Wire)		2
3	Reserved		Phase ON - 4		Sp Evnt Out 3		EXTMR	203	Plan 3		OR-3		TOD Out 4		Offset 2 (7-Wire)		3
4	Reserved		Phase ON - 5		Sp Evnt Out 4		One-Shot Timer		Plan 4		AND-1	201	TOD Out 5		Offset 3 (7-Wire)		4
5	Reserved		Phase ON - 6		Sp Evnt Out 5		Reserved		Plan 5		AND-2	204	TOD Out 6		Free (7-Wire)		5
6	Reserved		Phase ON - 7		Sp Evnt Out 6		Latch 1	200	Plan 6		AND-3	35	TOD Out 7		Flash (7-Wire)		6
7	Reserved		Phase ON - 8		Sp Evnt Out 7		Latch 2	205	Plan 7		NOT-2		TOD Out 8		Preempt		7
8	Flh Yell Arrow 1		Ph. Check - 1		Sp Evnt Out 8		NOT-3		Plan 8		EV-A		Adv. Warn - 1		Low Priority A		8
9	Green 1		Ph. Check - 2		Coord On		NOT-4		Plan 9		EV-B		Adv. Warn - 2		Low Priority B		9
A	Flh Yell Arrow 3		Ph. Check - 3		Detector Fail		OR-4		Spec. Funct. 3		EV-C		DELAY-A		Low Priority C		A
B	Green 3		Ph. Check - 4		Spec. Funct. 1		OR-5		Spec. Funct. 4		EV-D		DELAY-B		Low Priority D		B
C	Flh Yell Arrow 5		Ph. Check - 5		Spec. Funct. 2		OR-6		NAND-3		RR-1		DELAY-C		AND-5		C
D	Green 5		Ph. Check - 6		Central Control		AND-4		NAND-4		RR-2		DELAY-D		AND-6		D
E	Flh Yell Arrow 7		Ph. Check - 7		Excl. Ped DW		NAND-1		OR-7		Spec. Event 1		DELAY-E		Reserved		E
F	Green 7		Ph. Check - 8		Excl. Ped WK		NAND-2		OR-8				DELAY-F		Reserved		F

Assignable Outputs <E/127+Column+Row>

INTERSECTION: EASTBOURNE RD @ HIGHLAND RANCH RD

		Phase							
	Column Numbers ----->	1	2	3	4	5	6	7	8
Row	*Phase Names ----->*								
0	Ped Walk								
1	Ped FDW								
2	Min Green								
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension								
6	Max Gap								
7	Min Gap								
8	Max Limit								
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every								
E	Yellow Change								
F	Red Clear								

Phase Timing - Bank 2 <C+0+F=2>

	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

Transition Type
0.X = Shortway
1.X = Lengthen
X.1 thru X.4 = Number of cycles when lengthing

Transition Type	0.3	<C/5+1+9>

TBC Transition

Hawk Select	0	<F/1+0+4>

Hawk Select 200 = Mid-Block, 201 = Hawk

Address	0	<C/1+0+6>
Select Parity	0	<C/1+0+5>

AB3418 Comm 2 0 = No Parity, 1 = Even

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

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

Daylight Savings Time

Time B4 Yellow	0.0	<F/1+C+E>
Phase Number	0	<F/1+C+F>

Advance Warning Beacon - Sign 1

Time B4 Yellow	0.0	<F/1+D+E>
Phase Number	0	<F/1+D+F>

Advance Warning Beacon - Sign 2

Offset Time	0	<C/5+2+E>
Max Cycle Time	20	<C/5+2+F>

Yellow Yield Coordination

	12345678
Omit Alarm	#NAME?

Local Alarm Disable <C/5+F+0>

IEN Status	1	<C/5+1+B>
Synch Time	0.0	<C/5+1+C>

Other Parameters

Row		1	2	3	4	5	6	7	8
0	Ped Walk								
1	Ped FDW								
2	Min Green								
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension								
6	Max Gap								
7	Min Gap								
8	Max Limit								
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every								
E	Yellow Change								
F	Red Clear								

Phase Timing - Bank 3 <C+0+F=3>

	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 Timing

Row	6 Clear	7 Time	8 Ped Call	9 Hold	A Advance	B Force Off	C Vehicle Call	D Permit Phases	E Ped Omit	F Output
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										
A										
B										
C										
D										
E										
F										

Notes:

<E/27+5+F>

Limited Service Interval

Special Event Schedule -- Table 1 <C+0+E=27>

Row	6 Clear	7 Time	8 Ped Call	9 Hold	A Advance	B Force Off	C Vehicle Call	D Permit Phases	E Ped Omit	F Output
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										
A										
B										
C										
D										
E										
F										

Notes:

<E/28+5+F>

Limited Service Interval

Special Event Schedule -- Table 2 <C+0+E=28>

Min Time (seconds)	4	<F/1+0+8>

Min Green Before PE Force Off

Max Time (minutes)	255	<F/1+0+9>

Max Preempt Time Before Failure

Min Time (seconds)	0	<F/1+0+A>

Min Time Between Same Preempts
(Does Not Apply To Railroad Preempt)

Low Pri. Channel	#NAME?	<E/125+C+8>

Disable Low Priority Channel

Low Priority
1 = Channel A
2 = Channel B
3 = Channel C
4 = Channel D

Row		
C	Bus Headway	0
D	Bus Delay	0
E	Max Early Grn	0
F	Max Grn Ext.	0

Priority Parameters
<F/1 +A+Row>

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

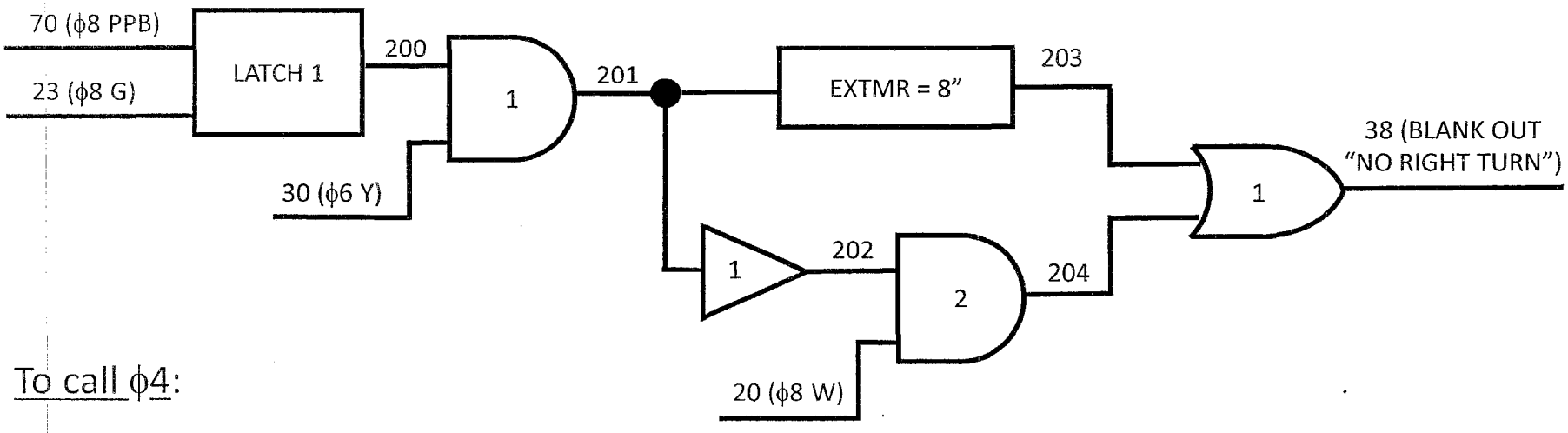
Headway Schedule <C+0+9=2.1>

Headway Time
(minutes)
1 thru 9 = 1 thru 9
A = 10
B = 11
C = 12
D = 13
E = 14
F = 15

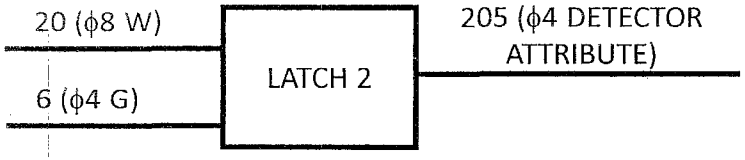
Low Priority Preemption (Bus Priority)

Note: Also see "Time of Day Functions", Function E, Bit 5 (Disable Low Priority)

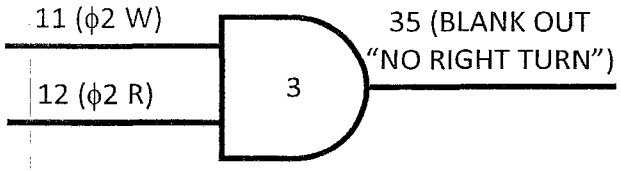
To activate blank out "NO RIGHT TURN" sign for ϕ 8 ped:



To call ϕ4:



To activate blank out "NO RIGHT TURN" sign for ϕ2 ped:



Notes:

- LPI on ϕ2 and ϕ8
- ϕ2P attribute calls ϕ7
- ϕ8P attribute calls ϕ3
- ϕ3 and ϕ7 in yellow lock and not included in start up
- Dummy ϕ7 exclusive (1s yellow)
- Detector 4I7U pin 65 replaced by pseudo pin 205

INTERSECTION: Highland Ranch Rd @ World Trade Dr

Group Assignment: **NONE**
Field Master Assignment: **FREE**
System Reference Number: **948**

N/S Street Name: **World Trade Dr**
E/W Street Name: **Highland Ranch Rd**

Last Database Change: **12/17/1991 10:30**

Change Record		
Timing Sheet By	Approved By	Date
YF1	ALS 5/21/19	

Notes: ***Drawing NO: 22012-40-D***

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

Free Lag <C/1+F+0> _2_4_6_8

Drop Number	14	<C/0+0+0>
Zone Number	14	<C/0+0+1>
Area Number	1	<C/0+0+2>
Area Address	112	<C/0+0+3>
QuicNet Channel	COM64:	(QuicNet)

Communication Addresses

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

Manual Selection

Flash Start	0	<F/1+0+E>
Red Revert	5.0	<F/1+0+F>
All Red Start	0.0	<F/1+C+0>
FYA Red Revert	0.0	<F/1+0+5>
OVLP CHG Red	0.0	<F/1+0+3>

Start / Revert Times

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

Row	Phase Names --->	1	2	3	4	5	6	7	8
	Column Numbers --->	Highland Ranch Rd		World Trade Dr		Highland Ranch Rd			
		Phase							
0	Ped Walk		7		7		7		7
1	Ped FDW		20		24		20		25
2	Min Green	4	10	4	4	4	10	4	4
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension	2.0	4.3	2.0	2.0	2.0	4.6	2.0	2.0
6	Max Gap	2.0	4.3	2.0	2.0	2.0	4.6	2.0	2.0
7	Min Gap	2.0	0.2	2.0	2.0	2.0	0.2	2.0	2.0
8	Max Limit	30	60	30	40	30	60	30	40
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW		1		1		1		1
C	Cond Serv Check								
D	Reduce Every		0.7				0.7		
E	Yellow Change	3.4	4.3	3.4	3.9	3.4	4.3	3.4	3.9
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>

	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>

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

Preempt Timing <F/1+E+Row>

	F	Row
Permit	12345678	0
Red Lock		1
Yellow Lock		2
Min Recall	_2___6__	3
Ped Recall		4
View Set Peds		5
Rest In Walk		6
Red Rest		7
Dual Entry		8
Max Recall		9
Soft Recall		A
Max 2		B
Cond. Service		C
Man Cntrl Calls		D
Yellow Start	_2___6__	E
First Phases	__3___7_	F

Phase Functions <F/1+F+Row>

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

		Overlap							
	Column Numbers ---->	1	2	3	4	5	6	7	8
Row	*Overlap Name ---->*								
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	Overlap Recall								
9	Queue Jump Phase								
A	Queue Jump Time								
B	Minimum Green								
C	Maximum Green								
D	Green Clear								
E	Yellow Change								
F	Red Clear								

Overlap Assignments <E/29+Column+Row>

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

Extra 2 Flags
1 = AWB During Initial
2 = Reserved
3 = Disable Min Walk
4 = QuicNet System
5 = Ignore P/P on EV
6 = Manual Hold in FDW
7 = Allow QuicNet PE
8 = Flash Grn B4 Yellow

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

Preempt Priority <E/125+C+Row>

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

Row	*Column Numbers ---->*	E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	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+E+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____

Configuration <E/125+F+Row>

	F
Fast Green Flash Phase	
Green Flash Phases	
Flashing Walk Phases	
Guaranteed Passage	
Simultaneous Gap Term	12345678
Sequential Timing	
Advance Walk Phases	
Delay Walk Phases	
External Recall	
Start-up Overlap Green	
Max Extension	
Inhibit Ped Reservice	
Semi-Actuated	
Start-up Overlap Yellow	
Start-up Vehicle Calls	12345678
Start-up Ped Calls	_2_4_6_8

Specials <F/2+F+Row>

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

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

	2	Row
		0
Phase 1	10	1
Phase 2	10	2
Phase 3	10	3
Phase 4	10	4
Phase 5	10	5
Phase 6	10	6
Phase 7	10	7
Phase 8	10	8
		9
		A
		B
		C
		D
		E
		F

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

Row	Detector Name	C1 Pin Number (0)	Attributes (1)	Phase(s) (2)	Assign (3)	Delay (1)	Carry-over (3)
0	2I2U	39	45_7_	2	123 8		1.8
1	6J2U	40	45_7_	6	123 8		1.8
2	4I6U	41	45_7_	4	123 8		
3	8J6U	42	45_7	8	123 8		
4	2I2L	43	45_7_	2	123 8		
5	6J2L	44	45_7_	6	123 8		
6	4I6L	45	45_7_	4	123 8		
7	8J6L	46	45_7_	8	123 8		
8	2I4	47	67_	2	123		
9	6J4	48	67_	6	123		
A	4I8	49	67_	4	123		
B	8J8	50	67_	8	123		
C	5J1	55	45_7_	5	123 8		
D	1I1	56	45_7_	1	123 8		
E	7J5	57	45_7_	7	123 8		
F	3I5	58	45_7_	3	123 8		

Row	Detector Name	C1 Pin Number (4)	Attributes (5)	Phase(s) (6)	Assign (7)	Delay (2)	Carry-over (4)
0	5J9U	59	45_7_	5	123		
1	1I9U	60	45_7_	1	123		
2	7J9L	61	45_7_	7	123		
3	3I9L	62	45_7_	3	123		
4	2I3U	63	45_7_	2	123		
5	6J3U	64	45_7_	6	123		
6	4I7U	65	45_7_	4	123		
7	8J7U	66	45_7_	8	123		
8	2P I12U	67	2	2	123		
9	6P I13U	68	2	6	123		
A	4P I12L	69	2	4	123		
B	8P I13L	70	2	8	123		
C	2I3L	76	45_7_	2	123		
D	6J3L	77	45_7_	6	123		
E	4I7L	78	45_7_	4	123		
F	8J7L	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 = Overlap
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

Column Numbers ---->	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)	20	<D/0+0+1>
Max ON (minutes)	7	<D/0+0+2>
Chatter Fail Time	0	<D/0+0+4>

Detector Failure Monitor

	B	Row
One-Shot	0	8
Ext. Timer	0	9
DELAY-A	0	A
DELAY-B	0	B
DELAY-C	0	C
DELAY-D	0	D
DELAY-E	0	E
DELAY-F	0	F

Delay Logic Times
<D/0+B+Row> (seconds)

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>

Day	Year	Month	Holiday Type

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

Time	Plan	Offset	Holiday Type

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

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 4 - Disable Detector OFF Monitor
Bit 5 - Disable Low Priority Preempt
Bit 6 - FYA Inhibit
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

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

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 <C+0+9=0.2>
(Bank 2)

Time	Funct.	Holiday Type	Column 4 Phases/Bits

Holiday TOD Function <C+0+7=0.2> <C+0+E=28>

Day	Year	Month	Holiday Type

Holiday Dates <C+0+8=1.2>
(Bank 2)

Time	Plan	Offset	Holiday Type

Holiday Events <C+0+9=1.2>
(Bank 2)

Month Select: October = A, November = B, Decmber = C

INTERSECTION: Highland Ranch Rd @ World Trade Dr

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

Row	Column Numbers --->	Plan 1	2	3	4	5	6	7	8	9	Row
	Plan Name --->										
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	Reserved										F

Coordination - Bank 1 <C/1+Plan+Row>

	E	Row
		0
Plan 1 - Sync		1
Plan 2 - Sync		2
Plan 3 - Sync		3
Plan 4 - Sync		4
Plan 5 - Sync		5
Plan 6 - Sync		6
Plan 7 - Sync		7
Plan 8 - Sync		8
Plan 9 - Sync		9
NEMA Sync		A
NEMA Hold		B
		C
		D
Coord Extra		E
		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 - Bank 2 <C/2+Plan+Row>

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

Lag Phases <C/1+F+Row>

Coordination Timing By:
Date:

Row	Column 8	Column 9	Column A	Column B	Column C	Column D	Column E	Column F	Row
0	One-Shot Timer	Latch 1 Set	NOT-3	Max 2	Pretimed	Set Monday	Dial 2 (7-Wire)	Sim Term 0	0
1	AND-5 (a)	Latch 1 Reset	NOT-4	Reserved	Plan 1	Ext. Perm 1	Dial 3 (7-Wire)	EV-A 71	1
2	AND-5 (b)	Latch 2 Set	OR-4 (a)	Reserved	Plan 2	Ext. Perm 2	Offset 1 (7-Wire)	EV-B 72	2
3	AND-6 (a)	Latch 2 Reset	OR-4 (b)	Reserved	Plan 3	Gate Down	Offset 2 (7-Wire)	EV-C 73	3
4	AND-6 (b)	NAND-3 (a)	OR-5 (a)	Reserved	Plan 4	Set Clock	Offset 3 (7-Wire)	EV-D 74	4
5	Reserved	NAND-3 (b)	OR-5 (b)	Reserved	Plan 5	Stop Time 82	Free (7-Wire)	RR-1 51	5
6	Reserved	NAND-4 (a)	OR-6 (a)	Reserved	Plan 6	Flash Sense 81	Flash (7-Wire)	RR-2 52	6
7	Reserved	NAND-4 (b)	OR-6 (b)	Reserved	Plan 7	Manual Enable	Excl. Ped Omit	Spec. Event 1	7
8	Spec. Funct. 1	OR-7 (a)	EXTMR	Reserved	Plan 8	Man. Advance	NOT-1	Spec. Event 2	8
9	Spec. Funct. 2	OR-7 (b)	Reserved	Max Inhibit (nema)	Plan 9	External Alarm	NOT-2	External Lag	9
A	Spec. Funct. 3	OR-7 (c)	AND-4 (a)	Force A (nema)	DELAY-A	Phase Bank 2	OR-1 (a)	AND-1 (a)	A
B	Spec. Funct. 4	OR-7 (d)	AND-4 (b)	Force B (nema)	DELAY-B	Phase Bank 3	OR-1 (b)	AND-1 (b)	B
C	Reserved	OR-8 (a)	NAND-1 (a)	C.N.A. (nema)	DELAY-C	Overlap Set 2	OR-2 (a)	AND-2 (a)	C
D	Reserved	OR-8 (b)	NAND-1 (b)	Hold (nema)	DELAY-D	Overlap Set 3	OR-2 (b)	AND-2 (b)	D
E	Reserved	OR-8 (c)	NAND-2 (a)	Max Recall	DELAY-E	Detector Set 2	OR-3 (a)	AND-3 (a)	E
F	Reserved	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 8	Column 9	Column A	Column B	Column C	Column D	Column E	Column F	Row
0	Reserved	Phase ON - 1	Preempt Fail	Flasher 0	Free	NOT-1	TOD Out 1	Dial 2 (7-Wire)	0
1	Reserved	Phase ON - 2	Sp Evnt Out 1	Flasher 1	Plan 1	OR-1	TOD Out 2	Dial 3 (7-Wire)	1
2	Reserved	Phase ON - 3	Sp Evnt Out 2	Fast Flasher	Plan 2	OR-2	TOD Out 3	Offset 1 (7-Wire)	2
3	Reserved	Phase ON - 4	Sp Evnt Out 3	EXTMR	Plan 3	OR-3	TOD Out 4	Offset 2 (7-Wire)	3
4	Reserved	Phase ON - 5	Sp Evnt Out 4	One-Shot Timer	Plan 4	AND-1	TOD Out 5	Offset 3 (7-Wire)	4
5	Reserved	Phase ON - 6	Sp Evnt Out 5	Reserved	Plan 5	AND-2	TOD Out 6	Free (7-Wire)	5
6	Reserved	Phase ON - 7	Sp Evnt Out 6	Latch 1	Plan 6	AND-3	TOD Out 7	Flash (7-Wire)	6
7	Reserved	Phase ON - 8	Sp Evnt Out 7	Latch 2	Plan 7	NOT-2	TOD Out 8	Preempt	7
8	Flh Yell Arrow 1	Ph. Check - 1	Sp Evnt Out 8	NOT-3	Plan 8	EV-A	Adv. Warn - 1	Low Priority A	8
9	Green 1	Ph. Check - 2	Coord On	NOT-4	Plan 9	EV-B	Adv. Warn - 2	Low Priority B	9
A	Flh Yell Arrow 3	Ph. Check - 3	Detector Fail	OR-4	Spec. Funct. 3	EV-C	DELAY-A	Low Priority C	A
B	Green 3	Ph. Check - 4	Spec. Funct. 1	OR-5	Spec. Funct. 4	EV-D	DELAY-B	Low Priority D	B
C	Flh Yell Arrow 5	Ph. Check - 5	Spec. Funct. 2	OR-6	NAND-3	RR-1	DELAY-C	AND-5	C
D	Green 5	Ph. Check - 6	Central Control	AND-4	NAND-4	RR-2	DELAY-D	AND-6	D
E	Flh Yell Arrow 7	Ph. Check - 7	Excl. Ped DW	NAND-1	OR-7	Spec. Event 1	DELAY-E	Reserved	E
F	Green 7	Ph. Check - 8	Excl. Ped WK	NAND-2	OR-8	Spec. Event 2	DELAY-F	Reserved	F

Assignable Outputs <E/127+Column+Row>

Row	Column Numbers ----> / Phase Names ---->	Phase 1	2	3	4	5	6	7	8
0	Ped Walk								
1	Ped FDW								
2	Min Green								
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension								
6	Max Gap								
7	Min Gap								
8	Max Limit								
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every								
E	Yellow Change								
F	Red Clear								

Phase Timing - Bank 2 <C+0+F=2>

	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

Transition Type
0.X = Shortway
1.X = Lengthen
X.1 thru X.4 = Number of cycles when lengthing

Transition Type	0.3	<C/5+1+9>

TBC Transition

Hawk Select	0	<F/1+0+4>

Hawk Select 200 = Mid-Block, 201 = Hawk

Address	0	<C/1+0+6>
Select Parity	0	<C/1+0+5>

AB3418 Comm 2 0 = No Parity, 1 = Even

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

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

Daylight Savings Time

Time B4 Yellow	0.0	<F/1+C+E>
Phase Number	0	<F/1+C+F>

Advance Warning Beacon - Sign 1

Time B4 Yellow	0.0	<F/1+D+E>
Phase Number	0	<F/1+D+F>

Advance Warning Beacon - Sign 2

Offset Time	0	<C/5+2+E>
Max Cycle Time	20	<C/5+2+F>

Yellow Yield Coordination

	12345678
Omit Alarm	#NAME?

Local Alarm Disable <C/5+F+0>

IEN Status	1	<C/5+1+B>
Synch Time	0.0	<C/5+1+C>

Other Parameters

Row		1	2	3	4	5	6	7	8
0	Ped Walk								
1	Ped FDW								
2	Min Green								
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension								
6	Max Gap								
7	Min Gap								
8	Max Limit								
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every								
E	Yellow Change								
F	Red Clear								

Phase Timing - Bank 3 <C+0+F=3>

	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

Row	6 Clear	7 Time	8 Ped Call	9 Hold	A Advance	B Force Off	C Vehicle Call	D Permit Phases	E Ped Omit	F Output
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										
A										
B										
C										
D										
E										
F										

Special Event Schedule -- Table 1 <C+0+E=27>

Notes:

<E/27+5+F>
Limited Service Interval

Row	6 Clear	7 Time	8 Ped Call	9 Hold	A Advance	B Force Off	C Vehicle Call	D Permit Phases	E Ped Omit	F Output
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										
A										
B										
C										
D										
E										
F										

Special Event Schedule -- Table 2 <C+0+E=28>

Notes:

<E/28+5+F>
Limited Service Interval

Min Time (seconds)	4	<F/1+0+8>

Min Green Before PE Force Off

Max Time (minutes)	255	<F/1+0+9>

Max Preempt Time Before Failure

Min Time (seconds)	0	<F/1+0+A>

Min Time Between Same Preempts
(Does Not Apply To Railroad Preempt)

Low Pri. Channel	#NAME?	<E/125+C+8>

Disable Low Priority Channel

Low Priority
1 = Channel A
2 = Channel B
3 = Channel C
4 = Channel D

Row		
C	Bus Headway	0
D	Bus Delay	0
E	Max Early Grn	0
F	Max Grn Ext.	0

Priority Parameters
<F/1 +A+Row>

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

Headway Schedule <C+0+9=2.1>

Headway Time
(minutes)
1 thru 9 = 1 thru 9
A = 10
B = 11
C = 12
D = 13
E = 14
F = 15

Low Priority Preemption (Bus Priority)

Note: Also see "Time of Day Functions", Function E, Bit 5 (Disable Low Priority)

Name	Type	EWStreet	NSStreet	Group	Drop#	Area	AreaAddr	Channel	Sys Ref #	Last Change	FM Name
Controller 2	233New233.X			Group 2	2	1	2	COM3:	2	###########	NONE

	IEN, Synch Time, etc.	Coord Minimums														Bar Hour	Bar Minute
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	0	1
Page 0 <C/5>																	

Notes are in Column A, Rows 32 to 40

TRAFFIC SIGNAL TIMING - BITS 152

PHASE TIMING

HIGHLAND RANCH — WORLD TRADE — HIGHLAND RANCH — WORLD TRADE

PHASE # →		1	2	3	4	5	6	7	8	PREEMPT	E	
WALK	0		7		7		7		7	RRI DELAY		0
FLASH D/W	1		16		20		16		20	RR1 CLEAR		1
MIN GREEN	2	4 ~~2~~	4 ~~10~~	4 ~~2~~	4	4 ~~2~~	4 ~~10~~	4 ~~2~~	4	EV A DELAY	0	2
TYPE 3 DET	3									EV A CLEAR	3	3
ADD/VEH	4									EV B DELAY	0	4
VEH EXTEN	5	2.0	4.3	2.0	2.0	2.0	4.3	2.0	2.0	EV B CLEAR	3	5
MAX GAP	6	2.0	4.3	2.0	2.0	2.0	4.3	2.0	2.0	EV C DELAY	0	6
MIN GAP	7	2.0	0.2	2.0	2.0	2.0	0.2	2.0	2.0	EV C CLEAR	3	7
MAX EXTEN	8	30	60	30	40	30	60	30	40	EV D DELAY	0	8
MAX 2	9	30	60	30	40	30	60	30	40	EV D CLEAR	3	9
	A									RR2 DELAY		A
	B									RR2 CLEAR		B
REDUCE BY	C		0.1				0.1			EV CLR TMR		C
REDUCE EVERY	D		0.7				0.7			EV DLY TMR		D
YELLOW	E	3.4 ~~3.0~~	4.3 ~~4.0~~	3.4 ~~3.0~~	3.9 ~~3.0~~	3.4 ~~3.0~~	4.3 ~~4.0~~	3.4 ~~3.0~~	3.9 ~~3.0~~	RR CLR TMR		E
RED CLEAR	F	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	RR DLY TMR		F

LOCATION

5/5/92 [illegible]

MAX INITIAL (F-O-E) = 0 KEYSTROKES: F + PHASE + LOCATION RED REVERT (F-O-F) = 5

PHASE FUNCTION FLAGS

		PHASE 1	2	3	4	5	6	7	8
PERMIT	0	X	X	X	X	X	X	X	X
RED LOCK	1								
YELLOW LOCK	2								
VEH RECALL	3		X				X		
PED RECALL	4								
PEDS	5								
REST IN WALK	6								
RED REST	7								
DOUBLE ENTRY	8								
MAX RECALL	9								
OVERLAP A	A								
OVERLAP B	B								
OVERLAP C	C								
OVERLAP D	D								
STARTUP	E		X				X		
(RESERVED)	F								

KEYSTROKES: F + F + FUNCTION #

PHASE SEQUENCES

		PHASE 1	2	3	4	5	6	7	8
LAG 0 (FREE)	0		X		X		X		X
LAG 1	1								
LAG 2	2								
LAG 3	3								
LAG 4	4								
LAG 5	5								
LAG 6	6								
LAG 7	7								
LAG 8	8								
LAG 9	9								
COOR MAX RECALL	A								
COOR LAG RECALL	B								
SYNC PHASES	C								
HOLD	D								
NEXT PHASE	E								
FORCE OFF	F								

KEYSTROKES: C + F + FUNCTION #

REMARKS:

9/1 [illegible]

LOC: HIGHLAND RANCH RD. @ WORLD TRADE DR T.O. 10:30 AM DATE: 12/17/91

ED-74 (6-86)

DETECTOR TIMES (332 CABINET)

Y ↓ / X →	1 SET DELAY	2 SET CARRY	3 OBS COUNT	4 OBS DELAY	5 OBS CARRY	6	7	8	9	A
0	1I1	5J1	1I1	5J1	1I1	5J1	1I1	5J1	1I1	5J1
1	2I2U	6J2U	2I2U 1.8	6J2U 1.8	2I2U	6J2U	2I2U	6J2U	2I2U	6J2U
2	2I2L	6J2L	2I2L	6J2L	2I2L	6J2L	2I2L	6J2L	2I2L	6J2L
3	2I3U	6J3U	2I3U	6J3U	2I3U	6J3U	2I3U	6J3U	2I3U	6J3U
4	2I3L	6J3L	2I3L	6J3L			2I3L	6J3L	2I3L	6J3L
5	2I4	6J4	2I4	6J4			2I4	6J4	2I4	6J4
6	3I5	7J5	3I5	7J5	3I5	7J5	3I5	7J5	3I5	7J5
7	4I6U	8J6U	4I6U	8J6U	4I6U	8J6U	4I6U	8J6U	4I6U	8J6U
8	4I6L	8J6L	4I6L	8J6L	4I6L	8J6L	4I6L	8J6L	4I6L	8J6L
9	4I7U	8J7U	4I7U	8J7U	4I7U	8J7U	4I7U	8J7U	4I7U	8J7U
A	4I7L	8J7L	4I7L	8J7L			4I7L	8J7L	4I7L	8J7L
B	4I8	8J8	4I8	8J8			4I8	8J8	4I8	8J8
C	1I9U	5J9U	1I9U	5J9U	1I9U	5J9U	1I9U	5J9U	1I9U	5J9U
D	3I9L	7J9L	3I9L	7J9L	3I9L	7J9L	3I9L	7J9L	3I9L	7J9L
E										
F										

KEYSTROKES: D + X + Y

TIME OF DAY FUNCTION

	TIME (24 HOUR)	FUN	DAY OF WEEK 1	2	3	4	5	6	7
0									
1									
2									
3									
4									
5									
6									
7									
8									
9									
A									
B									
C									
D									
E									
F									

KEYSTROKES: 7 + EVENT NUMBER

PEDESTRIAN ASSIGNMENTS

LOC	SWITCH-PACK	INPUT CI PIN	PHASE 1	2	3	4	5	6	7	8
EF5	2P	67		X						
EF6	6P	68						X		
EF7	4P	69				X				
EF8	8P	70								X

EMERGENCY VEHICLE PREEMPT ASSIGNMENTS

LOC	PREEM	INPUT CI PIN	PHASE 1	2	3	4	5	6	7	8
EEA	EVA	71		X			X			
EEB	EVB	72				X			X	
EEC	EVC	73	X					X		
EED	EVD	74			X					X

RAILROAD PREEMPTION ASSIGNMENTS

LOC	PHASE	1	2	3	4	5	6	7	8
EE1	RR1 CLEAR								
EE2	RR2 CLEAR								
EE3	RR2 LMT SVC								

CONDITIONAL SERVICE D-F-O _____

LONG POWER FAIL CORRECTION F-O-6 _____

SHORT POWER FAIL CORRECTION F-O-7 _____

CURRENT TIME AND DATE

8-0 HOUR, MINUTE, DAY OF WEEK

8-1 DAY OF MONTH, YEAR, MONTH

C-4-9 SECONDS

INTERSECTION: Carmel Mountain Rd & Rancho Carmel Drive (North)

233 Program

Group Assignment:
Field Master Assignment:
System Reference Number:

N/S Street: Carmel Mountain Road
E/W Street: Rancho Carmel Drive

Last Database Change:

Timing sheets by: FA1
Approved by: EFF
Timing implemented on: 10/15/13

Row	Phase Numbers---->	1	2	3	4	5	6	7	8
0	Ped Walk				7		7		
1	Ped FDW				27		22		
2	Min Green	4	10		7	4	10	4	
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension	2.0	5.9		3.8	2.0	4.7	2.0	
6	Max Gap	2.0	5.9		3.8	2.0	4.7	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	30	
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW				1		1		
C	Cond Serv Check								
D	Reduce Every		0.5		0.8		0.7		
E	Yellow Change	3.4	3.9		4.9	3.4	4.1	3.4	
F	Red Clear	1.0	1.0		1.0	1.0	1.0	1.0	

Phase Timing - Bank 1 <F/1+Phase+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	
EV-D Clear	
RR-2 Delay	
RR-2 Clear	
View EV Delay	- - -
View EV Clear	- - -
View RR Delay	- - -
View RR Clear	- - -

Preempt Timing <F/1+E+Row>

	F	Row
Permit	12_4567_	0
Red Lock		1
Yellow Lock		2
Min Recall	_2__6__	3
Ped Recall		4
View Set Peds	__4_6__	5
Rest In Walk		6
Red Rest		7
Double Entry	__4__7_	8
Max Recall		9
Soft Recall		A
Max 2		B
Cond. Service		C
Man Cntrl Calls	12345678	D
Yellow Start	__4__7_	E
First Phases	_2__6__	F

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	3	<C/0+0+0>
Zone Number	3	<C/0+0+1>
Area Number	1	<C/0+0+2>
Area Address	203	<C/0+0+3>
QuicNet Channel	COM64:	(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

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

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

Manual Selection

Free Lag	2_4_67_	<C/1+F+0>

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

Notes: Drawing ID: 27393

INTERSECTION: Carmel Mountain Rd & Rancho Carmel Drive E

233 Program

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								

Overlap Assignments <E/29+Column+Row>

	F
Fast Green Flash Phase	
Green Flash Phases	
Flashing Walk Phases	
Guaranteed Passage	
Simultaneous Gap Term	12345678
Sequential Timing	
Advance Walk Phases	
Delay Walk Phases	
External Recall	
Start-up Overlap Green	
Max Extension	
Inhibit Ped Reservice	
Semi-Actuated	
Start-up Overlap Yellow	
Start-up Vehicle Calls	12345678
Start-up Ped Calls	12345678

Specials <F/2+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	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	
E	Extra 1 Config. Bits	1 5
F	IC Select (Interconnect)	2

Configuration <E/125+E+Row>

	F
Ext. Permit 1 Phases	
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	12345678
Ped for 2P Output	6
Ped for 6P Output	4
Ped for 4P Output	
Ped for 8P Output	
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	

Configuration <E/125+F+Row>

	C
EV-A	
EV-B	
EV-C	
EV-D	
RR-1 *	- - -
RR-2 *	- - -
SE-1	0
SE-2	0

<E/125+C+Row>

Preemption Priority

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

	2
Phase 1	0
Phase 2	0
Phase 3	0
Phase 4	0
Phase 5	0
Phase 6	0
Phase 7	0
Phase 8	0

<C/5+2+Row>

Coordination Transition Minimums

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

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

Time and Date

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 Time

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

INTERSECTION: Carmel Mountain Rd & Rancho Carmel Drive E (North)

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	4I6U	41	45_7_	4	123 8		2.0
3		42	45_7_	8	123 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	123 8		
E		57	45_7_	7_	123 8		
F		58	45_7_	3	123 8		

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		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		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

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	

<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>

	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)

INTERSECTION: Carmel Mountain Rd & Rancho Carmel Drive E

233 Program

Row	Time	Plan	Offset	Day of Week
0	06 : 50	1	A	_23456_
1	08 : 30	E	A	_23456_
2	16 : 00	3	A	_23456_
3	18 : 15	E	A	1234567
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	Row
				0
				1
				2
				3
				4
				5
				6
				7
				8
				9
				A
				B
				C
				D
				E
				F

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

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 = Flesh

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

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

INTERSECTION: Carmel Mountain Rd & Rancho Carmel Drive (North

233 Program

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	120		125							0
1	Phase 1 - ForceOff	63		62							1
2	Phase 2 - ForceOff	0		0							2
3	Phase 3 - ForceOff	20		20							3
4	Phase 4 - ForceOff	41		50							4
5	Phase 5 - ForceOff	80		80							5
6	Phase 6 - ForceOff	0		0							6
7	Phase 7 - ForceOff	41		50							7
8	Phase 8 - ForceOff	40		40							8
9	Ring Offset										9
A	Offset 1	118		32							A
B	Offset 2										B
C	Offset 3										C
D	Perm 1 - End	12		12							D
E	Hold Release	255		255							E
F	Zone Offset	0		0							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	_2___6__	1
2	Plan 2 - Sync		2
3	Plan 3 - Sync	_2___6__	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	10		10							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	12345678		12345678							A
B	Perm 1 Ped Phase	12345678		12345678							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	_2_4_67_	0
1	Plan 1 - Lag	_2_4_67_	1
2	Plan 2 - Lag		2
3	Plan 3 - Lag	_2_4_67_	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: EFF

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>**

NTERSECTION: CAM DEL NORTE @ CARMEL MTN RD/ SEO LUCIDO 223 gram

Group Assignment:
Field Master Assignment:

N/S Street Name: CARMEL MTN Rd/ PASEO LUCIDO
E/W Street Name: CAM DEL NORTE

N

Row	Column # ---> / Phase # --->	1	2	3	4	5	6	7	8
		CAM DEL NORTE			PASEO LUCIDO		CAM DEL NORTE		CARMEL MTN Rd
0	Ped Walk		7		7		7		7
1	Ped FDW		34		32		36		33
2	Min Green	4	10	4	10	4	10	4	10
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	4.6	2.0	5.2	① 3.0 ~~2.0~~	4.5	2.0	5.4
6	Max Gap	2.0	4.6	2.0	5.2	3.0 ~~2.0~~	4.5	2.0	5.4
7	Min Gap	2.0	0.2	2.0	0.2	3.0 ~~2.0~~	0.2	2.0	0.2
8	Max Limit	30	50 ~~60~~	30	60	30	60	30	60
9	Max Limit 2 ②	25	70 ~~50~~	40	55	45	50	25	55
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1		0.1		0.1		0.1
D	Every		0.7		0.6		0.7		0.6
E	Yellow	3.4	5.5	3.4	4.5	3.4	5.3	3.4	4.2
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	Grade		-3.0%		-4.0%		-2.0%		-3.0%

① LEM 10/18/12
② LEM 10/18/12

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	---

Preempt Timing
F + E + Row

	F	Row
Permit	12345678	0
Red Lock		1
Yellow Lock		2
Min Recall		3
Ped Recall		4
Peds (View)	_2_4_6_8	5
Rest In Walk		6
Red Rest		7
Dbl Entry		8
Max Recall		9
Soft Recall	_2___6__	A
Max 2		B
Cond Serv		C
Ped Lock	12345678	D
Yellow Start	_2___6__	E
1st Phases	__3___7_	F

Phase Functions <F Page>
F + F + Row

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	11 ~~6~~	C + 0 + 0
Zone Number	6	C + 0 + 1
Area Number	1	C + 0 + 2
Area Address	206	C + 0 + 3
QuicNet Channel	DIGI: 60	(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	14	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: WXW
Approved By: EFF
Drawing Number: 28057-6-D
Timing Implemented On: 6/7/04

INTERSECTION: CAM DEL NORTE @ CARMEL MTN RD/ PASEO LUCIDO — 223 Program

Row	Time	Function	Day of Week	Column F Phases/Bits
0	16 : 30	B	_23456_	_23__6__
1	19 : 00	B	_23456_	
2	07:00	B	_23456_	12-45678
3	08:30	B	_23456_	
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function <D Page>

7 + ROW 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

Day of Week

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

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__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

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

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 =

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: CAM DEL NORTE @ CARMEL MT. RD/ PASEO LUCIDO — 223 Program

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1		1.8		2I2U	1
2		1.8		2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7		1.8		4I6U	3
8		1.8		4I6L	7
9				4I7U	23
A	10.0			4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.8		6J2U	2
2		1.8		6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7		1.8		8J6U	4
8		1.8		8J6L	8
9				8J7U	24
A	10.0			8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

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

System Detectors <D Page>

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

Detector Failure Monitor

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

Advance Warning Beacon - Sign 1

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

Advance Warning Beacon - Sign 2

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

Power Cycle Correction (Default = 0.5)

Appendix D: Intersection Analysis

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	739	704	115	123	681	41	201	189	91	29	77	198
Future Volume (veh/h)	739	704	115	123	681	41	201	189	91	29	77	198
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	821	782	128	131	724	44	226	212	102	35	92	212
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.89	0.89	0.89	0.84	0.84	0.84
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	1190	2296	373	183	1119	68	254	541	251	44	358	281
Arrive On Green	0.35	0.52	0.52	0.11	0.46	0.46	0.14	0.23	0.23	0.03	0.10	0.10
Sat Flow, veh/h	3428	4390	713	3428	4883	295	1767	2335	1081	1767	3526	2768
Grp Volume(v), veh/h	821	600	310	131	500	268	226	158	156	35	92	212
Grp Sat Flow(s),veh/h/ln	1714	1689	1726	1714	1689	1801	1767	1763	1653	1767	1763	1384
Q Serve(g_s), s	24.7	12.4	12.5	4.4	13.7	13.8	15.1	9.1	9.6	2.4	2.9	8.9
Cycle Q Clear(g_c), s	24.7	12.4	12.5	4.4	13.7	13.8	15.1	9.1	9.6	2.4	2.9	8.9
Prop In Lane	1.00		0.41	1.00		0.16	1.00		0.65	1.00		1.00
Lane Grp Cap(c), veh/h	1190	1766	903	183	774	413	254	409	383	44	358	281
V/C Ratio(X)	0.69	0.34	0.34	0.72	0.65	0.65	0.89	0.39	0.41	0.79	0.26	0.75
Avail Cap(c_a), veh/h	1190	1766	903	257	957	510	358	573	537	59	546	429
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	0.66	0.97	0.97	0.97	0.98	0.98	0.98	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.6	16.6	16.6	52.7	28.7	28.8	50.4	38.9	39.1	58.2	49.7	52.5
Incr Delay (d2), s/veh	0.9	0.3	0.7	2.3	4.0	7.5	14.0	0.2	0.3	29.7	0.6	6.4
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	10.2	4.8	5.0	1.9	4.9	5.6	7.6	4.0	3.9	1.4	1.3	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.6	16.9	17.3	55.0	32.7	36.3	64.5	39.1	39.3	87.8	50.3	58.8
LnGrp LOS	C	B	B	E	C	D	E	D	D	F	D	E
Approach Vol, veh/h		1731			899			540			339	
Approach Delay, s/veh		25.4			37.0			49.8			59.5	
Approach LOS		C			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	67.8	23.0	18.0	46.7	32.4	7.4	33.5
Change Period (Y+Rc), s	4.9	5.0	5.7	* 5.8	5.0	* 4.9	4.4	5.7
Max Green Setting (Gmax), s	9.0	48.0	24.3	* 19	23.1	* 34	4.0	39.0
Max Q Clear Time (g_c+I1), s	6.4	14.5	17.1	10.9	26.7	15.8	4.4	11.6
Green Ext Time (p_c), s	0.0	18.4	0.2	1.2	0.0	11.5	0.0	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)	36	651	108	20	535	22	272	5	32	19	10	7
Future Volume (veh/h)	36	651	108	20	535	22	272	5	32	19	10	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	38	685	114	21	563	23	324	0	0	23	12	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.82	0.82	0.82
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	48	2918	480	30	3273	133	453	238	0	45	48	40
Arrive On Green	0.05	1.00	1.00	0.02	0.66	0.66	0.13	0.00	0.00	0.03	0.03	0.03
Sat Flow, veh/h	1767	4382	721	1767	4993	203	3534	1856	0	1767	1856	1572
Grp Volume(v), veh/h	38	526	273	21	380	206	324	0	0	23	12	9
Grp Sat Flow(s),veh/h/ln	1767	1689	1726	1767	1689	1818	1767	1856	0	1767	1856	1572
Q Serve(g_s), s	2.5	0.0	0.0	1.4	5.2	5.3	10.6	0.0	0.0	1.5	0.8	0.7
Cycle Q Clear(g_c), s	2.5	0.0	0.0	1.4	5.2	5.3	10.6	0.0	0.0	1.5	0.8	0.7
Prop In Lane	1.00		0.42	1.00		0.11	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	48	2249	1149	30	2214	1192	453	238	0	45	48	40
V/C Ratio(X)	0.79	0.23	0.24	0.71	0.17	0.17	0.71	0.00	0.00	0.51	0.25	0.22
Avail Cap(c_a), veh/h	156	2249	1149	141	2214	1192	1211	636	0	134	141	119
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94	0.97	0.97	0.97	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.4	0.0	0.0	58.7	8.0	8.0	50.2	0.0	0.0	57.7	57.3	57.3
Incr Delay (d2), s/veh	9.5	0.2	0.5	10.6	0.2	0.3	0.8	0.0	0.0	3.2	1.0	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	1.2	0.1	0.1	0.7	1.8	2.0	4.7	0.0	0.0	0.7	0.4	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.9	0.2	0.5	69.3	8.2	8.3	51.0	0.0	0.0	61.0	58.4	58.3
LnGrp LOS	E	A	A	E	A	A	D	A	A	E	E	E
Approach Vol, veh/h		837			607			324			44	
Approach Delay, s/veh		3.3			10.4			51.0			59.7	
Approach LOS		A			B			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	85.3		8.0	7.7	84.1		20.3
Change Period (Y+Rc), s	4.4	* 5.4		4.9	4.4	5.4		4.9
Max Green Setting (Gmax), s	9.6	* 41		9.1	10.6	39.6		41.1
Max Q Clear Time (g_c+I1), s	3.4	2.0		3.5	4.5	7.3		12.6
Green Ext Time (p_c), s	0.0	18.0		0.0	0.0	9.9		0.6

Intersection Summary	
HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

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)	7	3	16	170	13	224	26	533	93	284	354	14
Future Volume (veh/h)	7	3	16	170	13	224	26	533	93	284	354	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	9	4	21	169	76	280	29	586	102	379	472	19
Peak Hour Factor	0.75	0.75	0.75	0.80	0.80	0.80	0.91	0.91	0.91	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	40	42	33	368	386	325	71	2102	360	434	2950	118
Arrive On Green	0.02	0.02	0.02	0.21	0.21	0.21	0.02	0.48	0.48	0.25	1.00	1.00
Sat Flow, veh/h	1767	1856	1445	1767	1856	1563	3428	4341	742	3428	4997	200
Grp Volume(v), veh/h	9	4	21	169	76	280	29	454	234	379	318	173
Grp Sat Flow(s),veh/h/ln	1767	1856	1445	1767	1856	1563	1714	1689	1707	1714	1689	1820
Q Serve(g_s), s	0.6	0.3	1.7	10.0	4.1	20.7	1.0	9.6	9.9	12.7	0.0	0.0
Cycle Q Clear(g_c), s	0.6	0.3	1.7	10.0	4.1	20.7	1.0	9.6	9.9	12.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.44	1.00		0.11
Lane Grp Cap(c), veh/h	40	42	33	368	386	325	71	1635	826	434	1994	1074
V/C Ratio(X)	0.23	0.10	0.64	0.46	0.20	0.86	0.41	0.28	0.28	0.87	0.16	0.16
Avail Cap(c_a), veh/h	82	87	67	573	602	507	160	1635	826	646	1994	1074
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	0.85	0.85	0.85	0.98	0.98	0.98	0.97	0.97	0.97
Uniform Delay (d), s/veh	57.6	57.4	58.2	41.6	39.2	45.8	58.0	18.4	18.5	43.9	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.4	7.6	0.3	0.1	4.8	1.4	0.4	0.8	6.0	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.1	0.7	4.4	1.9	8.5	0.4	3.8	4.0	5.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.7	57.8	65.8	41.9	39.3	50.6	59.4	18.8	19.3	49.8	0.2	0.3
LnGrp LOS	E	E	E	D	D	D	E	B	B	D	A	A
Approach Vol, veh/h		34			525			717			870	
Approach Delay, s/veh		62.9			46.2			20.7			21.8	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	19.6	63.2		7.1	6.9	75.9		30.1
Change Period (Y+Rc), s	4.4	* 5.1		4.4	4.4	5.1		5.1
Max Green Setting (Gmax), s	22.6	* 34		5.6	5.6	50.9		38.9
Max Q Clear Time (g_c+I1), s	14.7	11.9		3.7	3.0	2.0		22.7
Green Ext Time (p_c), s	0.5	11.2		0.0	0.0	9.1		1.6

Intersection Summary	
HCM 6th Ctrl Delay	28.0
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)	54	27	114	25	23	75	157	555	70	49	511	18
Future Volume (veh/h)	54	27	114	25	23	75	157	555	70	49	511	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	59	29	124	28	28	88	201	712	90	65	681	24
Peak Hour Factor	0.92	0.92	0.92	0.85	0.85	0.85	0.78	0.78	0.78	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	163	172	143	161	169	139	226	2776	348	84	2661	93
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.26	1.00	1.00	0.02	0.17	0.17
Sat Flow, veh/h	1767	1856	1547	1767	1856	1524	1767	4550	570	1767	5024	176
Grp Volume(v), veh/h	59	29	124	28	28	88	201	527	275	65	457	248
Grp Sat Flow(s),veh/h/ln	1767	1856	1547	1767	1856	1524	1767	1689	1743	1767	1689	1823
Q Serve(g_s), s	3.8	1.7	9.5	1.8	1.7	6.7	13.2	0.0	0.0	4.4	14.0	14.1
Cycle Q Clear(g_c), s	3.8	1.7	9.5	1.8	1.7	6.7	13.2	0.0	0.0	4.4	14.0	14.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.33	1.00		0.10
Lane Grp Cap(c), veh/h	163	172	143	161	169	139	226	2060	1063	84	1789	966
V/C Ratio(X)	0.36	0.17	0.87	0.17	0.17	0.63	0.89	0.26	0.26	0.78	0.26	0.26
Avail Cap(c_a), veh/h	163	172	143	502	527	433	348	2060	1063	156	1789	966
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.79	0.79	0.79
Uniform Delay (d), s/veh	51.1	50.2	53.7	50.4	50.3	52.6	43.9	0.0	0.0	58.4	29.1	29.1
Incr Delay (d2), s/veh	0.5	0.2	37.8	0.2	0.2	1.8	11.5	0.3	0.6	4.5	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.8	5.2	0.8	0.8	2.6	5.7	0.1	0.2	2.1	6.4	7.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.6	50.4	91.5	50.6	50.5	54.4	55.4	0.3	0.6	63.0	29.3	29.6
LnGrp LOS	D	D	F	D	D	D	E	A	A	E	C	C
Approach Vol, veh/h		212			144			1003			770	
Approach Delay, s/veh		74.8			52.9			11.4			32.3	
Approach LOS		E			D			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.1	78.1		16.0	19.7	68.5		15.8
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9
Max Green Setting (Gmax), s	10.6	45.1		11.1	23.6	32.1		34.1
Max Q Clear Time (g_c+I1), s	16.4	2.0		11.5	15.2	16.1		8.7
Green Ext Time (p_c), s	0.0	18.2		0.0	0.2	9.5		0.3

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

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	9	38	60	15	129	60	322	13	38	264	6
Future Volume (veh/h)	55	9	38	60	15	129	60	322	13	38	264	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	69	11	48	79	20	170	66	354	14	43	297	7
Peak Hour Factor	0.80	0.80	0.80	0.76	0.76	0.76	0.91	0.91	0.91	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	377	47	431	380	46	392	95	1031	41	69	998	23
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.05	0.30	0.30	0.04	0.28	0.28
Sat Flow, veh/h	692	171	1571	1332	168	1430	1767	3457	136	1767	3520	83
Grp Volume(v), veh/h	80	0	48	79	0	190	66	180	188	43	148	156
Grp Sat Flow(s),veh/h/ln	863	0	1571	1332	0	1598	1767	1763	1830	1767	1763	1840
Q Serve(g_s), s	1.5	0.0	0.8	2.0	0.0	3.5	1.3	2.9	2.9	0.9	2.4	2.4
Cycle Q Clear(g_c), s	5.0	0.0	0.8	7.0	0.0	3.5	1.3	2.9	2.9	0.9	2.4	2.4
Prop In Lane	0.86		1.00	1.00		0.89	1.00		0.07	1.00		0.04
Lane Grp Cap(c), veh/h	424	0	431	380	0	438	95	526	546	69	500	522
V/C Ratio(X)	0.19	0.00	0.11	0.21	0.00	0.43	0.69	0.34	0.34	0.63	0.30	0.30
Avail Cap(c_a), veh/h	1127	0	1317	1116	0	1322	444	1404	1458	395	1374	1435
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.9	0.0	9.7	14.3	0.0	10.7	16.6	9.8	9.8	16.9	10.0	10.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.3	3.4	0.5	0.5	3.4	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.2	0.5	0.0	1.0	0.5	0.9	0.9	0.4	0.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.0	0.0	9.8	14.4	0.0	10.9	20.0	10.3	10.3	20.4	10.7	10.7
LnGrp LOS	B	A	A	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		128			269			434			347	
Approach Delay, s/veh		11.1			11.9			11.8			11.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.4	16.2		14.2	5.9	15.6		14.2
Change Period (Y+Rc), s	4.0	5.5		* 4.4	4.0	* 5.5		4.4
Max Green Setting (Gmax), s	8.0	28.5		* 30	9.0	* 28		29.6
Max Q Clear Time (g_c+I1), s	2.9	4.9		7.0	3.3	4.4		9.0
Green Ext Time (p_c), s	0.0	3.0		0.4	0.0	3.1		0.9

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

Notes

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

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (veh/h)	70	100	0	255	39	66	341
Future Volume (veh/h)	70	100	0	255	39	66	341
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No
Adj Sat Flow, veh/h/ln	1856	1856		1856	1856	1856	1856
Adj Flow Rate, veh/h	92	132		287	44	69	355
Peak Hour Factor	0.76	0.76		0.89	0.89	0.96	0.96
Percent Heavy Veh, %	3	3		3	3	3	3
Cap, veh/h	236	210		1056	160	104	1905
Arrive On Green	0.13	0.13		0.34	0.34	0.06	0.54
Sat Flow, veh/h	1767	1572		3161	465	1767	3618
Grp Volume(v), veh/h	92	132		163	168	69	355
Grp Sat Flow(s),veh/h/ln	1767	1572		1763	1771	1767	1763
Q Serve(g_s), s	1.4	2.3		2.0	2.0	1.1	1.5
Cycle Q Clear(g_c), s	1.4	2.3		2.0	2.0	1.1	1.5
Prop In Lane	1.00	1.00			0.26	1.00	
Lane Grp Cap(c), veh/h	236	210		607	610	104	1905
V/C Ratio(X)	0.39	0.63		0.27	0.27	0.66	0.19
Avail Cap(c_a), veh/h	1699	1511		1543	1550	789	4030
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	11.5	11.9		6.9	6.9	13.4	3.4
Incr Delay (d2), s/veh	0.4	1.2		0.3	0.3	2.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.7		0.5	0.5	0.4	0.2
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	11.9	13.1		7.2	7.3	16.1	3.5
LnGrp LOS	B	B		A	A	B	A
Approach Vol, veh/h	224			331			424
Approach Delay, s/veh	12.6			7.3			5.6
Approach LOS	B			A			A

Timer - Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	5.7	15.5				21.2		7.9
Change Period (Y+Rc), s	4.0	5.5				* 5.5		4.0
Max Green Setting (Gmax), s	13.0	25.5				* 33		28.0
Max Q Clear Time (g_c+I1), s	3.1	4.0				3.5		4.3
Green Ext Time (p_c), s	0.0	2.6				4.3		0.3

Intersection Summary	
HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

Notes

User approved ignoring U-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)	2	0	1	121	0	22	4	249	17	19	389	2
Future Volume (veh/h)	2	0	1	121	0	22	4	249	17	19	389	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	3	0	1	129	0	23	5	286	20	19	397	2
Peak Hour Factor	0.75	0.75	0.75	0.94	0.94	0.94	0.87	0.87	0.87	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	264	27	25	433	0	179	10	1158	81	35	1297	7
Arrive On Green	0.11	0.00	0.11	0.11	0.00	0.11	0.01	0.35	0.35	0.02	0.36	0.36
Sat Flow, veh/h	413	241	218	1627	0	1569	1767	3344	232	1767	3596	18
Grp Volume(v), veh/h	4	0	0	129	0	23	5	150	156	19	195	204
Grp Sat Flow(s),veh/h/ln	872	0	0	1627	0	1569	1767	1763	1813	1767	1763	1852
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.4	0.1	1.8	1.8	0.3	2.3	2.3
Cycle Q Clear(g_c), s	2.0	0.0	0.0	2.0	0.0	0.4	0.1	1.8	1.8	0.3	2.3	2.3
Prop In Lane	0.75		0.25	1.00		1.00	1.00		0.13	1.00		0.01
Lane Grp Cap(c), veh/h	316	0	0	433	0	179	10	611	628	35	636	668
V/C Ratio(X)	0.01	0.00	0.00	0.30	0.00	0.13	0.52	0.25	0.25	0.55	0.31	0.31
Avail Cap(c_a), veh/h	1626	0	0	1730	0	1627	341	1773	1824	341	1779	1869
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.5	0.0	0.0	12.3	0.0	11.6	14.4	6.8	6.8	14.1	6.7	6.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.1	15.2	0.3	0.3	5.0	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.6	0.0	0.1	0.1	0.4	0.5	0.1	0.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.5	0.0	0.0	12.4	0.0	11.7	29.6	7.1	7.1	19.1	7.3	7.3
LnGrp LOS	B	A	A	B	A	B	C	A	A	B	A	A
Approach Vol, veh/h		4			152			311			418	
Approach Delay, s/veh		11.5			12.3			7.4			7.8	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.0	15.9		8.2	4.6	16.3		8.2
Change Period (Y+Rc), s	4.4	5.8		4.9	4.4	* 5.8		4.9
Max Green Setting (Gmax), s	5.6	29.2		30.1	5.6	* 29		30.1
Max Q Clear Time (g_c+I1), s	2.3	3.8		4.0	2.1	4.3		4.0
Green Ext Time (p_c), s	0.0	2.5		0.0	0.0	4.6		0.5

Intersection Summary	
HCM 6th Ctrl Delay	8.5
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

* 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	880	1152	0	1855	147	541	21	402	0	0	0
Future Volume (veh/h)	0	880	1152	0	1855	147	541	21	402	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	0	926	1213	0	1932	153	646	0	467			
Peak Hour Factor	0.95	0.95	0.95	0.96	0.96	0.96	0.86	0.86	0.86			
Percent Heavy Veh, %	0	3	3	0	3	3	3	3	3			
Cap, veh/h	0	3455	2477	0	2405	1059	753	0	670			
Arrive On Green	0.00	1.00	1.00	0.00	0.68	0.68	0.21	0.00	0.21			
Sat Flow, veh/h	0	5233	2768	0	3618	1553	3534	0	3145			
Grp Volume(v), veh/h	0	926	1213	0	1932	153	646	0	467			
Grp Sat Flow(s),veh/h/ln	0	1689	1384	0	1763	1553	1767	0	1572			
Q Serve(g_s), s	0.0	0.0	0.0	0.0	46.3	4.2	21.1	0.0	16.5			
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	46.3	4.2	21.1	0.0	16.5			
Prop In Lane	0.00		1.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	3455	2477	0	2405	1059	753	0	670			
V/C Ratio(X)	0.00	0.27	0.49	0.00	0.80	0.14	0.86	0.00	0.70			
Avail Cap(c_a), veh/h	0	3455	2477	0	2405	1059	851	0	757			
HCM Platoon Ratio	1.00	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	0.84	0.84	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	13.4	6.7	45.5	0.0	43.7			
Incr Delay (d2), s/veh	0.0	0.2	0.6	0.0	3.0	0.3	8.0	0.0	2.4			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.2	0.0	16.0	1.3	10.1	0.0	6.6			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.2	0.6	0.0	16.4	7.0	53.5	0.0	46.1			
LnGrp LOS	A	A	A	A	B	A	D	A	D			
Approach Vol, veh/h		2139			2085			1113				
Approach Delay, s/veh		0.4			15.7			50.4				
Approach LOS		A			B			D				

Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		89.3				89.3		30.7				
Change Period (Y+Rc), s		7.5				7.5		5.1				
Max Green Setting (Gmax), s		78.5				78.5		28.9				
Max Q Clear Time (g_c+I1), s		2.0				48.3		23.1				
Green Ext Time (p_c), s		19.8				19.4		2.4				

Intersection Summary	
HCM 6th Ctrl Delay	16.8
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1734	720	0	1596	992	0	0	0	172	50	0
Future Volume (veh/h)	0	1734	720	0	1596	992	0	0	0	172	50	0
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856				1856	1856	0
Adj Flow Rate, veh/h	0	1993	828	0	1754	0				138	169	0
Peak Hour Factor	0.87	0.87	0.87	0.91	0.91	0.91				0.80	0.80	0.80
Percent Heavy Veh, %	0	3	3	0	3	3				3	3	0
Cap, veh/h	0	4057	1259	0	2824					166	175	0
Arrive On Green	0.00	0.80	0.80	0.00	1.00	0.00				0.09	0.09	0.00
Sat Flow, veh/h	0	5233	1572	0	3618	1572				1767	1856	0
Grp Volume(v), veh/h	0	1993	828	0	1754	0				138	169	0
Grp Sat Flow(s),veh/h/ln	0	1689	1572	0	1763	1572				1767	1856	0
Q Serve(g_s), s	0.0	15.5	26.6	0.0	0.0	0.0				9.2	10.9	0.0
Cycle Q Clear(g_c), s	0.0	15.5	26.6	0.0	0.0	0.0				9.2	10.9	0.0
Prop In Lane	0.00		1.00	0.00		1.00				1.00		0.00
Lane Grp Cap(c), veh/h	0	4057	1259	0	2824					166	175	0
V/C Ratio(X)	0.00	0.49	0.66	0.00	0.62					0.83	0.97	0.00
Avail Cap(c_a), veh/h	0	4057	1259	0	2824					278	292	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.33	1.33				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.43	0.00				1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	3.9	5.0	0.0	0.0	0.0				53.4	54.2	0.0
Incr Delay (d2), s/veh	0.0	0.4	2.7	0.0	0.4	0.0				10.1	32.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.5	6.3	0.0	0.2	0.0				4.6	6.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	4.3	7.7	0.0	0.4	0.0				63.5	86.6	0.0
LnGrp LOS	A	A	A	A	A					E	F	A
Approach Vol, veh/h		2821			1754	A					307	
Approach Delay, s/veh		5.3			0.4						76.2	
Approach LOS		A			A						E	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	103.6	16.4	103.6
Change Period (Y+Rc), s	7.5	5.1	7.5
Max Green Setting (Gmax), s	88.5	18.9	88.5
Max Q Clear Time (g_c+I1), s	28.6	11.2	2.0
Green Ext Time (p_c), s	36.2	0.1	23.6

Intersection Summary	
HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	152	3	39	286	301	0	0	235	293
Future Volume (veh/h)	0	0	0	152	3	39	286	301	0	0	235	293
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1856	1856	1856	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				165	3	42	311	327	0	0	250	312
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.94	0.94	0.94
Percent Heavy Veh, %				3	3	3	3	3	0	0	3	3
Cap, veh/h				215	4	195	404	2529	0	0	1920	1474
Arrive On Green				0.12	0.12	0.12	0.12	0.72	0.00	0.00	0.54	0.54
Sat Flow, veh/h				1737	32	1572	3428	3618	0	0	3618	2707
Grp Volume(v), veh/h				168	0	42	311	327	0	0	250	312
Grp Sat Flow(s),veh/h/ln				1769	0	1572	1714	1763	0	0	1763	1353
Q Serve(g_s), s				7.4	0.0	1.9	7.0	2.3	0.0	0.0	2.8	4.7
Cycle Q Clear(g_c), s				7.4	0.0	1.9	7.0	2.3	0.0	0.0	2.8	4.7
Prop In Lane				0.98		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				219	0	195	404	2529	0	0	1920	1474
V/C Ratio(X)				0.77	0.00	0.22	0.77	0.13	0.00	0.00	0.13	0.21
Avail Cap(c_a), veh/h				531	0	472	776	2529	0	0	1920	1474
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.99	0.99	0.00	0.00	0.98	0.98
Uniform Delay (d), s/veh				33.9	0.0	31.6	34.2	3.5	0.0	0.0	8.9	9.4
Incr Delay (d2), s/veh				2.1	0.0	0.2	1.2	0.1	0.0	0.0	0.1	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
%ile BackOfQ(50%),veh/ln				3.1	0.0	0.7	2.8	0.5	0.0	0.0	0.9	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				36.1	0.0	31.8	35.4	3.6	0.0	0.0	9.1	9.7
LnGrp LOS				D	A	C	D	A	A	A	A	A
Approach Vol, veh/h					210			638			562	
Approach Delay, s/veh					35.2			19.1			9.4	
Approach LOS					D			B			A	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	63.1		13.8	49.3		16.9
Change Period (Y+Rc), s	* 5.7		4.4	5.7		7.0
Max Green Setting (Gmax), s	* 44		18.1	20.8		24.0
Max Q Clear Time (g_c+I1), s	4.3		9.0	6.7		9.4
Green Ext Time (p_c), s	1.5		0.4	3.0		0.5

Intersection Summary	
HCM 6th Ctrl Delay	17.6
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)	159	6	397	0	0	0	0	469	114	15	311	0
Future Volume (veh/h)	159	6	397	0	0	0	0	469	114	15	311	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856				0	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	194	0	473				0	625	152	18	379	0
Peak Hour Factor	0.84	0.84	0.84				0.75	0.75	0.75	0.82	0.82	0.82
Percent Heavy Veh, %	3	3	3				0	3	3	3	3	0
Cap, veh/h	703	0	622				0	3109	727	29	2357	0
Arrive On Green	0.20	0.00	0.20				0.00	0.60	0.60	0.03	1.00	0.00
Sat Flow, veh/h	3534	0	3129				0	5467	1217	1767	3618	0
Grp Volume(v), veh/h	194	0	473				0	573	204	18	379	0
Grp Sat Flow(s),veh/h/ln	1767	0	1565				0	1596	1637	1767	1763	0
Q Serve(g_s), s	3.7	0.0	11.4				0.0	4.4	4.6	0.8	0.0	0.0
Cycle Q Clear(g_c), s	3.7	0.0	11.4				0.0	4.4	4.6	0.8	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.74	1.00		0.00
Lane Grp Cap(c), veh/h	703	0	622				0	2859	977	29	2357	0
V/C Ratio(X)	0.28	0.00	0.76				0.00	0.20	0.21	0.62	0.16	0.00
Avail Cap(c_a), veh/h	1149	0	1017				0	2859	977	477	2357	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.99	0.99	0.00
Uniform Delay (d), s/veh	27.2	0.0	30.2				0.0	7.4	7.4	38.4	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	1.9				0.0	0.2	0.5	7.6	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	4.3				0.0	1.2	1.4	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.4	0.0	32.2				0.0	7.5	7.9	46.0	0.1	0.0
LnGrp LOS	C	A	C				A	A	A	D	A	A
Approach Vol, veh/h		667						777			397	
Approach Delay, s/veh		30.8						7.6			2.2	
Approach LOS		C						A			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	5.7	53.5		20.8		59.2
Change Period (Y+Rc), s	4.4	* 5.7		4.9		5.7
Max Green Setting (Gmax), s	21.6	* 18		26.0		43.4
Max Q Clear Time (g_c+I1), s	2.8	6.6		13.4		2.0
Green Ext Time (p_c), s	0.0	4.6		2.3		1.7

Intersection Summary	
HCM 6th Ctrl Delay	14.9
HCM 6th LOS	B

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)	43	682	90	195	1471	94	156	99	81	58	135	72
Future Volume (veh/h)	43	682	90	195	1471	94	156	99	81	58	135	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	46	726	96	205	1548	99	208	132	108	77	180	96
Peak Hour Factor	0.94	0.94	0.94	0.95	0.95	0.95	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	58	1331	175	239	1925	123	238	127	104	380	242	129
Arrive On Green	0.03	0.29	0.29	0.14	0.40	0.40	0.13	0.13	0.13	0.22	0.22	0.22
Sat Flow, veh/h	1767	4531	594	1767	4863	311	1767	943	772	1767	1126	600
Grp Volume(v), veh/h	46	540	282	205	1075	572	208	0	240	77	0	276
Grp Sat Flow(s),veh/h/ln	1767	1689	1749	1767	1689	1796	1767	0	1715	1767	0	1726
Q Serve(g_s), s	2.5	12.9	13.0	10.9	27.0	27.0	11.1	0.0	12.9	3.4	0.0	14.3
Cycle Q Clear(g_c), s	2.5	12.9	13.0	10.9	27.0	27.0	11.1	0.0	12.9	3.4	0.0	14.3
Prop In Lane	1.00		0.34	1.00		0.17	1.00		0.45	1.00		0.35
Lane Grp Cap(c), veh/h	58	992	514	239	1337	711	238	0	231	380	0	371
V/C Ratio(X)	0.79	0.54	0.55	0.86	0.80	0.80	0.87	0.00	1.04	0.20	0.00	0.74
Avail Cap(c_a), veh/h	100	992	514	347	1442	767	238	0	231	738	0	721
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	46.0	28.4	28.5	40.5	25.6	25.7	40.7	0.0	41.5	30.9	0.0	35.1
Incr Delay (d2), s/veh	8.5	0.8	1.6	9.8	3.4	6.3	27.3	0.0	70.0	0.1	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	1.2	4.9	5.2	5.1	10.1	11.4	6.6	0.0	9.9	1.5	0.0	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.5	29.2	30.1	50.4	29.1	31.9	67.9	0.0	111.4	30.9	0.0	36.2
LnGrp LOS	D	C	C	D	C	C	E	A	F	C	A	D
Approach Vol, veh/h		868			1852			448			353	
Approach Delay, s/veh		30.9			32.3			91.2			35.1	
Approach LOS		C			C			F			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.3	35.1		25.5	7.6	44.9		17.8
Change Period (Y+Rc), s	4.4	7.0		4.9	4.4	* 7		4.9
Max Green Setting (Gmax), s	13.8	27.1		40.0	5.4	* 41		12.9
Max Q Clear Time (g_c+I1), s	12.9	15.0		16.3	4.5	29.0		14.9
Green Ext Time (p_c), s	0.1	4.9		1.2	0.0	8.9		0.0

Intersection Summary	
HCM 6th Ctrl Delay	39.7
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)	190	771	7	27	1235	168	113	26	27	199	17	211
Future Volume (veh/h)	190	771	7	27	1235	168	113	26	27	199	17	211
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	207	838	8	31	1403	191	151	35	36	261	0	260
Peak Hour Factor	0.92	0.92	0.92	0.88	0.88	0.88	0.75	0.75	0.75	0.81	0.81	0.81
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	293	2391	23	44	1806	246	258	121	124	386	0	169
Arrive On Green	0.09	0.46	0.46	0.02	0.40	0.40	0.15	0.15	0.15	0.11	0.00	0.11
Sat Flow, veh/h	3428	5173	49	1767	4499	612	1767	826	850	3534	0	1547
Grp Volume(v), veh/h	207	547	299	31	1053	541	151	0	71	261	0	260
Grp Sat Flow(s),veh/h/ln	1714	1689	1845	1767	1689	1734	1767	0	1676	1767	0	1547
Q Serve(g_s), s	4.8	8.6	8.6	1.4	22.4	22.4	6.6	0.0	3.1	5.9	0.0	9.0
Cycle Q Clear(g_c), s	4.8	8.6	8.6	1.4	22.4	22.4	6.6	0.0	3.1	5.9	0.0	9.0
Prop In Lane	1.00		0.03	1.00		0.35	1.00		0.51	1.00		1.00
Lane Grp Cap(c), veh/h	293	1561	853	44	1356	696	258	0	245	386	0	169
V/C Ratio(X)	0.71	0.35	0.35	0.71	0.78	0.78	0.59	0.00	0.29	0.68	0.00	1.54
Avail Cap(c_a), veh/h	814	1985	1085	133	1437	738	750	0	711	386	0	169
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	36.7	14.2	14.2	39.9	21.5	21.5	32.9	0.0	31.4	35.4	0.0	36.8
Incr Delay (d2), s/veh	1.2	0.4	0.6	7.7	3.1	5.8	3.0	0.0	0.9	5.2	0.0	270.6
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	1.9	2.8	3.1	0.7	8.0	8.7	3.0	0.0	1.3	2.7	0.0	16.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.9	14.6	14.9	47.7	24.5	27.3	35.9	0.0	32.4	40.6	0.0	307.3
LnGrp LOS	D	B	B	D	C	C	D	A	C	D	A	F
Approach Vol, veh/h		1053			1625			222			521	
Approach Delay, s/veh		19.3			25.9			34.8			173.7	
Approach LOS		B			C			C			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	44.1		15.0	11.5	39.1		16.9
Change Period (Y+Rc), s	4.4	6.0		6.0	4.4	6.0		4.9
Max Green Setting (Gmax), s	6.3	48.5		9.0	19.6	35.1		35.0
Max Q Clear Time (g_c+I1), s	3.4	10.6		11.0	6.8	24.4		8.6
Green Ext Time (p_c), s	0.0	12.4		0.0	0.3	8.7		1.8

Intersection Summary	
HCM 6th Ctrl Delay	46.9
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	373	322	341	90	509	17	325	620	48	7	655	405
Future Volume (veh/h)	373	322	341	90	509	17	325	620	48	7	655	405
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	444	383	366	100	566	19	401	765	59	8	771	428
Peak Hour Factor	0.84	0.84	0.84	0.90	0.90	0.90	0.81	0.81	0.81	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	510	956	421	125	933	31	465	1561	120	14	1184	517
Arrive On Green	0.15	0.27	0.27	0.07	0.19	0.19	0.14	0.47	0.47	0.01	0.34	0.34
Sat Flow, veh/h	3428	3526	1551	1767	5033	168	3428	3311	255	1767	3526	1539
Grp Volume(v), veh/h	444	383	366	100	379	206	401	407	417	8	771	428
Grp Sat Flow(s),veh/h/ln	1714	1763	1551	1767	1689	1824	1714	1763	1804	1767	1763	1539
Q Serve(g_s), s	14.8	10.4	26.3	6.5	12.0	12.1	13.4	18.5	18.6	0.5	21.7	29.9
Cycle Q Clear(g_c), s	14.8	10.4	26.3	6.5	12.0	12.1	13.4	18.5	18.6	0.5	21.7	29.9
Prop In Lane	1.00		1.00	1.00		0.09	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	510	956	421	125	626	338	465	831	851	14	1184	517
V/C Ratio(X)	0.87	0.40	0.87	0.80	0.61	0.61	0.86	0.49	0.49	0.58	0.65	0.83
Avail Cap(c_a), veh/h	748	1228	540	248	928	501	660	1026	1050	61	1491	651
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.6	34.8	40.6	53.5	43.7	43.7	49.4	21.2	21.2	57.8	33.0	35.7
Incr Delay (d2), s/veh	5.5	0.3	12.4	4.5	1.1	2.1	6.1	0.5	0.5	13.4	0.8	7.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	4.3	11.1	3.0	5.0	5.5	5.9	7.3	7.5	0.3	9.0	11.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.1	35.1	53.0	58.0	44.8	45.8	55.5	21.8	21.7	71.1	33.8	43.2
LnGrp LOS	D	D	D	E	D	D	E	C	C	E	C	D
Approach Vol, veh/h		1193			685			1225			1207	
Approach Delay, s/veh		47.7			47.0			32.8			37.4	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.5	61.7	11.8	38.8	20.4	45.8	21.9	28.7
Change Period (Y+Rc), s	3.6	6.6	3.6	7.1	4.5	* 6.6	4.5	* 7.1
Max Green Setting (Gmax), s	4.0	68.0	16.4	40.7	22.5	* 49	25.5	* 32
Max Q Clear Time (g_c+I1), s	2.5	20.6	8.5	28.3	15.4	31.9	16.8	14.1
Green Ext Time (p_c), s	0.0	6.8	0.1	3.4	0.5	7.4	0.6	3.7

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	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	9	27	97	29	62	20	261	65	99	250	36
Future Volume (veh/h)	98	9	27	97	29	62	20	261	65	99	250	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.98	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	131	12	36	129	39	83	24	314	78	132	333	48
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.83	0.83	0.83	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	390	47	71	300	84	123	62	736	179	202	1064	152
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.04	0.26	0.26	0.11	0.34	0.34
Sat Flow, veh/h	1009	202	305	705	361	527	1767	2783	678	1767	3095	442
Grp Volume(v), veh/h	179	0	0	251	0	0	24	197	195	132	188	193
Grp Sat Flow(s),veh/h/ln	1515	0	0	1593	0	0	1767	1763	1698	1767	1763	1774
Q Serve(g_s), s	0.0	0.0	0.0	1.7	0.0	0.0	0.5	3.7	3.9	2.9	3.2	3.2
Cycle Q Clear(g_c), s	3.8	0.0	0.0	5.4	0.0	0.0	0.5	3.7	3.9	2.9	3.2	3.2
Prop In Lane	0.73		0.20	0.51		0.33	1.00		0.40	1.00		0.25
Lane Grp Cap(c), veh/h	509	0	0	507	0	0	62	466	449	202	606	610
V/C Ratio(X)	0.35	0.00	0.00	0.49	0.00	0.00	0.39	0.42	0.43	0.65	0.31	0.32
Avail Cap(c_a), veh/h	1225	0	0	1321	0	0	266	1607	1548	266	1602	1612
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.3	0.0	0.0	13.9	0.0	0.0	19.2	12.4	12.4	17.2	9.8	9.8
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.3	0.0	0.0	1.5	1.2	1.3	1.3	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	1.8	0.0	0.0	0.2	1.3	1.3	1.0	0.9	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.5	0.0	0.0	14.2	0.0	0.0	20.6	13.5	13.7	18.5	10.3	10.3
LnGrp LOS	B	A	A	B	A	A	C	B	B	B	B	B
Approach Vol, veh/h		179			251			416			513	
Approach Delay, s/veh		13.5			14.2			14.0			12.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	16.4		15.1	5.8	19.7		15.1
Change Period (Y+Rc), s	4.4	* 5.7		* 5.6	4.4	5.7		5.6
Max Green Setting (Gmax), s	6.1	* 37		* 32	6.1	36.9		31.3
Max Q Clear Time (g_c+I1), s	4.9	5.9		7.4	2.5	5.2		5.8
Green Ext Time (p_c), s	0.0	4.3		1.1	0.0	3.7		0.8

Intersection Summary	
HCM 6th Ctrl Delay	13.4
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)	290	214	15	7	349	57	23	6	8	102	1	328
Future Volume (veh/h)	290	214	15	7	349	57	23	6	8	102	1	328
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.72	1.00		0.96	0.97		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	387	285	20	9	459	75	31	8	11	136	1	437
Peak Hour Factor	0.75	0.75	0.75	0.76	0.76	0.76	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	424	1494	104	16	619	99	216	58	60	170	14	441
Arrive On Green	0.24	0.45	0.45	0.01	0.22	0.22	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1767	3341	233	1767	2864	459	399	149	155	320	37	1138
Grp Volume(v), veh/h	387	150	155	9	279	255	50	0	0	574	0	0
Grp Sat Flow(s),veh/h/ln	1767	1763	1812	1767	1763	1560	703	0	0	1495	0	0
Q Serve(g_s), s	20.4	4.9	5.0	0.5	14.1	14.7	0.0	0.0	0.0	33.2	0.0	0.0
Cycle Q Clear(g_c), s	20.4	4.9	5.0	0.5	14.1	14.7	2.6	0.0	0.0	36.6	0.0	0.0
Prop In Lane	1.00		0.13	1.00		0.29	0.62		0.22	0.24		0.76
Lane Grp Cap(c), veh/h	424	788	810	16	381	337	333	0	0	625	0	0
V/C Ratio(X)	0.91	0.19	0.19	0.57	0.73	0.76	0.15	0.00	0.00	0.92	0.00	0.00
Avail Cap(c_a), veh/h	509	788	810	100	381	337	333	0	0	625	0	0
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	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	35.4	16.0	16.0	47.3	35.0	35.2	18.6	0.0	0.0	29.1	0.0	0.0
Incr Delay (d2), s/veh	18.7	0.5	0.5	28.8	11.8	14.6	1.0	0.0	0.0	20.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.6	2.0	2.1	0.3	7.0	6.7	0.8	0.0	0.0	16.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.1	16.5	16.5	76.1	46.7	49.8	19.5	0.0	0.0	49.7	0.0	0.0
LnGrp LOS	D	B	B	E	D	D	B	A	A	D	A	A
Approach Vol, veh/h		692			543			50			574	
Approach Delay, s/veh		37.5			48.7			19.5			49.7	
Approach LOS		D			D			B			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	37.4	26.4		42.0	5.3	48.5		42.0
Change Period (Y+Rc), s	4.4	* 5.7		4.9	4.4	5.7		4.9
Max Green Setting (Gmax), s	27.6	* 21		37.1	5.4	42.5		37.1
Max Q Clear Time (g_c+I1), s	22.4	16.7		38.6	2.5	7.0		4.6
Green Ext Time (p_c), s	0.6	1.2		0.0	0.0	1.7		0.3

Intersection Summary	
HCM 6th Ctrl Delay	44.1
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)	41	256	17	92	354	249	25	103	96	148	82	16
Future Volume (veh/h)	41	256	17	92	354	249	25	103	96	148	82	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.96	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	55	341	23	123	472	332	27	111	103	197	109	21
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.93	0.93	0.93	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	71	1320	89	155	866	607	39	309	255	232	832	156
Arrive On Green	0.04	0.39	0.39	0.09	0.44	0.44	0.02	0.17	0.17	0.13	0.28	0.28
Sat Flow, veh/h	1767	3351	225	1767	1962	1374	1767	1796	1485	1767	2955	555
Grp Volume(v), veh/h	55	179	185	123	424	380	27	109	105	197	64	66
Grp Sat Flow(s),veh/h/ln	1767	1763	1813	1767	1763	1573	1767	1763	1518	1767	1763	1747
Q Serve(g_s), s	2.7	6.0	6.1	6.0	15.6	15.7	1.3	4.8	5.5	9.6	2.4	2.5
Cycle Q Clear(g_c), s	2.7	6.0	6.1	6.0	15.6	15.7	1.3	4.8	5.5	9.6	2.4	2.5
Prop In Lane	1.00		0.12	1.00		0.87	1.00		0.98	1.00		0.32
Lane Grp Cap(c), veh/h	71	694	714	155	778	695	39	303	261	232	496	492
V/C Ratio(X)	0.78	0.26	0.26	0.79	0.54	0.55	0.70	0.36	0.40	0.85	0.13	0.13
Avail Cap(c_a), veh/h	262	694	714	262	778	695	262	798	687	262	798	791
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.0	18.1	18.1	39.5	18.1	18.2	42.9	32.3	32.5	37.5	23.7	23.7
Incr Delay (d2), s/veh	16.5	0.9	0.9	8.8	2.7	3.1	20.1	0.7	1.0	20.4	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	2.5	2.6	2.9	6.4	5.8	0.8	2.1	2.0	5.4	1.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.5	19.0	19.0	48.4	20.9	21.3	63.0	33.0	33.5	57.9	23.8	23.8
LnGrp LOS	E	B	B	D	C	C	E	C	C	E	C	C
Approach Vol, veh/h		419			927			241			327	
Approach Delay, s/veh		24.2			24.7			36.6			44.3	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	40.1	6.3	29.8	7.9	44.3	16.0	20.1
Change Period (Y+Rc), s	4.4	5.3	4.4	4.9	4.4	5.3	4.4	4.9
Max Green Setting (Gmax), s	13.1	34.8	13.1	40.0	13.1	34.8	13.1	40.0
Max Q Clear Time (g_c+I1), s	9.0	8.1	3.3	4.5	4.7	17.7	11.6	7.5
Green Ext Time (p_c), s	0.1	2.0	0.0	0.7	0.0	4.6	0.1	1.3

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

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	45	26	49	23	18	42
Future Vol, veh/h	45	26	49	23	18	42
Peak Hour Factor	0.75	0.75	0.86	0.86	0.94	0.94
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	60	35	57	27	19	45
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Righ	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	7.7	7.4	7.7
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	63%	30%
Vol Thru, %	68%	0%	70%
Vol Right, %	32%	37%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	72	71	60
LT Vol	0	45	18
Through Vol	49	0	42
RT Vol	23	26	0
Lane Flow Rate	84	95	64
Geometry Grp	1	1	1
Degree of Util (X)	0.092	0.108	0.075
Departure Headway (Hd)	3.974	4.111	4.241
Convergence, Y/N	Yes	Yes	Yes
Cap	892	862	837
Service Time	2.038	2.179	2.305
HCM Lane V/C Ratio	0.094	0.11	0.076
HCM Control Delay	7.4	7.7	7.7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.3	0.4	0.2

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	14	23	33	12	10	70
Future Vol, veh/h	14	23	33	12	10	70
Conflicting Peds, #/hr	0	3	0	7	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	75	75	91	91
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	19	31	44	16	11	77

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	158	62	0	0	67	0
Stage 1	59	-	-	-	-	-
Stage 2	99	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	831	1000	-	-	1528	-
Stage 1	961	-	-	-	-	-
Stage 2	922	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	819	990	-	-	1518	-
Mov Cap-2 Maneuver	819	-	-	-	-	-
Stage 1	954	-	-	-	-	-
Stage 2	915	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	0.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	918	1518	-
HCM Lane V/C Ratio	-	-	0.054	0.007	-
HCM Control Delay (s)	-	-	9.1	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	1	21	80	1	14	12	127	43	2	140	8
Future Vol, veh/h	5	1	21	80	1	14	12	127	43	2	140	8
Conflicting Peds, #/hr	0	0	3	0	0	15	0	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	85	85	85	75	75	75	75	75	75
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	7	1	28	94	1	16	16	169	57	3	187	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	454	459	198	446	436	213	200	0	0	226	0	0
Stage 1	201	201	-	230	230	-	-	-	-	-	-	-
Stage 2	253	258	-	216	206	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	515	497	841	521	512	825	1366	-	-	1337	-	-
Stage 1	799	733	-	771	712	-	-	-	-	-	-	-
Stage 2	749	692	-	784	729	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	489	488	837	494	502	813	1363	-	-	1337	-	-
Mov Cap-2 Maneuver	489	488	-	494	502	-	-	-	-	-	-	-
Stage 1	786	729	-	760	702	-	-	-	-	-	-	-
Stage 2	712	682	-	752	725	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.2	13.7	0.5	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1363	-	-	723	524	1337	-	-
HCM Lane V/C Ratio	0.012	-	-	0.05	0.213	0.002	-	-
HCM Control Delay (s)	7.7	0	-	10.2	13.7	7.7	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.8	0	-	-

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	14	9	61	20	12	10	15	11	1	79	16
Future Vol, veh/h	9	14	9	61	20	12	10	15	11	1	79	16
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.77	0.77	0.77
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	12	19	12	81	27	16	13	20	15	1	103	21
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.6	8.3	7.6	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	28%	28%	66%	1%
Vol Thru, %	42%	44%	22%	82%
Vol Right, %	31%	28%	13%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	36	32	93	96
LT Vol	10	9	61	1
Through Vol	15	14	20	79
RT Vol	11	9	12	16
Lane Flow Rate	48	43	124	125
Geometry Grp	1	1	1	1
Degree of Util (X)	0.058	0.052	0.153	0.149
Departure Headway (Hd)	4.342	4.365	4.44	4.29
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	827	823	810	839
Service Time	2.358	2.38	2.453	2.303
HCM Lane V/C Ratio	0.058	0.052	0.153	0.149
HCM Control Delay	7.6	7.6	8.3	8.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.2	0.5	0.5

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1018	1490	13	0	161
Future Vol, veh/h	0	1018	1490	13	0	161
Conflicting Peds, #/hr	6	0	0	6	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	92	92	82	82
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	1131	1620	14	0	196

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	823
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.93
Pot Cap-1 Maneuver	0	-	-	-	0	270
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	268
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	48
HCM LOS			E

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	268
HCM Lane V/C Ratio	-	-	-	0.733
HCM Control Delay (s)	-	-	-	48
HCM Lane LOS	-	-	-	E
HCM 95th %tile Q(veh)	-	-	-	5.2

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	15	2	27	6	95	3	78	67	93	17	5
Future Vol, veh/h	27	15	2	27	6	95	3	78	67	93	17	5
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.88	0.88	0.88	0.85	0.85	0.85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	36	20	3	36	8	127	3	89	76	109	20	6
Number of Lanes	0	1	0	0	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay	9.3	8.6	9.2	9.5
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	61%	82%	0%	100%	0%
Vol Thru, %	0%	54%	34%	18%	0%	0%	77%
Vol Right, %	0%	46%	5%	0%	100%	0%	23%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	3	145	44	33	95	93	22
LT Vol	3	0	27	27	0	93	0
Through Vol	0	78	15	6	0	0	17
RT Vol	0	67	2	0	95	0	5
Lane Flow Rate	3	165	59	44	127	109	26
Geometry Grp	7	7	6	7	7	7	7
Degree of Util (X)	0.005	0.227	0.092	0.071	0.165	0.176	0.037
Departure Headway (Hd)	5.784	4.955	5.646	5.811	4.696	5.796	5.132
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	617	722	632	615	761	617	695
Service Time	3.532	2.703	3.702	3.557	2.441	3.546	2.882
HCM Lane V/C Ratio	0.005	0.229	0.093	0.072	0.167	0.177	0.037
HCM Control Delay	8.6	9.2	9.3	9	8.4	9.8	8.1
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0	0.9	0.3	0.2	0.6	0.6	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	614	0	0	749	326	161	3	1021	0	0	0
Future Volume (veh/h)	325	614	0	0	749	326	161	3	1021	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1856	1856	0	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	346	653	0	0	788	343	181	0	1134			
Peak Hour Factor	0.94	0.94	0.94	0.95	0.95	0.95	0.90	0.90	0.90			
Percent Heavy Veh, %	3	3	0	0	3	3	3	3	3			
Cap, veh/h	484	2399	0	0	897	397	1346	0	1196			
Arrive On Green	0.28	0.95	0.00	0.00	0.25	0.25	0.38	0.00	0.38			
Sat Flow, veh/h	3428	5233	0	0	3618	1561	3534	0	3140			
Grp Volume(v), veh/h	346	653	0	0	788	343	181	0	1134			
Grp Sat Flow(s),veh/h/ln	1714	1689	0	0	1763	1561	1767	0	1570			
Q Serve(g_s), s	8.2	0.8	0.0	0.0	19.3	18.9	3.0	0.0	31.5			
Cycle Q Clear(g_c), s	8.2	0.8	0.0	0.0	19.3	18.9	3.0	0.0	31.5			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	484	2399	0	0	897	397	1346	0	1196			
V/C Ratio(X)	0.71	0.27	0.00	0.00	0.88	0.86	0.13	0.00	0.95			
Avail Cap(c_a), veh/h	484	2399	0	0	971	430	1378	0	1225			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.79	0.79	0.00	0.00	0.82	0.82	1.00	0.00	1.00			
Uniform Delay (d), s/veh	30.6	1.3	0.0	0.0	32.2	32.1	18.2	0.0	27.0			
Incr Delay (d2), s/veh	3.4	0.2	0.0	0.0	10.0	18.1	0.0	0.0	14.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.1	0.3	0.0	0.0	9.1	8.8	1.2	0.0	13.6			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.0	1.5	0.0	0.0	42.3	50.2	18.2	0.0	41.6			
LnGrp LOS	C	A	A	A	D	D	B	A	D			
Approach Vol, veh/h		999			1131			1315				
Approach Delay, s/veh		12.8			44.7			38.4				
Approach LOS		B			D			D				

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		49.6			19.7	29.9		40.4				
Change Period (Y+Rc), s		7.0			7.0	* 7		6.1				
Max Green Setting (Gmax), s		41.8			11.3	* 25		35.1				
Max Q Clear Time (g_c+I1), s		2.8			10.2	21.3		33.5				
Green Ext Time (p_c), s		3.2			0.1	1.6		0.8				

Intersection Summary	
HCM 6th Ctrl Delay	33.0
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)	0	676	589	528	382	0	0	0	0	263	1	234
Future Volume (veh/h)	0	676	589	528	382	0	0	0	0	263	1	234
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1856	1856	1856	1856	0				1856	1856	1856
Adj Flow Rate, veh/h	0	777	609	574	415	0				369	0	172
Peak Hour Factor	0.87	0.87	0.87	0.92	0.92	0.92				0.91	0.91	0.91
Percent Heavy Veh, %	0	3	3	3	3	0				3	3	3
Cap, veh/h	0	1611	718	642	2494	0				520	0	231
Arrive On Green	0.00	0.46	0.46	0.31	1.00	0.00				0.15	0.00	0.15
Sat Flow, veh/h	0	3618	1571	3428	3618	0				3534	0	1572
Grp Volume(v), veh/h	0	777	609	574	415	0				369	0	172
Grp Sat Flow(s),veh/h/ln	0	1763	1571	1714	1763	0				1767	0	1572
Q Serve(g_s), s	0.0	13.8	30.9	14.4	0.0	0.0				8.9	0.0	9.4
Cycle Q Clear(g_c), s	0.0	13.8	30.9	14.4	0.0	0.0				8.9	0.0	9.4
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1611	718	642	2494	0				520	0	231
V/C Ratio(X)	0.00	0.48	0.85	0.89	0.17	0.00				0.71	0.00	0.74
Avail Cap(c_a), veh/h	0	1611	718	693	2494	0				1139	0	507
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.64	0.64	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	17.0	21.7	30.1	0.0	0.0				36.6	0.0	36.8
Incr Delay (d2), s/veh	0.0	1.0	11.9	9.3	0.1	0.0				1.8	0.0	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.4	12.8	5.7	0.0	0.0				3.9	0.0	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	18.1	33.6	39.4	0.1	0.0				38.4	0.0	41.4
LnGrp LOS	A	B	C	D	A	A				D	A	D
Approach Vol, veh/h		1386			989						541	
Approach Delay, s/veh		24.9			22.9						39.3	
Approach LOS		C			C						D	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	22.5	48.1		19.3		70.7						
Change Period (Y+Rc), s *	5.7	7.0		6.1		7.0						
Max Green Setting (Gmax), s	16.8	24.0		29.0		47.9						
Max Q Clear Time (g_c+I1), s	16.4	32.9		11.4		2.0						
Green Ext Time (p_c), s	0.5	0.0		1.8		2.9						

Intersection Summary	
HCM 6th Ctrl Delay	26.9
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	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	191	30	170	528	0	719	780
Future Volume (veh/h)	191	30	170	528	0	719	780
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856		1856	1856
Adj Flow Rate, veh/h	248	39	181	562		846	918
Peak Hour Factor	0.77	0.77	0.94	0.94		0.85	0.85
Percent Heavy Veh, %	3	3	3	3		3	3
Cap, veh/h	339	155	235	4101		2379	1104
Arrive On Green	0.10	0.10	0.14	1.00		0.70	0.70
Sat Flow, veh/h	3428	1572	3428	5233		3544	1567
Grp Volume(v), veh/h	248	39	181	562		846	918
Grp Sat Flow(s),veh/h/ln	1714	1572	1714	1689		1689	1567
Q Serve(g_s), s	8.4	2.8	6.1	0.0		11.9	50.2
Cycle Q Clear(g_c), s	8.4	2.8	6.1	0.0		11.9	50.2
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	339	155	235	4101		2379	1104
V/C Ratio(X)	0.73	0.25	0.77	0.14		0.36	0.83
Avail Cap(c_a), veh/h	1003	460	360	4101		2379	1104
HCM Platoon Ratio	1.00	1.00	2.00	2.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	0.97	0.97		0.63	0.63
Uniform Delay (d), s/veh	52.5	50.0	50.9	0.0		7.0	12.7
Incr Delay (d2), s/veh	4.0	1.1	2.1	0.1		0.3	4.8
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	2.5	2.5	0.0		3.9	16.4
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	56.6	51.1	53.0	0.1		7.3	17.4
LnGrp LOS	E	D	D	A		A	B
Approach Vol, veh/h	287			743		1764	
Approach Delay, s/veh	55.8			13.0		12.6	
Approach LOS	E			B		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		102.2		17.8	12.6	89.6
Change Period (Y+Rc), s		* 5.1		5.9	4.4	5.1
Max Green Setting (Gmax), s		* 66		35.1	12.6	56.9
Max Q Clear Time (g_c+I1), s		2.0		10.4	8.1	52.2
Green Ext Time (p_c), s		11.1		1.4	0.1	4.4

Intersection Summary	
HCM 6th Ctrl Delay	17.1
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	273	917	552	246	1112	251	286	385	64	304	559	397
Future Volume (veh/h)	273	917	552	246	1112	251	286	385	64	304	559	397
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	303	1019	552	262	1183	240	336	453	68	405	745	476
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.85	0.85	0.85	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	332	1738	539	298	1687	519	340	1547	476	359	1574	483
Arrive On Green	0.10	0.34	0.34	0.09	0.33	0.33	0.10	0.31	0.31	0.10	0.31	0.31
Sat Flow, veh/h	3428	5066	1570	3428	5066	1558	3428	5066	1559	3428	5066	1553
Grp Volume(v), veh/h	303	1019	552	262	1183	240	336	453	68	405	745	476
Grp Sat Flow(s),veh/h/ln	1714	1689	1570	1714	1689	1558	1714	1689	1559	1714	1689	1553
Q Serve(g_s), s	11.4	21.5	44.6	9.8	26.4	15.8	12.7	8.9	4.1	13.6	15.4	39.6
Cycle Q Clear(g_c), s	11.4	21.5	44.6	9.8	26.4	15.8	12.7	8.9	4.1	13.6	15.4	39.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	332	1738	539	298	1687	519	340	1547	476	359	1574	483
V/C Ratio(X)	0.91	0.59	1.02	0.88	0.70	0.46	0.99	0.29	0.14	1.13	0.47	0.99
Avail Cap(c_a), veh/h	332	1738	539	298	1734	533	340	1559	480	359	1574	483
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.1	35.1	42.7	58.7	37.7	34.2	58.5	34.4	32.8	58.2	36.2	44.5
Incr Delay (d2), s/veh	28.2	0.7	45.3	23.8	1.5	1.1	45.2	0.3	0.4	87.3	0.5	37.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	9.0	23.7	5.2	11.1	6.1	7.6	3.7	1.6	10.2	6.4	20.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	86.4	35.8	88.0	82.5	39.2	35.3	103.7	34.7	33.1	145.5	36.7	82.0
LnGrp LOS	F	D	F	F	D	D	F	C	C	F	D	F
Approach Vol, veh/h		1874			1685			857			1626	
Approach Delay, s/veh		59.4			45.4			61.6			77.1	
Approach LOS		E			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.7	51.1	17.3	45.9	17.0	49.8	18.0	45.2
Change Period (Y+Rc), s	4.4	6.5	4.4	5.5	4.4	* 6.5	4.4	* 5.5
Max Green Setting (Gmax), s	11.3	44.6	12.9	40.4	12.6	* 45	13.6	* 40
Max Q Clear Time (g_c+I1), s	11.8	46.6	14.7	41.6	13.4	28.4	15.6	10.9
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	11.4	0.0	7.1

Intersection Summary	
HCM 6th Ctrl Delay	60.6
HCM 6th LOS	E

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)	427	1050	162	285	953	68	146	237	234	121	330	893
Future Volume (veh/h)	427	1050	162	285	953	68	146	237	234	121	330	893
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	459	1129	174	310	1036	74	166	269	266	138	375	914
Peak Hour Factor	0.93	0.93	0.93	0.92	0.92	0.92	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	509	1515	233	366	1452	104	192	525	466	163	993	779
Arrive On Green	0.15	0.34	0.34	0.04	0.10	0.10	0.11	0.30	0.30	0.09	0.28	0.28
Sat Flow, veh/h	3428	4425	682	3428	4825	344	1767	1763	1565	1767	3526	2768
Grp Volume(v), veh/h	459	861	442	310	725	385	166	269	266	138	375	914
Grp Sat Flow(s),veh/h/ln	1714	1689	1730	1714	1689	1792	1767	1763	1565	1767	1763	1384
Q Serve(g_s), s	16.5	28.1	28.2	11.2	26.0	26.1	11.6	15.8	18.0	9.6	10.7	35.2
Cycle Q Clear(g_c), s	16.5	28.1	28.2	11.2	26.0	26.1	11.6	15.8	18.0	9.6	10.7	35.2
Prop In Lane	1.00		0.39	1.00		0.19	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	509	1156	592	366	1016	539	192	525	466	163	993	779
V/C Ratio(X)	0.90	0.74	0.75	0.85	0.71	0.71	0.87	0.51	0.57	0.85	0.38	1.17
Avail Cap(c_a), veh/h	524	1156	592	403	1016	539	216	550	488	164	993	779
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.72	0.72	0.72	0.84	0.84	0.84	0.93	0.93	0.93	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.3	36.3	36.3	59.3	51.1	51.1	54.8	36.4	37.1	55.9	36.1	44.9
Incr Delay (d2), s/veh	13.9	3.2	6.1	11.3	3.6	6.7	23.4	0.3	0.8	30.2	0.4	91.1
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	8.0	11.9	12.7	5.7	12.3	13.5	6.4	6.9	7.0	5.7	4.7	21.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.2	39.5	42.4	70.6	54.7	57.8	78.2	36.6	37.9	86.1	36.5	136.0
LnGrp LOS	E	D	D	E	D	E	E	D	D	F	D	F
Approach Vol, veh/h		1762			1420			701			1427	
Approach Delay, s/veh		47.2			59.0			47.0			105.0	
Approach LOS		D			E			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.2	47.8	18.0	41.0	23.4	42.6	15.9	43.0
Change Period (Y+Rc), s	4.9	5.0	4.4	5.8	4.9	* 5	4.4	* 5.8
Max Green Setting (Gmax), s	14.7	39.7	15.3	35.2	19.1	* 35	11.6	* 39
Max Q Clear Time (g_c+I1), s	13.2	30.2	13.6	37.2	18.5	28.1	11.6	20.0
Green Ext Time (p_c), s	0.1	8.4	0.0	0.0	0.1	6.5	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	65.8
HCM 6th LOS	E

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)	199	943	261	42	738	76	353	45	28	107	73	120
Future Volume (veh/h)	199	943	261	42	738	76	353	45	28	107	73	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	226	1072	297	49	858	88	462	0	0	120	82	135
Peak Hour Factor	0.88	0.88	0.88	0.86	0.86	0.86	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	249	2139	592	77	2079	212	568	298	0	181	190	161
Arrive On Green	0.28	1.00	1.00	0.04	0.44	0.44	0.16	0.00	0.00	0.10	0.10	0.10
Sat Flow, veh/h	1781	3971	1100	1781	4705	480	3563	1870	0	1781	1870	1585
Grp Volume(v), veh/h	226	919	450	49	620	326	462	0	0	120	82	135
Grp Sat Flow(s),veh/h/ln	1781	1702	1666	1781	1702	1781	1781	1870	0	1781	1870	1585
Q Serve(g_s), s	15.3	0.0	0.0	3.4	15.5	15.6	15.7	0.0	0.0	8.1	5.1	10.5
Cycle Q Clear(g_c), s	15.3	0.0	0.0	3.4	15.5	15.6	15.7	0.0	0.0	8.1	5.1	10.5
Prop In Lane	1.00		0.66	1.00		0.27	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	249	1834	898	77	1504	787	568	298	0	181	190	161
V/C Ratio(X)	0.91	0.50	0.50	0.64	0.41	0.41	0.81	0.00	0.00	0.66	0.43	0.84
Avail Cap(c_a), veh/h	368	1834	898	128	1504	787	943	495	0	229	241	204
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.59	0.59	0.59	0.93	0.93	0.93	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.2	0.0	0.0	58.8	23.8	23.8	50.7	0.0	0.0	54.1	52.7	55.1
Incr Delay (d2), s/veh	9.7	0.6	1.2	3.0	0.8	1.5	1.1	0.0	0.0	2.3	0.6	17.4
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	6.3	0.1	0.3	1.6	6.3	6.8	7.1	0.0	0.0	3.8	2.5	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.9	0.6	1.2	61.9	24.6	25.3	51.8	0.0	0.0	56.4	53.3	72.5
LnGrp LOS	D	A	A	E	C	C	D	A	A	E	D	E
Approach Vol, veh/h		1595			995			462			337	
Approach Delay, s/veh		8.3			26.7			51.8			62.1	
Approach LOS		A			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.8	72.7		17.6	21.9	60.6		24.8
Change Period (Y+Rc), s	4.4	* 5.4		4.9	4.4	5.4		4.9
Max Green Setting (Gmax), s	9.6	* 48		16.1	25.8	30.4		33.1
Max Q Clear Time (g_c+I1), s	5.4	2.0		12.5	17.3	17.6		17.7
Green Ext Time (p_c), s	0.0	34.6		0.3	0.2	8.8		0.8

Intersection Summary	
HCM 6th Ctrl Delay	25.0
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)	90	79	71	212	18	184	144	754	134	340	587	116
Future Volume (veh/h)	90	79	71	212	18	184	144	754	134	340	587	116
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	115	101	91	287	-22	222	155	811	144	382	660	130
Peak Hour Factor	0.78	0.78	0.78	0.83	0.83	0.83	0.93	0.93	0.93	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	145	153	128	579	0	278	208	2053	362	434	2303	447
Arrive On Green	0.08	0.08	0.08	0.16	0.00	0.16	0.06	0.48	0.48	0.25	1.00	1.00
Sat Flow, veh/h	1767	1856	1555	3534	-168	1696	3428	4321	761	3428	4257	827
Grp Volume(v), veh/h	115	101	91	287	0	200	155	633	322	382	522	268
Grp Sat Flow(s),veh/h/ln	1767	1856	1555	1767	0	1528	1714	1689	1705	1714	1689	1707
Q Serve(g_s), s	8.0	6.6	7.1	9.2	0.0	15.7	5.6	15.1	15.3	13.4	0.0	0.0
Cycle Q Clear(g_c), s	8.0	6.6	7.1	9.2	0.0	15.7	5.6	15.1	15.3	13.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.11	1.00		0.45	1.00		0.48
Lane Grp Cap(c), veh/h	145	153	128	579	0	251	208	1605	810	434	1827	923
V/C Ratio(X)	0.79	0.66	0.71	0.50	0.00	0.80	0.74	0.39	0.40	0.88	0.29	0.29
Avail Cap(c_a), veh/h	206	217	182	987	0	427	291	1605	810	592	1827	923
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	0.94	0.00	0.94	0.82	0.82	0.82	0.92	0.92	0.92
Uniform Delay (d), s/veh	56.3	55.7	55.9	47.5	0.0	49.1	57.7	21.2	21.2	45.8	0.0	0.0
Incr Delay (d2), s/veh	8.0	1.8	2.8	0.2	0.0	2.1	2.8	0.6	1.2	8.4	0.4	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	3.9	3.2	2.9	4.1	0.0	6.0	2.5	6.0	6.3	5.4	0.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.3	57.5	58.7	47.8	0.0	51.2	60.6	21.8	22.4	54.2	0.4	0.7
LnGrp LOS	E	E	E	D	A	D	E	C	C	D	A	A
Approach Vol, veh/h		307			487			1110			1172	
Approach Delay, s/veh		60.4			49.2			27.4			18.0	
Approach LOS		E			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	30.2	64.5		14.7	12.0	72.7		25.6
Change Period (Y+Rc), s	4.4	* 5.1		4.4	4.4	5.1		5.1
Max Green Setting (Gmax), s	21.6	* 35		14.6	10.6	45.9		34.9
Max Q Clear Time (g_c+I1), s	15.4	17.3		10.0	7.6	2.0		17.7
Green Ext Time (p_c), s	0.4	12.6		0.3	0.1	15.9		1.3

Intersection Summary	
HCM 6th Ctrl Delay	30.6
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)	122	50	147	57	60	101	221	672	19	144	772	31
Future Volume (veh/h)	122	50	147	57	60	101	221	672	19	144	772	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	118	81	163	64	67	113	251	764	22	160	858	34
Peak Hour Factor	0.90	0.90	0.90	0.89	0.89	0.89	0.88	0.88	0.88	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	213	224	187	188	198	163	276	2611	75	184	2319	92
Arrive On Green	0.12	0.12	0.12	0.11	0.11	0.11	0.21	0.69	0.69	0.21	0.93	0.93
Sat Flow, veh/h	1767	1856	1553	1767	1856	1529	1767	5058	145	1767	4998	198
Grp Volume(v), veh/h	118	81	163	64	67	113	251	510	276	160	579	313
Grp Sat Flow(s),veh/h/ln	1767	1856	1553	1767	1856	1529	1767	1689	1826	1767	1689	1819
Q Serve(g_s), s	7.9	5.0	12.9	4.2	4.2	8.9	17.3	7.4	7.4	10.9	2.4	2.4
Cycle Q Clear(g_c), s	7.9	5.0	12.9	4.2	4.2	8.9	17.3	7.4	7.4	10.9	2.4	2.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.08	1.00		0.11
Lane Grp Cap(c), veh/h	213	224	187	188	198	163	276	1743	943	184	1567	844
V/C Ratio(X)	0.55	0.36	0.87	0.34	0.34	0.69	0.91	0.29	0.29	0.87	0.37	0.37
Avail Cap(c_a), veh/h	228	239	200	481	505	416	362	1743	943	270	1567	844
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.89	0.89	0.89	0.75	0.75	0.75
Uniform Delay (d), s/veh	51.8	50.6	54.0	51.8	51.8	53.9	48.6	10.6	10.6	48.7	2.5	2.5
Incr Delay (d2), s/veh	1.2	0.4	28.7	0.4	0.4	2.0	17.6	0.4	0.7	10.5	0.5	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	3.6	2.4	6.5	1.9	2.0	3.5	8.6	2.6	2.9	4.8	0.7	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.0	50.9	82.8	52.2	52.1	55.9	66.3	11.0	11.3	59.2	3.0	3.4
LnGrp LOS	D	D	F	D	D	E	E	B	B	E	A	A
Approach Vol, veh/h		362			244			1037			1052	
Approach Delay, s/veh		65.9			53.9			24.5			11.7	
Approach LOS		E			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.4	69.4		20.0	23.9	62.9		18.2
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9
Max Green Setting (Gmax), s	19.1	36.7		16.1	25.6	30.2		34.0
Max Q Clear Time (g_c+I1), s	12.9	9.4		14.9	19.3	4.4		10.9
Green Ext Time (p_c), s	0.1	13.9		0.2	0.2	16.4		0.5

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

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	36	68	34	19	64	27	518	53	110	587	19
Future Volume (veh/h)	39	36	68	34	19	64	27	518	53	110	587	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	45	41	78	40	22	74	28	540	55	121	645	21
Peak Hour Factor	0.87	0.87	0.87	0.86	0.86	0.86	0.96	0.96	0.96	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	238	145	244	330	58	195	48	1158	118	155	1460	48
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.03	0.36	0.36	0.09	0.42	0.42
Sat Flow, veh/h	520	932	1566	1259	373	1254	1767	3228	328	1767	3484	113
Grp Volume(v), veh/h	86	0	78	40	0	96	28	294	301	121	326	340
Grp Sat Flow(s),veh/h/ln	1452	0	1566	1259	0	1627	1767	1763	1793	1767	1763	1835
Q Serve(g_s), s	0.1	0.0	1.5	1.0	0.0	1.8	0.5	4.5	4.5	2.3	4.6	4.6
Cycle Q Clear(g_c), s	2.0	0.0	1.5	3.0	0.0	1.8	0.5	4.5	4.5	2.3	4.6	4.6
Prop In Lane	0.52		1.00	1.00		0.77	1.00		0.18	1.00		0.06
Lane Grp Cap(c), veh/h	383	0	244	330	0	254	48	632	643	155	739	769
V/C Ratio(X)	0.22	0.00	0.32	0.12	0.00	0.38	0.58	0.47	0.47	0.78	0.44	0.44
Avail Cap(c_a), veh/h	1356	0	1255	1129	0	1285	303	1286	1309	657	1660	1727
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.1	0.0	13.1	14.7	0.0	13.2	16.8	8.6	8.6	15.6	7.2	7.2
Incr Delay (d2), s/veh	0.1	0.0	0.3	0.1	0.0	0.3	4.1	0.7	0.7	3.2	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.5	0.3	0.0	0.6	0.2	1.3	1.3	0.9	1.3	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.2	0.0	13.4	14.7	0.0	13.6	20.9	9.4	9.4	18.8	8.0	8.0
LnGrp LOS	B	A	B	B	A	B	C	A	A	B	A	A
Approach Vol, veh/h		164			136			623			787	
Approach Delay, s/veh		13.3			13.9			9.9			9.7	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.1	18.0		9.9	5.0	20.1		9.9
Change Period (Y+Rc), s	4.0	5.5		* 4.4	4.0	* 5.5		4.4
Max Green Setting (Gmax), s	13.0	25.5		* 28	6.0	* 33		27.6
Max Q Clear Time (g_c+I1), s	4.3	6.5		4.0	2.5	6.6		5.0
Green Ext Time (p_c), s	0.1	4.8		0.4	0.0	7.9		0.4

Intersection Summary	
HCM 6th Ctrl Delay	10.4
HCM 6th LOS	B

Notes

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

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (veh/h)	36	77	0	577	50	82	599
Future Volume (veh/h)	36	77	0	577	50	82	599
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No
Adj Sat Flow, veh/h/ln	1856	1856		1856	1856	1856	1856
Adj Flow Rate, veh/h	40	85		695	60	96	705
Peak Hour Factor	0.91	0.91		0.83	0.83	0.85	0.85
Percent Heavy Veh, %	3	3		3	3	3	3
Cap, veh/h	147	131		1409	122	126	2199
Arrive On Green	0.08	0.08		0.43	0.43	0.07	0.62
Sat Flow, veh/h	1767	1572		3376	283	1767	3618
Grp Volume(v), veh/h	40	85		373	382	96	705
Grp Sat Flow(s),veh/h/ln	1767	1572		1763	1804	1767	1763
Q Serve(g_s), s	0.7	1.7		5.0	5.0	1.7	3.1
Cycle Q Clear(g_c), s	0.7	1.7		5.0	5.0	1.7	3.1
Prop In Lane	1.00	1.00			0.16	1.00	
Lane Grp Cap(c), veh/h	147	131		756	774	126	2199
V/C Ratio(X)	0.27	0.65		0.49	0.49	0.76	0.32
Avail Cap(c_a), veh/h	1417	1261		1603	1641	599	3837
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	13.9	14.4		6.7	6.7	14.8	2.9
Incr Delay (d2), s/veh	0.4	2.0		0.7	0.7	3.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.6		1.2	1.3	0.7	0.3
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	14.3	16.4		7.4	7.4	18.3	3.0
LnGrp LOS	B	B		A	A	B	A
Approach Vol, veh/h	125			755			801
Approach Delay, s/veh	15.7			7.4			4.9
Approach LOS	B			A			A

Timer - Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	6.3	19.4				25.7		6.7
Change Period (Y+Rc), s	4.0	5.5				* 5.5		4.0
Max Green Setting (Gmax), s	11.3	29.5				* 35		26.0
Max Q Clear Time (g_c+I1), s	3.7	7.0				5.1		3.7
Green Ext Time (p_c), s	0.1	6.9				9.6		0.2

Intersection Summary	
HCM 6th Ctrl Delay	6.8
HCM 6th LOS	A

Notes

User approved ignoring U-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)	12	3	24	49	1	25	18	599	55	40	574	19
Future Volume (veh/h)	12	3	24	49	1	25	18	599	55	40	574	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		1.00	1.00		0.96	1.00		0.99	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	16	4	32	58	1	29	19	637	59	47	667	22
Peak Hour Factor	0.75	0.75	0.75	0.85	0.85	0.85	0.94	0.94	0.94	0.86	0.86	0.86
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	169	44	136	393	5	213	34	1328	123	73	1495	49
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.02	0.41	0.41	0.04	0.43	0.43
Sat Flow, veh/h	289	313	963	1410	37	1509	1767	3259	301	1767	3479	115
Grp Volume(v), veh/h	52	0	0	59	0	29	19	344	352	47	338	351
Grp Sat Flow(s),veh/h/ln	1565	0	0	1446	0	1509	1767	1763	1797	1767	1763	1831
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.0	0.6	0.4	5.3	5.3	1.0	5.0	5.0
Cycle Q Clear(g_c), s	1.0	0.0	0.0	1.1	0.0	0.6	0.4	5.3	5.3	1.0	5.0	5.0
Prop In Lane	0.31		0.62	0.98		1.00	1.00		0.17	1.00		0.06
Lane Grp Cap(c), veh/h	349	0	0	398	0	213	34	718	733	73	758	787
V/C Ratio(X)	0.15	0.00	0.00	0.15	0.00	0.14	0.56	0.48	0.48	0.64	0.45	0.45
Avail Cap(c_a), veh/h	1241	0	0	1210	0	1109	220	1444	1472	364	1592	1654
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.0	0.0	0.0	14.1	0.0	13.9	17.9	8.0	8.0	17.4	7.4	7.4
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.1	5.3	0.7	0.7	3.5	0.9	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	0.3	0.0	0.0	0.4	0.0	0.2	0.2	1.5	1.5	0.4	1.4	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.1	0.0	0.0	14.1	0.0	14.0	23.2	8.7	8.7	20.9	8.3	8.3
LnGrp LOS	B	A	A	B	A	B	C	A	A	C	A	A
Approach Vol, veh/h		52			88			715			736	
Approach Delay, s/veh		14.1			14.1			9.1			9.1	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.9	20.8		10.1	5.1	21.6		10.1
Change Period (Y+Rc), s	4.4	5.8		4.9	4.4	* 5.8		4.9
Max Green Setting (Gmax), s	7.6	30.2		27.1	4.6	* 33		27.1
Max Q Clear Time (g_c+I1), s	3.0	7.3		3.0	2.4	7.0		3.1
Green Ext Time (p_c), s	0.0	6.3		0.1	0.0	8.9		0.2

Intersection Summary	
HCM 6th Ctrl Delay	9.6
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

* 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	1359	1292	0	1428	139	793	103	894	0	0	0
Future Volume (veh/h)	0	1359	1292	0	1428	139	793	103	894	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	0	1446	1374	0	1569	153	875	0	903			
Peak Hour Factor	0.94	0.94	0.94	0.91	0.91	0.91	0.99	0.99	0.99			
Percent Heavy Veh, %	0	3	3	0	3	3	3	3	3			
Cap, veh/h	0	2769	2451	0	1927	849	1197	0	1065			
Arrive On Green	0.00	1.00	1.00	0.00	0.55	0.55	0.34	0.00	0.34			
Sat Flow, veh/h	0	5233	2768	0	3618	1552	3534	0	3145			
Grp Volume(v), veh/h	0	1446	1374	0	1569	153	875	0	903			
Grp Sat Flow(s),veh/h/ln	0	1689	1384	0	1763	1552	1767	0	1572			
Q Serve(g_s), s	0.0	0.0	0.0	0.0	40.0	5.5	23.9	0.0	29.3			
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	40.0	5.5	23.9	0.0	29.3			
Prop In Lane	0.00		1.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	2769	2451	0	1927	849	1197	0	1065			
V/C Ratio(X)	0.00	0.52	0.56	0.00	0.81	0.18	0.73	0.00	0.85			
Avail Cap(c_a), veh/h	0	2769	2451	0	1927	849	1366	0	1215			
HCM Platoon Ratio	1.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	0.78	0.78	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	20.4	12.5	32.0	0.0	33.7			
Incr Delay (d2), s/veh	0.0	0.6	0.7	0.0	3.9	0.5	1.8	0.0	5.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.2	0.0	15.6	1.9	10.4	0.0	11.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.6	0.7	0.0	24.3	13.0	33.7	0.0	38.9			
LnGrp LOS	A	A	A	A	C	B	C	A	D			
Approach Vol, veh/h		2820			1722			1778				
Approach Delay, s/veh		0.6			23.3			36.4				
Approach LOS		A			C			D				

Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		67.6				67.6		42.4				
Change Period (Y+Rc), s		7.5				7.5		5.1				
Max Green Setting (Gmax), s		54.9				54.9		42.5				
Max Q Clear Time (g_c+I1), s		2.0				42.0		31.3				
Green Ext Time (p_c), s		30.5				8.7		6.0				

Intersection Summary		
HCM 6th Ctrl Delay		16.9
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2261	606	0	1550	530	0	0	0	178	10	0
Future Volume (veh/h)	0	2261	606	0	1550	530	0	0	0	178	10	0
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856				1856	1856	0
Adj Flow Rate, veh/h	0	2331	625	0	1632	0				191	0	0
Peak Hour Factor	0.97	0.97	0.97	0.95	0.95	0.95				0.97	0.97	0.97
Percent Heavy Veh, %	0	3	3	0	3	3				3	3	0
Cap, veh/h	0	4105	1274	0	2857					265	139	0
Arrive On Green	0.00	0.81	0.81	0.00	1.00	0.00				0.08	0.00	0.00
Sat Flow, veh/h	0	5233	1572	0	3618	1572				3534	1856	0
Grp Volume(v), veh/h	0	2331	625	0	1632	0				191	0	0
Grp Sat Flow(s),veh/h/ln	0	1689	1572	0	1763	1572				1767	1856	0
Q Serve(g_s), s	0.0	17.8	13.8	0.0	0.0	0.0				5.8	0.0	0.0
Cycle Q Clear(g_c), s	0.0	17.8	13.8	0.0	0.0	0.0				5.8	0.0	0.0
Prop In Lane	0.00		1.00	0.00		1.00				1.00		0.00
Lane Grp Cap(c), veh/h	0	4105	1274	0	2857					265	139	0
V/C Ratio(X)	0.00	0.57	0.49	0.00	0.57					0.72	0.00	0.00
Avail Cap(c_a), veh/h	0	4105	1274	0	2857					639	336	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.41	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	3.7	3.3	0.0	0.0	0.0				49.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	1.4	0.0	0.3	0.0				3.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.5	2.8	0.0	0.1	0.0				2.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	4.2	4.6	0.0	0.3	0.0				53.4	0.0	0.0
LnGrp LOS	A	A	A	A	A					D	A	A
Approach Vol, veh/h		2956			1632	A					191	
Approach Delay, s/veh		4.3			0.3						53.4	
Approach LOS		A			A						D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		96.6		13.4		96.6
Change Period (Y+Rc), s		7.5		5.1		7.5
Max Green Setting (Gmax), s		77.5		19.9		77.5
Max Q Clear Time (g_c+I1), s		19.8		7.8		2.0
Green Ext Time (p_c), s		39.8		0.5		19.7

Intersection Summary	
HCM 6th Ctrl Delay	4.9
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	103	6	55	392	673	0	0	313	366
Future Volume (veh/h)	0	0	0	103	6	55	392	673	0	0	313	366
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1856	1856	1856	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				113	7	60	445	765	0	0	373	436
Peak Hour Factor				0.91	0.91	0.91	0.88	0.88	0.88	0.84	0.84	0.84
Percent Heavy Veh, %				3	3	3	3	3	0	0	3	3
Cap, veh/h				205	13	193	538	2533	0	0	1786	1372
Arrive On Green				0.12	0.12	0.12	0.16	0.72	0.00	0.00	0.51	0.51
Sat Flow, veh/h				1669	103	1572	3428	3618	0	0	3618	2708
Grp Volume(v), veh/h				120	0	60	445	765	0	0	373	436
Grp Sat Flow(s),veh/h/ln				1772	0	1572	1714	1763	0	0	1763	1354
Q Serve(g_s), s				5.1	0.0	2.8	10.1	6.2	0.0	0.0	4.7	7.6
Cycle Q Clear(g_c), s				5.1	0.0	2.8	10.1	6.2	0.0	0.0	4.7	7.6
Prop In Lane				0.94		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				217	0	193	538	2533	0	0	1786	1372
V/C Ratio(X)				0.55	0.00	0.31	0.83	0.30	0.00	0.00	0.21	0.32
Avail Cap(c_a), veh/h				509	0	452	776	2533	0	0	1786	1372
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.96	0.96	0.00	0.00	0.97	0.97
Uniform Delay (d), s/veh				33.0	0.0	32.0	32.7	4.0	0.0	0.0	10.9	11.6
Incr Delay (d2), s/veh				0.8	0.0	0.3	3.2	0.3	0.0	0.0	0.3	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
%ile BackOfQ(50%),veh/ln				2.1	0.0	1.0	4.1	1.4	0.0	0.0	1.6	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				33.8	0.0	32.3	35.9	4.3	0.0	0.0	11.1	12.2
LnGrp LOS				C	A	C	D	A	A	A	B	B
Approach Vol, veh/h					180			1210			809	
Approach Delay, s/veh					33.3			15.9			11.7	
Approach LOS					C			B			B	

Timer - Assigned Phs	2	5	6	8
Phs Duration (G+Y+Rc), s	63.2	17.0	46.2	16.8
Change Period (Y+Rc), s	* 5.7	4.4	5.7	7.0
Max Green Setting (Gmax), s	* 45	18.1	21.8	23.0
Max Q Clear Time (g_c+I1), s	8.2	12.1	9.6	7.1
Green Ext Time (p_c), s	3.9	0.5	4.1	0.4

Intersection Summary	
HCM 6th Ctrl Delay	15.8
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)	335	0	261	0	0	0	0	634	146	21	296	0
Future Volume (veh/h)	335	0	261	0	0	0	0	634	146	21	296	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856				0	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	404	0	314				0	737	170	25	357	0
Peak Hour Factor	0.83	0.83	0.83				0.86	0.86	0.86	0.83	0.83	0.83
Percent Heavy Veh, %	3	3	3				0	3	3	3	3	0
Cap, veh/h	599	0	528				0	3267	731	38	2461	0
Arrive On Green	0.17	0.00	0.17				0.00	0.62	0.62	0.04	1.00	0.00
Sat Flow, veh/h	3534	0	3117				0	5514	1176	1767	3618	0
Grp Volume(v), veh/h	404	0	314				0	669	238	25	357	0
Grp Sat Flow(s),veh/h/ln	1767	0	1559				0	1596	1643	1767	1763	0
Q Serve(g_s), s	8.6	0.0	7.4				0.0	4.9	5.1	1.1	0.0	0.0
Cycle Q Clear(g_c), s	8.6	0.0	7.4				0.0	4.9	5.1	1.1	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.72	1.00		0.00
Lane Grp Cap(c), veh/h	599	0	528				0	2976	1021	38	2461	0
V/C Ratio(X)	0.67	0.00	0.59				0.00	0.22	0.23	0.66	0.15	0.00
Avail Cap(c_a), veh/h	1149	0	1013				0	2976	1021	477	2461	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.99	0.99	0.00
Uniform Delay (d), s/veh	31.2	0.0	30.7				0.0	6.7	6.7	38.0	0.0	0.0
Incr Delay (d2), s/veh	1.3	0.0	1.1				0.0	0.2	0.5	7.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	0.0	2.8				0.0	1.3	1.5	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.5	0.0	31.8				0.0	6.8	7.2	45.2	0.1	0.0
LnGrp LOS	C	A	C				A	A	A	D	A	A
Approach Vol, veh/h		718						907			382	
Approach Delay, s/veh		32.2						6.9			3.1	
Approach LOS		C						A			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.1	55.4		18.5		61.5
Change Period (Y+Rc), s	4.4	* 5.7		4.9		5.7
Max Green Setting (Gmax), s	21.6	* 18		26.0		43.4
Max Q Clear Time (g_c+I1), s	10.1	7.1		10.6		2.0
Green Ext Time (p_c), s	0.0	5.1		2.6		1.6

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

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.

User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	228	1663	73	124	840	66	46	46	40	65	37	49
Future Volume (veh/h)	228	1663	73	124	840	66	46	46	40	65	37	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	248	1808	79	131	884	69	55	55	48	84	48	64
Peak Hour Factor	0.92	0.92	0.92	0.95	0.95	0.95	0.83	0.83	0.83	0.77	0.77	0.77
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	286	2287	100	162	1867	145	119	62	54	244	97	130
Arrive On Green	0.16	0.46	0.46	0.09	0.39	0.39	0.07	0.07	0.07	0.14	0.14	0.14
Sat Flow, veh/h	1767	4976	217	1767	4789	373	1767	912	796	1767	704	938
Grp Volume(v), veh/h	248	1226	661	131	623	330	55	0	103	84	0	112
Grp Sat Flow(s),veh/h/ln	1767	1689	1816	1767	1689	1784	1767	0	1708	1767	0	1642
Q Serve(g_s), s	11.9	26.9	27.0	6.3	12.0	12.1	2.6	0.0	5.2	3.8	0.0	5.5
Cycle Q Clear(g_c), s	11.9	26.9	27.0	6.3	12.0	12.1	2.6	0.0	5.2	3.8	0.0	5.5
Prop In Lane	1.00		0.12	1.00		0.21	1.00		0.47	1.00		0.57
Lane Grp Cap(c), veh/h	286	1552	835	162	1316	696	119	0	115	244	0	227
V/C Ratio(X)	0.87	0.79	0.79	0.81	0.47	0.48	0.46	0.00	0.89	0.34	0.00	0.49
Avail Cap(c_a), veh/h	437	1660	893	202	1316	696	119	0	115	810	0	753
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	35.7	20.0	20.0	38.9	19.9	19.9	39.2	0.0	40.4	34.0	0.0	34.8
Incr Delay (d2), s/veh	7.5	2.7	5.0	14.0	0.4	0.7	1.0	0.0	50.6	0.3	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	5.3	9.3	10.6	3.2	4.2	4.5	1.2	0.0	3.8	1.6	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.2	22.7	25.0	52.9	20.3	20.7	40.2	0.0	90.9	34.3	0.0	35.4
LnGrp LOS	D	C	C	D	C	C	D	A	F	C	A	D
Approach Vol, veh/h		2135			1084			158			196	
Approach Delay, s/veh		25.8			24.3			73.3			35.0	
Approach LOS		C			C			E			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.4	47.1		16.9	18.5	41.0		10.8
Change Period (Y+Rc), s	4.4	7.0		4.9	4.4	* 7		4.9
Max Green Setting (Gmax), s	10.6	42.9		40.0	21.6	* 32		5.9
Max Q Clear Time (g_c+I1), s	8.3	29.0		7.5	13.9	14.1		7.2
Green Ext Time (p_c), s	0.0	11.1		0.5	0.2	7.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	28.0
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)	360	1423	22	46	783	279	30	27	23	275	30	211
Future Volume (veh/h)	360	1423	22	46	783	279	30	27	23	275	30	211
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	383	1514	23	51	870	310	40	36	31	390	0	278
Peak Hour Factor	0.94	0.94	0.94	0.90	0.90	0.90	0.75	0.75	0.75	0.76	0.76	0.76
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	479	2555	39	64	1447	513	107	97	84	401	0	176
Arrive On Green	0.14	0.50	0.50	0.04	0.39	0.39	0.08	0.08	0.08	0.11	0.00	0.11
Sat Flow, veh/h	3428	5138	78	1767	3672	1302	1267	1154	1003	3534	0	1547
Grp Volume(v), veh/h	383	995	542	51	800	380	57	0	50	390	0	278
Grp Sat Flow(s),veh/h/ln	1714	1689	1839	1767	1689	1597	1792	0	1631	1767	0	1547
Q Serve(g_s), s	8.6	16.7	16.7	2.3	14.9	15.0	2.4	0.0	2.3	8.7	0.0	9.0
Cycle Q Clear(g_c), s	8.6	16.7	16.7	2.3	14.9	15.0	2.4	0.0	2.3	8.7	0.0	9.0
Prop In Lane	1.00		0.04	1.00		0.82	0.71		0.61	1.00		1.00
Lane Grp Cap(c), veh/h	479	1679	914	64	1331	629	151	0	137	401	0	176
V/C Ratio(X)	0.80	0.59	0.59	0.79	0.60	0.60	0.37	0.00	0.37	0.97	0.00	1.58
Avail Cap(c_a), veh/h	848	2015	1097	165	1495	707	791	0	720	401	0	176
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	33.0	14.2	14.2	37.9	19.1	19.1	34.3	0.0	34.3	35.0	0.0	35.1
Incr Delay (d2), s/veh	1.2	0.9	1.6	7.9	0.9	1.9	2.2	0.0	2.3	37.6	0.0	287.4
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	8.3	5.2	5.8	1.0	5.1	5.0	1.1	0.0	1.0	5.6	0.0	17.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.2	15.1	15.8	45.8	20.0	21.0	36.5	0.0	36.6	72.6	0.0	322.6
LnGrp LOS	C	B	B	D	B	C	D	A	D	E	A	F
Approach Vol, veh/h		1920			1231			107			668	
Approach Delay, s/veh		19.1			21.4			36.6			176.6	
Approach LOS		B			C			D			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.3	45.4		15.0	15.5	37.2		11.6
Change Period (Y+Rc), s	4.4	6.0		6.0	4.4	6.0		4.9
Max Green Setting (Gmax), s	7.4	47.3		9.0	19.6	35.1		35.0
Max Q Clear Time (g_c+I1), s	4.3	18.7		11.0	10.6	17.0		4.4
Green Ext Time (p_c), s	0.0	20.8		0.0	0.5	10.6		0.8

Intersection Summary	
HCM 6th Ctrl Delay	47.1
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	513	762	364	207	365	18	344	809	60	12	622	328
Future Volume (veh/h)	513	762	364	207	365	18	344	809	60	12	622	328
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		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	546	811	349	249	440	22	374	879	65	13	662	314
Peak Hour Factor	0.94	0.94	0.94	0.83	0.83	0.83	0.92	0.92	0.92	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	612	984	432	276	1233	61	432	1280	95	21	929	405
Arrive On Green	0.18	0.28	0.28	0.16	0.25	0.25	0.13	0.39	0.39	0.01	0.26	0.26
Sat Flow, veh/h	3428	3526	1546	1767	4942	245	3428	3322	246	1767	3526	1535
Grp Volume(v), veh/h	546	811	349	249	300	162	374	466	478	13	662	314
Grp Sat Flow(s),veh/h/ln	1714	1763	1546	1767	1689	1810	1714	1763	1805	1767	1763	1535
Q Serve(g_s), s	19.4	26.8	26.1	17.2	9.1	9.2	13.3	27.5	27.5	0.9	21.2	23.6
Cycle Q Clear(g_c), s	19.4	26.8	26.1	17.2	9.1	9.2	13.3	27.5	27.5	0.9	21.2	23.6
Prop In Lane	1.00		1.00	1.00		0.14	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	612	984	432	276	842	452	432	679	695	21	929	405
V/C Ratio(X)	0.89	0.82	0.81	0.90	0.36	0.36	0.87	0.69	0.69	0.63	0.71	0.78
Avail Cap(c_a), veh/h	929	1188	521	361	926	496	565	799	818	77	1168	509
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.9	42.0	41.7	51.6	38.4	38.5	53.3	32.0	32.0	61.2	41.5	42.4
Incr Delay (d2), s/veh	5.3	4.3	8.2	18.4	0.3	0.6	8.9	2.2	2.1	11.3	1.7	6.3
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	8.4	11.6	10.6	8.8	3.7	4.1	6.1	11.6	11.9	0.5	9.2	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.2	46.3	50.0	70.0	38.8	39.1	62.2	34.2	34.1	72.5	43.2	48.7
LnGrp LOS	E	D	D	E	D	D	E	C	C	E	D	D
Approach Vol, veh/h		1706			711			1318			989	
Approach Delay, s/veh		49.9			49.8			42.1			45.3	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.0	54.5	23.0	41.8	20.2	39.4	26.7	38.1
Change Period (Y+Rc), s	3.6	6.6	3.6	7.1	4.5	* 6.6	4.5	* 7.1
Max Green Setting (Gmax), s	5.4	56.4	25.4	41.9	20.5	* 41	33.7	* 34
Max Q Clear Time (g_c+I1), s	2.9	29.5	19.2	28.8	15.3	25.6	21.4	11.2
Green Ext Time (p_c), s	0.0	7.4	0.2	5.9	0.4	5.8	0.8	3.1

Intersection Summary	
HCM 6th Ctrl Delay	46.8
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)	62	3	18	22	6	23	49	518	47	43	468	88
Future Volume (veh/h)	62	3	18	22	6	23	49	518	47	43	468	88
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	0.99		0.98	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	83	4	24	26	7	27	55	582	53	46	498	94
Peak Hour Factor	0.75	0.75	0.75	0.85	0.85	0.85	0.89	0.89	0.89	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	308	20	44	203	56	99	123	1250	114	108	1110	208
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.07	0.38	0.38	0.06	0.37	0.37
Sat Flow, veh/h	1025	144	323	477	406	723	1767	3256	296	1767	2960	556
Grp Volume(v), veh/h	111	0	0	60	0	0	55	314	321	46	296	296
Grp Sat Flow(s),veh/h/ln	1492	0	0	1606	0	0	1767	1763	1789	1767	1763	1753
Q Serve(g_s), s	1.2	0.0	0.0	0.0	0.0	0.0	1.1	5.0	5.1	0.9	4.7	4.8
Cycle Q Clear(g_c), s	2.4	0.0	0.0	1.2	0.0	0.0	1.1	5.0	5.1	0.9	4.7	4.8
Prop In Lane	0.75		0.22	0.43		0.45	1.00		0.17	1.00		0.32
Lane Grp Cap(c), veh/h	373	0	0	358	0	0	123	676	687	108	661	657
V/C Ratio(X)	0.30	0.00	0.00	0.17	0.00	0.00	0.45	0.46	0.47	0.43	0.45	0.45
Avail Cap(c_a), veh/h	1393	0	0	1463	0	0	452	1567	1591	405	1516	1507
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.0	0.0	0.0	14.5	0.0	0.0	16.8	8.7	8.7	17.0	8.8	8.8
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.1	0.0	0.0	0.9	1.0	1.0	1.0	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	0.4	0.0	0.0	0.4	1.4	1.4	0.3	1.3	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.1	0.0	0.0	14.6	0.0	0.0	17.7	9.7	9.7	18.0	9.6	9.6
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		111			60			690			638	
Approach Delay, s/veh		15.1			14.6			10.3			10.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.7	20.1		10.8	7.0	19.8		10.8
Change Period (Y+Rc), s	4.4	* 5.7		* 5.6	4.4	5.7		5.6
Max Green Setting (Gmax), s	8.6	* 33		* 33	9.6	32.3		32.4
Max Q Clear Time (g_c+I1), s	2.9	7.1		3.2	3.1	6.8		4.4
Green Ext Time (p_c), s	0.0	7.1		0.2	0.0	5.8		0.4

Intersection Summary	
HCM 6th Ctrl Delay	10.8
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)	138	507	8	15	504	73	4	1	6	38	2	128
Future Volume (veh/h)	138	507	8	15	504	73	4	1	6	38	2	128
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.83	0.99		0.96	0.97		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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	157	576	9	17	573	83	5	1	8	51	3	171
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	192	1642	26	27	1109	160	217	59	300	146	33	421
Arrive On Green	0.11	0.46	0.46	0.02	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
Sat Flow, veh/h	1767	3552	55	1767	3006	433	453	162	821	273	90	1149
Grp Volume(v), veh/h	157	286	299	17	335	321	14	0	0	225	0	0
Grp Sat Flow(s),veh/h/ln	1767	1763	1845	1767	1763	1676	1436	0	0	1511	0	0
Q Serve(g_s), s	8.3	10.0	10.0	0.9	14.2	14.4	0.0	0.0	0.0	3.5	0.0	0.0
Cycle Q Clear(g_c), s	8.3	10.0	10.0	0.9	14.2	14.4	0.5	0.0	0.0	10.2	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.26	0.36		0.57	0.23		0.76
Lane Grp Cap(c), veh/h	192	815	853	27	650	618	577	0	0	599	0	0
V/C Ratio(X)	0.82	0.35	0.35	0.63	0.51	0.52	0.02	0.00	0.00	0.38	0.00	0.00
Avail Cap(c_a), veh/h	343	815	853	103	650	618	577	0	0	599	0	0
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	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	41.8	16.5	16.5	46.9	23.6	23.6	19.4	0.0	0.0	22.4	0.0	0.0
Incr Delay (d2), s/veh	8.3	1.2	1.1	22.1	2.9	3.1	0.1	0.0	0.0	1.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	4.0	4.2	0.6	6.1	5.9	0.2	0.0	0.0	4.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.1	17.7	17.7	69.0	26.5	26.7	19.5	0.0	0.0	24.2	0.0	0.0
LnGrp LOS	D	B	B	E	C	C	B	A	A	C	A	A
Approach Vol, veh/h		742			673			14			225	
Approach Delay, s/veh		24.6			27.7			19.5			24.2	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.8	41.1		40.0	5.9	50.0		40.0
Change Period (Y+Rc), s	4.4	* 5.7		4.9	4.4	5.7		4.9
Max Green Setting (Gmax), s	18.6	* 32		35.1	5.6	44.3		35.1
Max Q Clear Time (g_c+I1), s	10.3	16.4		12.2	2.9	12.0		2.5
Green Ext Time (p_c), s	0.2	3.4		1.5	0.0	3.5		0.0

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.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	161	288	34	168	228	179	33	155	153	179	201	50
Future Volume (veh/h)	161	288	34	168	228	179	33	155	153	179	201	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	181	324	38	175	238	186	36	168	166	211	236	59
Peak Hour Factor	0.89	0.89	0.89	0.96	0.96	0.96	0.92	0.92	0.92	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	220	1012	118	214	599	446	47	358	309	252	894	219
Arrive On Green	0.12	0.32	0.32	0.12	0.31	0.31	0.03	0.20	0.20	0.14	0.32	0.32
Sat Flow, veh/h	1767	3178	370	1767	1903	1417	1767	1763	1518	1767	2801	685
Grp Volume(v), veh/h	181	178	184	175	220	204	36	168	166	211	147	148
Grp Sat Flow(s),veh/h/ln	1767	1763	1785	1767	1763	1558	1767	1763	1518	1767	1763	1723
Q Serve(g_s), s	8.8	6.8	6.9	8.5	8.6	9.1	1.8	7.4	8.6	10.3	5.5	5.7
Cycle Q Clear(g_c), s	8.8	6.8	6.9	8.5	8.6	9.1	1.8	7.4	8.6	10.3	5.5	5.7
Prop In Lane	1.00		0.21	1.00		0.91	1.00		1.00	1.00		0.40
Lane Grp Cap(c), veh/h	220	561	568	214	555	490	47	358	309	252	563	550
V/C Ratio(X)	0.82	0.32	0.32	0.82	0.40	0.42	0.77	0.47	0.54	0.84	0.26	0.27
Avail Cap(c_a), veh/h	392	561	568	392	555	490	134	639	550	432	936	915
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.7	22.8	22.9	37.9	23.7	23.9	42.7	31.0	31.5	36.9	22.3	22.4
Incr Delay (d2), s/veh	7.5	1.5	1.5	7.6	2.1	2.6	22.5	1.0	1.5	7.3	0.2	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	4.1	2.9	3.0	4.0	3.7	3.5	1.1	3.1	3.2	4.8	2.2	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.2	24.3	24.4	45.4	25.8	26.5	65.2	31.9	32.9	44.2	22.6	22.7
LnGrp LOS	D	C	C	D	C	C	E	C	C	D	C	C
Approach Vol, veh/h		543			599			370			506	
Approach Delay, s/veh		31.3			31.8			35.6			31.6	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	33.4	6.7	33.1	15.4	33.1	17.0	22.9
Change Period (Y+Rc), s	4.4	5.3	4.4	4.9	4.4	5.3	4.4	4.9
Max Green Setting (Gmax), s	19.6	27.8	6.7	46.9	19.6	27.8	21.6	32.0
Max Q Clear Time (g_c+I1), s	10.5	8.9	3.8	7.7	10.8	11.1	12.3	10.6
Green Ext Time (p_c), s	0.3	1.8	0.0	1.8	0.3	2.2	0.4	1.9

Intersection Summary	
HCM 6th Ctrl Delay	32.3
HCM 6th LOS	C

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	43	41	47	48	43	48
Future Vol, veh/h	43	41	47	48	43	48
Peak Hour Factor	0.88	0.88	0.75	0.75	0.75	0.75
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	49	47	63	64	57	64
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Righ	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	7.9	7.6	8.1
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	51%	47%
Vol Thru, %	49%	0%	53%
Vol Right, %	51%	49%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	95	84	91
LT Vol	0	43	43
Through Vol	47	0	48
RT Vol	48	41	0
Lane Flow Rate	127	95	121
Geometry Grp	1	1	1
Degree of Util (X)	0.138	0.114	0.145
Departure Headway (Hd)	3.909	4.299	4.312
Convergence, Y/N	Yes	Yes	Yes
Cap	902	839	821
Service Time	2	2.299	2.392
HCM Lane V/C Ratio	0.141	0.113	0.147
HCM Control Delay	7.6	7.9	8.1
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.5	0.4	0.5

Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	11	79	44	45	56
Future Vol, veh/h	11	11	79	44	45	56
Conflicting Peds, #/hr	4	3	0	7	7	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	75	75	83	83	75	75
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	15	15	95	53	60	75

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	328	132	0	0	155	0
Stage 1	129	-	-	-	-	-
Stage 2	199	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	664	915	-	-	1419	-
Stage 1	894	-	-	-	-	-
Stage 2	832	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	628	906	-	-	1410	-
Mov Cap-2 Maneuver	628	-	-	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	792	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.1	0	3.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	742	1410	-
HCM Lane V/C Ratio	-	-	0.04	0.043	-
HCM Control Delay (s)	-	-	10.1	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	1	11	44	11	11	15	127	114	16	92	13
Future Vol, veh/h	6	1	11	44	11	11	15	127	114	16	92	13
Conflicting Peds, #/hr	15	0	3	3	0	15	2	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	79	79	79	84	84	84	84	84	84
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	8	1	15	56	14	14	18	151	136	19	110	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	442	481	123	422	420	234	127	0	0	287	0	0
Stage 1	158	158	-	255	255	-	-	-	-	-	-	-
Stage 2	284	323	-	167	165	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	524	483	925	540	523	803	1453	-	-	1269	-	-
Stage 1	842	765	-	747	695	-	-	-	-	-	-	-
Stage 2	721	649	-	833	760	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	484	467	921	516	506	792	1450	-	-	1269	-	-
Mov Cap-2 Maneuver	484	467	-	516	506	-	-	-	-	-	-	-
Stage 1	828	751	-	736	685	-	-	-	-	-	-	-
Stage 2	674	639	-	803	746	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.5	12.8	0.4	1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1450	-	-	680	546	1269	-	-
HCM Lane V/C Ratio	0.012	-	-	0.035	0.153	0.015	-	-
HCM Control Delay (s)	7.5	0	-	10.5	12.8	7.9	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.5	0	-	-

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	30	7	11	8	7	9	22	21	6	42	5
Future Vol, veh/h	18	30	7	11	8	7	9	22	21	6	42	5
Peak Hour Factor	0.75	0.75	0.75	0.81	0.81	0.81	0.81	0.81	0.81	0.83	0.83	0.83
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	24	40	9	14	10	9	11	27	26	7	51	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.6	7.4	7.4	7.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	17%	33%	42%	11%
Vol Thru, %	42%	55%	31%	79%
Vol Right, %	40%	13%	27%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	52	55	26	53
LT Vol	9	18	11	6
Through Vol	22	30	8	42
RT Vol	21	7	7	5
Lane Flow Rate	64	73	32	64
Geometry Grp	1	1	1	1
Degree of Util (X)	0.071	0.085	0.037	0.074
Departure Headway (Hd)	3.976	4.187	4.153	4.15
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	890	847	851	854
Service Time	2.046	2.254	2.231	2.217
HCM Lane V/C Ratio	0.072	0.086	0.038	0.075
HCM Control Delay	7.4	7.6	7.4	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.3	0.1	0.2

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1735	966	17	0	48
Future Vol, veh/h	0	1735	966	17	0	48
Conflicting Peds, #/hr	6	0	0	6	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	94	94	86	86
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	1907	1028	18	0	56

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	529
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.93
Pot Cap-1 Maneuver	0	-	-	-	0	421
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	419
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	14.9
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	419
HCM Lane V/C Ratio	-	-	-	0.133
HCM Control Delay (s)	-	-	-	14.9
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.5

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	9	0	89	21	151	2	40	66	129	71	13
Future Vol, veh/h	11	9	0	89	21	151	2	40	66	129	71	13
Peak Hour Factor	0.75	0.75	0.75	0.86	0.86	0.86	0.77	0.77	0.77	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	15	12	0	103	24	176	3	52	86	140	77	14
Number of Lanes	0	1	0	0	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay	9.4	9.6	9.3	10.1
HCM LOS	A	A	A	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	55%	81%	0%	100%	0%
Vol Thru, %	0%	38%	45%	19%	0%	0%	85%
Vol Right, %	0%	62%	0%	0%	100%	0%	15%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	2	106	20	110	151	129	84
LT Vol	2	0	11	89	0	129	0
Through Vol	0	40	9	21	0	0	71
RT Vol	0	66	0	0	151	0	13
Lane Flow Rate	3	138	27	128	176	140	91
Geometry Grp	7	7	6	7	7	7	7
Degree of Util (X)	0.004	0.2	0.045	0.212	0.236	0.235	0.138
Departure Headway (Hd)	6.178	5.232	6.026	5.955	4.844	6.043	5.429
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	575	679	588	600	736	590	655
Service Time	3.963	3.017	4.124	3.722	2.611	3.821	3.207
HCM Lane V/C Ratio	0.005	0.203	0.046	0.213	0.239	0.237	0.139
HCM Control Delay	9	9.3	9.4	10.3	9.1	10.7	9.1
HCM Lane LOS	A	A	A	B	A	B	A
HCM 95th-tile Q	0	0.7	0.1	0.8	0.9	0.9	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	873	0	0	1453	538	358	4	890	0	0	0
Future Volume (veh/h)	235	873	0	0	1453	538	358	4	890	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	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				
Adj Sat Flow, veh/h/ln	1856	1856	0	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	253	939	0	0	1529	509	392	0	870			
Peak Hour Factor	0.93	0.93	0.93	0.95	0.95	0.95	0.92	0.92	0.92			
Percent Heavy Veh, %	3	3	0	0	3	3	3	3	3			
Cap, veh/h	357	2853	0	0	1371	609	1081	0	962			
Arrive On Green	0.21	1.00	0.00	0.00	0.39	0.39	0.31	0.00	0.31			
Sat Flow, veh/h	3428	5233	0	0	3618	1566	3534	0	3145			
Grp Volume(v), veh/h	253	939	0	0	1529	509	392	0	870			
Grp Sat Flow(s),veh/h/ln	1714	1689	0	0	1763	1566	1767	0	1572			
Q Serve(g_s), s	6.9	0.0	0.0	0.0	38.9	29.4	8.7	0.0	26.5			
Cycle Q Clear(g_c), s	6.9	0.0	0.0	0.0	38.9	29.4	8.7	0.0	26.5			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	357	2853	0	0	1371	609	1081	0	962			
V/C Ratio(X)	0.71	0.33	0.00	0.00	1.11	0.84	0.36	0.00	0.90			
Avail Cap(c_a), veh/h	357	2853	0	0	1371	609	1237	0	1101			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.64	0.64	0.00	0.00	0.49	0.49	1.00	0.00	1.00			
Uniform Delay (d), s/veh	38.2	0.0	0.0	0.0	30.5	27.7	27.1	0.0	33.3			
Incr Delay (d2), s/veh	3.5	0.2	0.0	0.0	57.3	6.7	0.1	0.0	9.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.8	0.1	0.0	0.0	26.5	11.6	3.6	0.0	11.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.7	0.2	0.0	0.0	87.9	34.4	27.2	0.0	42.3			
LnGrp LOS	D	A	A	A	F	C	C	A	D			
Approach Vol, veh/h		1192			2038			1262				
Approach Delay, s/veh		9.0			74.5			37.6				
Approach LOS		A			E			D				

Timer - Assigned Phs	2			5	6		8					
Phs Duration (G+Y+Rc), s	63.3			17.4	45.9		36.7					
Change Period (Y+Rc), s	7.0			7.0	* 7		6.1					
Max Green Setting (Gmax), s	51.9			7.3	* 39		35.0					
Max Q Clear Time (g_c+I1), s	2.0			8.9	40.9		28.5					
Green Ext Time (p_c), s	4.9			0.0	0.0		2.0					

Intersection Summary	
HCM 6th Ctrl Delay	46.8
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	662	236	928	883	0	0	0	0	446	1	293
Future Volume (veh/h)	0	662	236	928	883	0	0	0	0	446	1	293
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1856	1856	1856	1856	0				1856	1856	1856
Adj Flow Rate, veh/h	0	712	254	967	920	0				571	0	208
Peak Hour Factor	0.93	0.93	0.93	0.96	0.96	0.96				0.94	0.94	0.94
Percent Heavy Veh, %	0	3	3	3	3	0				3	3	3
Cap, veh/h	0	803	358	1309	2395	0				670	0	298
Arrive On Green	0.00	0.23	0.23	0.64	1.00	0.00				0.19	0.00	0.19
Sat Flow, veh/h	0	3618	1570	3428	3618	0				3534	0	1572
Grp Volume(v), veh/h	0	712	254	967	920	0				571	0	208
Grp Sat Flow(s),veh/h/ln	0	1763	1570	1714	1763	0				1767	0	1572
Q Serve(g_s), s	0.0	19.5	14.9	19.3	0.0	0.0				15.6	0.0	12.4
Cycle Q Clear(g_c), s	0.0	19.5	14.9	19.3	0.0	0.0				15.6	0.0	12.4
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	803	358	1309	2395	0				670	0	298
V/C Ratio(X)	0.00	0.89	0.71	0.74	0.38	0.00				0.85	0.00	0.70
Avail Cap(c_a), veh/h	0	864	385	1309	2395	0				1025	0	456
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.09	0.09	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	37.4	35.6	14.7	0.0	0.0				39.2	0.0	37.8
Incr Delay (d2), s/veh	0.0	13.8	11.4	0.2	0.0	0.0				2.8	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
%ile BackOfQ(50%),veh/ln	0.0	9.7	6.7	4.8	0.0	0.0				6.9	0.0	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	51.2	46.9	14.9	0.0	0.0				41.9	0.0	39.0
LnGrp LOS	A	D	D	B	A	A				D	A	D
Approach Vol, veh/h		966			1887						779	
Approach Delay, s/veh		50.1			7.7						41.1	
Approach LOS		D			A						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.2	29.8		25.1		74.9
Change Period (Y+Rc), s	7.0	* 7		6.1		7.0
Max Green Setting (Gmax), s	27.7	* 25		29.0		57.9
Max Q Clear Time (g_c+I1), s	21.3	21.5		17.6		2.0
Green Ext Time (p_c), s	1.4	1.2		1.3		4.8

Intersection Summary	
HCM 6th Ctrl Delay	26.1
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	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	816	193	149	910	0	1027	393
Future Volume (veh/h)	816	193	149	910	0	1027	393
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				0.99
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	1856	1856	1856	1856		1856	1856
Adj Flow Rate, veh/h	868	205	162	989		1116	427
Peak Hour Factor	0.94	0.94	0.92	0.92		0.92	0.92
Percent Heavy Veh, %	3	3	3	3		3	3
Cap, veh/h	1012	464	213	3124		1868	715
Arrive On Green	0.30	0.30	0.12	1.00		0.52	0.52
Sat Flow, veh/h	3428	1572	3428	5233		3765	1376
Grp Volume(v), veh/h	868	205	162	989		1047	496
Grp Sat Flow(s),veh/h/ln	1714	1572	1714	1689		1689	1597
Q Serve(g_s), s	29.9	13.2	5.7	0.0		27.0	27.0
Cycle Q Clear(g_c), s	29.9	13.2	5.7	0.0		27.0	27.0
Prop In Lane	1.00	1.00	1.00				0.86
Lane Grp Cap(c), veh/h	1012	464	213	3124		1754	829
V/C Ratio(X)	0.86	0.44	0.76	0.32		0.60	0.60
Avail Cap(c_a), veh/h	1237	567	318	3124		1754	829
HCM Platoon Ratio	1.00	1.00	2.00	2.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	0.93	0.93		0.61	0.61
Uniform Delay (d), s/veh	41.6	35.7	53.8	0.0		20.9	20.9
Incr Delay (d2), s/veh	5.7	0.9	2.4	0.2		0.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	18.3	12.2	2.4	0.1		10.5	10.2
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	47.2	36.6	56.2	0.2		21.9	22.9
LnGrp LOS	D	D	E	A		C	C
Approach Vol, veh/h	1073			1151		1543	
Approach Delay, s/veh	45.2			8.1		22.2	
Approach LOS	D			A		C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		82.2		42.8	12.2	70.0
Change Period (Y+Rc), s		* 5.1		5.9	4.4	5.1
Max Green Setting (Gmax), s		* 61		45.1	11.6	52.9
Max Q Clear Time (g_c+I1), s		2.0		31.9	7.7	29.0
Green Ext Time (p_c), s		23.2		5.0	0.1	17.5

Intersection Summary	
HCM 6th Ctrl Delay	24.4
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	398	1064	605	283	1159	224	632	774	279	171	390	168
Future Volume (veh/h)	398	1064	605	283	1159	224	632	774	279	171	390	168
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	433	1157	513	308	1260	158	710	870	217	192	438	113
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	464	1806	560	364	1657	509	721	1497	464	248	797	247
Arrive On Green	0.14	0.36	0.36	0.11	0.33	0.33	0.21	0.30	0.30	0.07	0.16	0.16
Sat Flow, veh/h	3428	5066	1570	3428	5066	1557	3428	5066	1571	3428	5066	1569
Grp Volume(v), veh/h	433	1157	513	308	1260	158	710	870	217	192	438	113
Grp Sat Flow(s),veh/h/ln	1714	1689	1570	1714	1689	1557	1714	1689	1571	1714	1689	1569
Q Serve(g_s), s	15.3	23.4	38.3	10.8	27.3	9.3	25.3	17.9	13.8	6.7	9.8	8.0
Cycle Q Clear(g_c), s	15.3	23.4	38.3	10.8	27.3	9.3	25.3	17.9	13.8	6.7	9.8	8.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	464	1806	560	364	1657	509	721	1497	464	248	797	247
V/C Ratio(X)	0.93	0.64	0.92	0.85	0.76	0.31	0.98	0.58	0.47	0.77	0.55	0.46
Avail Cap(c_a), veh/h	464	1814	562	433	1777	546	721	2161	670	358	1611	499
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	32.9	37.7	53.8	36.9	30.9	48.2	36.7	35.3	55.9	47.6	46.9
Incr Delay (d2), s/veh	25.9	1.0	20.5	11.1	2.1	0.6	29.4	0.9	1.9	3.6	1.4	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	9.7	17.5	5.2	11.5	3.6	13.6	7.4	5.5	3.0	4.2	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.4	33.9	58.2	64.9	39.1	31.5	77.6	37.7	37.2	59.4	49.0	50.0
LnGrp LOS	E	C	E	E	D	C	E	D	D	E	D	D
Approach Vol, veh/h		2103			1726			1797			743	
Approach Delay, s/veh		49.0			43.0			53.4			51.9	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.4	50.2	30.2	24.8	21.0	46.6	13.3	41.7
Change Period (Y+Rc), s	4.4	6.5	4.4	5.5	4.4	* 6.5	4.4	* 5.5
Max Green Setting (Gmax), s	15.5	43.9	25.8	39.0	16.6	* 43	12.8	* 52
Max Q Clear Time (g_c+I1), s	12.8	40.3	27.3	11.8	17.3	29.3	8.7	19.9
Green Ext Time (p_c), s	0.2	3.2	0.0	6.8	0.0	10.2	0.1	16.3

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	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	745	732	116	123	698	41	203	190	92	29	78	203
Future Volume (veh/h)	745	732	116	123	698	41	203	190	92	29	78	203
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	828	813	129	131	743	44	228	213	103	35	93	218
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.89	0.89	0.89	0.84	0.84	0.84
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	1168	2293	361	183	1136	67	256	548	255	44	365	287
Arrive On Green	0.34	0.52	0.52	0.11	0.46	0.46	0.14	0.24	0.24	0.03	0.10	0.10
Sat Flow, veh/h	3428	4411	695	3428	4891	288	1767	2331	1084	1767	3526	2768
Grp Volume(v), veh/h	828	621	321	131	512	275	228	159	157	35	93	218
Grp Sat Flow(s),veh/h/ln	1714	1689	1729	1714	1689	1803	1767	1763	1652	1767	1763	1384
Q Serve(g_s), s	25.2	13.0	13.1	4.4	14.0	14.1	15.2	9.1	9.6	2.4	2.9	9.2
Cycle Q Clear(g_c), s	25.2	13.0	13.1	4.4	14.0	14.1	15.2	9.1	9.6	2.4	2.9	9.2
Prop In Lane	1.00		0.40	1.00		0.16	1.00		0.66	1.00		1.00
Lane Grp Cap(c), veh/h	1168	1755	899	183	785	419	256	415	389	44	365	287
V/C Ratio(X)	0.71	0.35	0.36	0.72	0.65	0.66	0.89	0.38	0.40	0.79	0.25	0.76
Avail Cap(c_a), veh/h	1168	1755	899	257	957	511	358	573	537	59	546	429
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.65	0.65	0.65	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.4	17.0	17.0	52.7	28.4	28.4	50.4	38.6	38.8	58.2	49.5	52.3
Incr Delay (d2), s/veh	1.1	0.4	0.7	2.3	4.1	7.6	14.3	0.2	0.2	29.7	0.6	6.6
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	10.5	5.0	5.3	1.9	4.9	5.7	7.7	4.0	3.9	1.4	1.3	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.5	17.3	17.7	55.0	32.5	36.0	64.7	38.8	39.0	87.8	50.1	58.9
LnGrp LOS	D	B	B	E	C	D	E	D	D	F	D	E
Approach Vol, veh/h		1770			918			544			346	
Approach Delay, s/veh		25.9			36.8			49.7			59.5	
Approach LOS		C			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	67.4	23.1	18.2	45.9	32.8	7.4	33.9
Change Period (Y+Rc), s	4.9	5.0	5.7	* 5.8	5.0	* 4.9	4.4	5.7
Max Green Setting (Gmax), s	9.0	48.0	24.3	* 19	23.1	* 34	4.0	39.0
Max Q Clear Time (g_c+I1), s	6.4	15.1	17.2	11.2	27.2	16.1	4.4	11.6
Green Ext Time (p_c), s	0.0	18.8	0.2	1.2	0.0	11.6	0.0	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)	46	670	108	20	547	22	272	5	32	19	10	12
Future Volume (veh/h)	46	670	108	20	547	22	272	5	32	19	10	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	48	705	114	21	576	23	324	0	0	23	12	15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.82	0.82	0.82
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	61	2925	468	30	3232	128	453	238	0	48	50	43
Arrive On Green	0.07	1.00	1.00	0.02	0.65	0.65	0.13	0.00	0.00	0.03	0.03	0.03
Sat Flow, veh/h	1767	4401	705	1767	4998	199	3534	1856	0	1767	1856	1572
Grp Volume(v), veh/h	48	539	280	21	388	211	324	0	0	23	12	15
Grp Sat Flow(s),veh/h/ln	1767	1689	1729	1767	1689	1819	1767	1856	0	1767	1856	1572
Q Serve(g_s), s	3.2	0.0	0.0	1.4	5.5	5.6	10.6	0.0	0.0	1.5	0.8	1.1
Cycle Q Clear(g_c), s	3.2	0.0	0.0	1.4	5.5	5.6	10.6	0.0	0.0	1.5	0.8	1.1
Prop In Lane	1.00		0.41	1.00		0.11	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	61	2244	1149	30	2184	1176	453	238	0	48	50	43
V/C Ratio(X)	0.78	0.24	0.24	0.71	0.18	0.18	0.71	0.00	0.00	0.48	0.24	0.35
Avail Cap(c_a), veh/h	156	2244	1149	141	2184	1176	1211	636	0	134	141	119
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	0.97	0.97	0.97	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.4	0.0	0.0	58.7	8.5	8.5	50.2	0.0	0.0	57.5	57.2	57.3
Incr Delay (d2), s/veh	7.3	0.2	0.5	10.6	0.2	0.3	0.8	0.0	0.0	2.8	0.9	1.8
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	1.5	0.1	0.1	0.7	2.0	2.2	4.7	0.0	0.0	0.7	0.4	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.7	0.2	0.5	69.3	8.6	8.8	51.0	0.0	0.0	60.3	58.1	59.2
LnGrp LOS	E	A	A	E	A	A	D	A	A	E	E	E
Approach Vol, veh/h		867			620			324			50	
Approach Delay, s/veh		3.8			10.7			51.0			59.4	
Approach LOS		A			B			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	85.2		8.1	8.6	83.0		20.3
Change Period (Y+Rc), s	4.4	* 5.4		4.9	4.4	5.4		4.9
Max Green Setting (Gmax), s	9.6	* 41		9.1	10.6	39.6		41.1
Max Q Clear Time (g_c+I1), s	3.4	2.0		3.5	5.2	7.6		12.6
Green Ext Time (p_c), s	0.0	18.5		0.0	0.0	10.1		0.6

Intersection Summary	
HCM 6th Ctrl Delay	15.8
HCM 6th LOS	B

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)	7	3	21	173	13	224	32	542	97	284	358	14
Future Volume (veh/h)	7	3	21	173	13	224	32	542	97	284	358	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	9	4	28	171	79	280	35	596	107	379	477	19
Peak Hour Factor	0.75	0.75	0.75	0.80	0.80	0.80	0.91	0.91	0.91	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	47	50	39	368	386	325	79	2073	366	434	2918	116
Arrive On Green	0.03	0.03	0.03	0.21	0.21	0.21	0.02	0.48	0.48	0.25	1.00	1.00
Sat Flow, veh/h	1767	1856	1445	1767	1856	1563	3428	4318	762	3428	4999	198
Grp Volume(v), veh/h	9	4	28	171	79	280	35	464	239	379	321	175
Grp Sat Flow(s),veh/h/ln	1767	1856	1445	1767	1856	1563	1714	1689	1703	1714	1689	1820
Q Serve(g_s), s	0.6	0.3	2.3	10.2	4.2	20.7	1.2	9.9	10.2	12.7	0.0	0.0
Cycle Q Clear(g_c), s	0.6	0.3	2.3	10.2	4.2	20.7	1.2	9.9	10.2	12.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		0.11
Lane Grp Cap(c), veh/h	47	50	39	368	386	325	79	1621	817	434	1971	1062
V/C Ratio(X)	0.19	0.08	0.72	0.46	0.20	0.86	0.44	0.29	0.29	0.87	0.16	0.16
Avail Cap(c_a), veh/h	82	87	67	573	602	507	160	1621	817	646	1971	1062
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	0.84	0.84	0.84	0.98	0.98	0.98	0.97	0.97	0.97
Uniform Delay (d), s/veh	57.1	57.0	58.0	41.7	39.3	45.8	57.9	18.8	18.9	43.9	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.3	9.1	0.3	0.1	4.7	1.4	0.4	0.9	6.0	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.1	0.9	4.5	1.9	8.4	0.5	3.9	4.2	5.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.8	57.2	67.1	41.9	39.4	50.5	59.3	19.2	19.8	49.8	0.2	0.3
LnGrp LOS	E	E	E	D	D	D	E	B	B	D	A	A
Approach Vol, veh/h		41			530			738			875	
Approach Delay, s/veh		64.1			46.1			21.3			21.7	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	19.6	62.7		7.6	7.2	75.2		30.1
Change Period (Y+Rc), s	4.4	* 5.1		4.4	4.4	5.1		5.1
Max Green Setting (Gmax), s	22.6	* 34		5.6	5.6	50.9		38.9
Max Q Clear Time (g_c+I1), s	14.7	12.2		4.3	3.2	2.0		22.7
Green Ext Time (p_c), s	0.5	11.3		0.0	0.0	9.2		1.6

Intersection Summary	
HCM 6th Ctrl Delay	28.3
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)	54	27	114	25	23	75	157	564	70	49	515	18
Future Volume (veh/h)	54	27	114	25	23	75	157	564	70	49	515	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	59	29	124	28	28	88	201	723	90	65	687	24
Peak Hour Factor	0.92	0.92	0.92	0.85	0.85	0.85	0.78	0.78	0.78	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	163	172	143	161	169	139	226	2781	343	84	2662	93
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.26	1.00	1.00	0.02	0.17	0.17
Sat Flow, veh/h	1767	1856	1547	1767	1856	1524	1767	4559	563	1767	5025	175
Grp Volume(v), veh/h	59	29	124	28	28	88	201	534	279	65	461	250
Grp Sat Flow(s),veh/h/ln	1767	1856	1547	1767	1856	1524	1767	1689	1745	1767	1689	1823
Q Serve(g_s), s	3.8	1.7	9.5	1.8	1.7	6.7	13.2	0.0	0.0	4.4	14.2	14.2
Cycle Q Clear(g_c), s	3.8	1.7	9.5	1.8	1.7	6.7	13.2	0.0	0.0	4.4	14.2	14.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.32	1.00		0.10
Lane Grp Cap(c), veh/h	163	172	143	161	169	139	226	2060	1064	84	1789	966
V/C Ratio(X)	0.36	0.17	0.87	0.17	0.17	0.63	0.89	0.26	0.26	0.78	0.26	0.26
Avail Cap(c_a), veh/h	163	172	143	502	527	433	348	2060	1064	156	1789	966
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.79	0.79	0.79
Uniform Delay (d), s/veh	51.1	50.2	53.7	50.4	50.3	52.6	43.9	0.0	0.0	58.4	29.1	29.2
Incr Delay (d2), s/veh	0.5	0.2	37.8	0.2	0.2	1.8	11.5	0.3	0.6	4.5	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.8	5.2	0.8	0.8	2.6	5.7	0.1	0.2	2.1	6.5	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.6	50.4	91.5	50.6	50.5	54.4	55.4	0.3	0.6	63.0	29.4	29.7
LnGrp LOS	D	D	F	D	D	D	E	A	A	E	C	C
Approach Vol, veh/h		212			144			1014			776	
Approach Delay, s/veh		74.8			52.9			11.3			32.3	
Approach LOS		E			D			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.1	78.1		16.0	19.7	68.5		15.8
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9
Max Green Setting (Gmax), s	10.6	45.1		11.1	23.6	32.1		34.1
Max Q Clear Time (g_c+I1), s	16.4	2.0		11.5	15.2	16.2		8.7
Green Ext Time (p_c), s	0.0	18.5		0.0	0.2	9.5		0.3

Intersection Summary	
HCM 6th Ctrl Delay	28.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	9	38	60	15	129	60	326	13	38	266	6
Future Volume (veh/h)	55	9	38	60	15	129	60	326	13	38	266	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	69	11	48	79	20	170	66	358	14	43	299	7
Peak Hour Factor	0.80	0.80	0.80	0.76	0.76	0.76	0.91	0.91	0.91	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	377	47	431	380	46	392	95	1032	40	69	998	23
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.05	0.30	0.30	0.04	0.28	0.28
Sat Flow, veh/h	692	171	1571	1332	168	1430	1767	3459	135	1767	3521	82
Grp Volume(v), veh/h	80	0	48	79	0	190	66	182	190	43	149	157
Grp Sat Flow(s),veh/h/ln	863	0	1571	1332	0	1598	1767	1763	1831	1767	1763	1840
Q Serve(g_s), s	1.5	0.0	0.8	2.0	0.0	3.5	1.3	2.9	2.9	0.9	2.4	2.4
Cycle Q Clear(g_c), s	5.0	0.0	0.8	7.0	0.0	3.5	1.3	2.9	2.9	0.9	2.4	2.4
Prop In Lane	0.86		1.00	1.00		0.89	1.00		0.07	1.00		0.04
Lane Grp Cap(c), veh/h	424	0	431	380	0	438	95	526	546	69	500	522
V/C Ratio(X)	0.19	0.00	0.11	0.21	0.00	0.43	0.69	0.35	0.35	0.63	0.30	0.30
Avail Cap(c_a), veh/h	1127	0	1317	1116	0	1322	444	1404	1458	395	1374	1435
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.9	0.0	9.7	14.3	0.0	10.7	16.6	9.8	9.8	16.9	10.0	10.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.3	3.4	0.5	0.5	3.4	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.2	0.5	0.0	1.0	0.5	0.9	1.0	0.4	0.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.0	0.0	9.8	14.4	0.0	10.9	20.0	10.4	10.4	20.4	10.7	10.7
LnGrp LOS	B	A	A	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		128			269			438			349	
Approach Delay, s/veh		11.1			11.9			11.8			11.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.4	16.2		14.2	5.9	15.6		14.2
Change Period (Y+Rc), s	4.0	5.5		* 4.4	4.0	* 5.5		4.4
Max Green Setting (Gmax), s	8.0	28.5		* 30	9.0	* 28		29.6
Max Q Clear Time (g_c+I1), s	2.9	4.9		7.0	3.3	4.4		9.0
Green Ext Time (p_c), s	0.0	3.0		0.4	0.0	3.1		0.9

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

Notes

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

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (veh/h)	70	100	0	259	39	66	343
Future Volume (veh/h)	70	100	0	259	39	66	343
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No
Adj Sat Flow, veh/h/ln	1856	1856		1856	1856	1856	1856
Adj Flow Rate, veh/h	92	132		291	44	69	357
Peak Hour Factor	0.76	0.76		0.89	0.89	0.96	0.96
Percent Heavy Veh, %	3	3		3	3	3	3
Cap, veh/h	236	210		1059	158	104	1905
Arrive On Green	0.13	0.13		0.34	0.34	0.06	0.54
Sat Flow, veh/h	1767	1572		3168	460	1767	3618
Grp Volume(v), veh/h	92	132		165	170	69	357
Grp Sat Flow(s),veh/h/ln	1767	1572		1763	1772	1767	1763
Q Serve(g_s), s	1.4	2.3		2.0	2.0	1.1	1.5
Cycle Q Clear(g_c), s	1.4	2.3		2.0	2.0	1.1	1.5
Prop In Lane	1.00	1.00			0.26	1.00	
Lane Grp Cap(c), veh/h	236	210		607	610	104	1905
V/C Ratio(X)	0.39	0.63		0.27	0.28	0.66	0.19
Avail Cap(c_a), veh/h	1699	1511		1543	1551	789	4030
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	11.5	11.9		6.9	6.9	13.4	3.4
Incr Delay (d2), s/veh	0.4	1.2		0.3	0.3	2.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.7		0.5	0.5	0.4	0.2
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	11.9	13.1		7.3	7.3	16.1	3.5
LnGrp LOS	B	B		A	A	B	A
Approach Vol, veh/h	224			335			426
Approach Delay, s/veh	12.6			7.3			5.6
Approach LOS	B			A			A

Timer - Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	5.7	15.5				21.2		7.9
Change Period (Y+Rc), s	4.0	5.5				* 5.5		4.0
Max Green Setting (Gmax), s	13.6	25.5				* 33		28.0
Max Q Clear Time (g_c+I1), s	3.1	4.0				3.5		4.3
Green Ext Time (p_c), s	0.0	2.7				4.4		0.3

Intersection Summary	
HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

Notes

User approved ignoring U-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)	3	0	1	137	0	25	4	251	20	20	389	3
Future Volume (veh/h)	3	0	1	137	0	25	4	251	20	20	389	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	4	0	1	146	0	27	5	289	23	20	397	3
Peak Hour Factor	0.75	0.75	0.75	0.94	0.94	0.94	0.87	0.87	0.87	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	276	23	20	454	0	203	10	1125	89	36	1273	10
Arrive On Green	0.13	0.00	0.13	0.13	0.00	0.13	0.01	0.34	0.34	0.02	0.35	0.35
Sat Flow, veh/h	443	179	155	1625	0	1569	1767	3309	262	1767	3585	27
Grp Volume(v), veh/h	5	0	0	146	0	27	5	153	159	20	195	205
Grp Sat Flow(s),veh/h/ln	777	0	0	1625	0	1569	1767	1763	1808	1767	1763	1850
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.5	0.1	1.9	1.9	0.3	2.4	2.4
Cycle Q Clear(g_c), s	2.3	0.0	0.0	2.3	0.0	0.5	0.1	1.9	1.9	0.3	2.4	2.4
Prop In Lane	0.80		0.20	1.00		1.00	1.00		0.14	1.00		0.01
Lane Grp Cap(c), veh/h	319	0	0	454	0	203	10	599	615	36	626	657
V/C Ratio(X)	0.02	0.00	0.00	0.32	0.00	0.13	0.52	0.26	0.26	0.55	0.31	0.31
Avail Cap(c_a), veh/h	1568	0	0	1701	0	1596	334	1739	1784	334	1745	1831
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.3	0.0	0.0	12.2	0.0	11.4	14.7	7.1	7.1	14.4	6.9	6.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.1	15.2	0.3	0.3	4.8	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.7	0.0	0.1	0.1	0.5	0.5	0.2	0.6	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.3	0.0	0.0	12.4	0.0	11.5	29.9	7.4	7.4	19.2	7.6	7.5
LnGrp LOS	B	A	A	B	A	B	C	A	A	B	A	A
Approach Vol, veh/h		5			173			317			420	
Approach Delay, s/veh		11.3			12.2			7.7			8.1	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.0	15.9		8.7	4.6	16.3		8.7
Change Period (Y+Rc), s	4.4	5.8		4.9	4.4	* 5.8		4.9
Max Green Setting (Gmax), s	5.6	29.2		30.1	5.6	* 29		30.1
Max Q Clear Time (g_c+I1), s	2.3	3.9		4.3	2.1	4.4		4.3
Green Ext Time (p_c), s	0.0	2.6		0.0	0.0	4.6		0.5

Intersection Summary	
HCM 6th Ctrl Delay	8.8
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

* 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	882	1152	0	1864	150	541	21	403	0	0	0
Future Volume (veh/h)	0	882	1152	0	1864	150	541	21	403	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	0	928	1213	0	1942	156	646	0	469			
Peak Hour Factor	0.95	0.95	0.95	0.96	0.96	0.96	0.86	0.86	0.86			
Percent Heavy Veh, %	0	3	3	0	3	3	3	3	3			
Cap, veh/h	0	3455	2477	0	2405	1059	753	0	670			
Arrive On Green	0.00	1.00	1.00	0.00	0.68	0.68	0.21	0.00	0.21			
Sat Flow, veh/h	0	5233	2768	0	3618	1553	3534	0	3145			
Grp Volume(v), veh/h	0	928	1213	0	1942	156	646	0	469			
Grp Sat Flow(s),veh/h/ln	0	1689	1384	0	1763	1553	1767	0	1572			
Q Serve(g_s), s	0.0	0.0	0.0	0.0	46.8	4.3	21.1	0.0	16.6			
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	46.8	4.3	21.1	0.0	16.6			
Prop In Lane	0.00		1.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	3455	2477	0	2405	1059	753	0	670			
V/C Ratio(X)	0.00	0.27	0.49	0.00	0.81	0.15	0.86	0.00	0.70			
Avail Cap(c_a), veh/h	0	3455	2477	0	2405	1059	851	0	757			
HCM Platoon Ratio	1.00	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	0.84	0.84	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	13.5	6.7	45.5	0.0	43.7			
Incr Delay (d2), s/veh	0.0	0.2	0.6	0.0	3.0	0.3	8.0	0.0	2.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.2	0.0	16.2	1.3	10.1	0.0	6.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.2	0.6	0.0	16.5	7.0	53.5	0.0	46.2			
LnGrp LOS	A	A	A	A	B	A	D	A	D			
Approach Vol, veh/h		2141			2098			1115				
Approach Delay, s/veh		0.4			15.8			50.4				
Approach LOS		A			B			D				

Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		89.3				89.3		30.7				
Change Period (Y+Rc), s		7.5				7.5		5.1				
Max Green Setting (Gmax), s		78.5				78.5		28.9				
Max Q Clear Time (g_c+I1), s		2.0				48.8		23.1				
Green Ext Time (p_c), s		19.8				19.3		2.4				

Intersection Summary			
HCM 6th Ctrl Delay			16.9
HCM 6th LOS			B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1735	720	0	1600	997	0	0	0	173	50	0
Future Volume (veh/h)	0	1735	720	0	1600	997	0	0	0	173	50	0
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856				1856	1856	0
Adj Flow Rate, veh/h	0	1994	828	0	1758	0				139	170	0
Peak Hour Factor	0.87	0.87	0.87	0.91	0.91	0.91				0.80	0.80	0.80
Percent Heavy Veh, %	0	3	3	0	3	3				3	3	0
Cap, veh/h	0	4054	1259	0	2822					167	176	0
Arrive On Green	0.00	0.80	0.80	0.00	1.00	0.00				0.09	0.09	0.00
Sat Flow, veh/h	0	5233	1572	0	3618	1572				1767	1856	0
Grp Volume(v), veh/h	0	1994	828	0	1758	0				139	170	0
Grp Sat Flow(s),veh/h/ln	0	1689	1572	0	1763	1572				1767	1856	0
Q Serve(g_s), s	0.0	15.6	26.6	0.0	0.0	0.0				9.3	11.0	0.0
Cycle Q Clear(g_c), s	0.0	15.6	26.6	0.0	0.0	0.0				9.3	11.0	0.0
Prop In Lane	0.00		1.00	0.00		1.00				1.00		0.00
Lane Grp Cap(c), veh/h	0	4054	1259	0	2822					167	176	0
V/C Ratio(X)	0.00	0.49	0.66	0.00	0.62					0.83	0.97	0.00
Avail Cap(c_a), veh/h	0	4054	1259	0	2822					278	292	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.33	1.33				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.42	0.00				1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	3.9	5.1	0.0	0.0	0.0				53.4	54.1	0.0
Incr Delay (d2), s/veh	0.0	0.4	2.7	0.0	0.4	0.0				10.1	32.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.6	6.4	0.0	0.2	0.0				4.6	6.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	4.4	7.8	0.0	0.4	0.0				63.5	86.8	0.0
LnGrp LOS	A	A	A	A	A					E	F	A
Approach Vol, veh/h		2822			1758	A					309	
Approach Delay, s/veh		5.4			0.4						76.3	
Approach LOS		A			A						E	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	103.5	16.5	103.5
Change Period (Y+Rc), s	7.5	5.1	7.5
Max Green Setting (Gmax), s	88.5	18.9	88.5
Max Q Clear Time (g_c+I1), s	28.6	11.3	2.0
Green Ext Time (p_c), s	36.2	0.1	23.7

Intersection Summary	
HCM 6th Ctrl Delay	8.1
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	152	3	40	286	305	0	0	239	305
Future Volume (veh/h)	0	0	0	152	3	40	286	305	0	0	239	305
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1856	1856	1856	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				165	3	43	311	332	0	0	254	324
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.94	0.94	0.94
Percent Heavy Veh, %				3	3	3	3	3	0	0	3	3
Cap, veh/h				215	4	192	406	2529	0	0	1918	1470
Arrive On Green				0.12	0.12	0.12	0.12	0.72	0.00	0.00	0.54	0.54
Sat Flow, veh/h				1737	32	1551	3428	3618	0	0	3618	2702
Grp Volume(v), veh/h				168	0	43	311	332	0	0	254	324
Grp Sat Flow(s),veh/h/ln				1769	0	1551	1714	1763	0	0	1763	1351
Q Serve(g_s), s				7.4	0.0	2.0	7.0	2.4	0.0	0.0	2.8	5.0
Cycle Q Clear(g_c), s				7.4	0.0	2.0	7.0	2.4	0.0	0.0	2.8	5.0
Prop In Lane				0.98		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				219	0	192	406	2529	0	0	1918	1470
V/C Ratio(X)				0.77	0.00	0.22	0.77	0.13	0.00	0.00	0.13	0.22
Avail Cap(c_a), veh/h				442	0	388	883	2529	0	0	1918	1470
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.98	0.98	0.00	0.00	0.98	0.98
Uniform Delay (d), s/veh				33.9	0.0	31.6	34.2	3.5	0.0	0.0	9.0	9.4
Incr Delay (d2), s/veh				2.1	0.0	0.2	1.1	0.1	0.0	0.0	0.1	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
%ile BackOfQ(50%),veh/ln				3.1	0.0	0.7	2.8	0.5	0.0	0.0	0.9	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				36.1	0.0	31.8	35.3	3.6	0.0	0.0	9.1	9.8
LnGrp LOS				D	A	C	D	A	A	A	A	A
Approach Vol, veh/h					211			643			578	
Approach Delay, s/veh					35.2			19.0			9.5	
Approach LOS					D			B			A	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	63.1		13.9	49.2		16.9
Change Period (Y+Rc), s	* 5.7		4.4	5.7		7.0
Max Green Setting (Gmax), s	* 48		20.6	22.3		20.0
Max Q Clear Time (g_c+I1), s	4.4		9.0	7.0		9.4
Green Ext Time (p_c), s	1.5		0.4	3.2		0.4

Intersection Summary	
HCM 6th Ctrl Delay	17.5
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)	162	6	397	0	0	0	0	470	114	17	313	0
Future Volume (veh/h)	162	6	397	0	0	0	0	470	114	17	313	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	1856	1856	1856				0	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	198	0	473				0	627	152	21	382	0
Peak Hour Factor	0.84	0.84	0.84				0.75	0.75	0.75	0.82	0.82	0.82
Percent Heavy Veh, %	3	3	3				0	3	3	3	3	0
Cap, veh/h	701	0	624				0	3090	715	33	2359	0
Arrive On Green	0.20	0.00	0.20				0.00	0.60	0.60	0.04	1.00	0.00
Sat Flow, veh/h	3534	0	3145				0	5449	1201	1767	3618	0
Grp Volume(v), veh/h	198	0	473				0	576	203	21	382	0
Grp Sat Flow(s),veh/h/ln	1767	0	1572				0	1596	1603	1767	1763	0
Q Serve(g_s), s	3.8	0.0	11.4				0.0	4.4	4.7	0.9	0.0	0.0
Cycle Q Clear(g_c), s	3.8	0.0	11.4				0.0	4.4	4.7	0.9	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.75	1.00		0.00
Lane Grp Cap(c), veh/h	701	0	624				0	2851	955	33	2359	0
V/C Ratio(X)	0.28	0.00	0.76				0.00	0.20	0.21	0.64	0.16	0.00
Avail Cap(c_a), veh/h	1330	0	1183				0	2851	955	323	2359	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.99	0.99	0.00
Uniform Delay (d), s/veh	27.2	0.0	30.3				0.0	7.4	7.5	38.2	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	1.9				0.0	0.2	0.5	7.3	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	4.3				0.0	1.2	1.4	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.5	0.0	32.2				0.0	7.6	8.0	45.5	0.1	0.0
LnGrp LOS	C	A	C				A	A	A	D	A	A
Approach Vol, veh/h		671						779			403	
Approach Delay, s/veh		30.8						7.7			2.5	
Approach LOS		C						A			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	5.9	53.3		20.8		59.2
Change Period (Y+Rc), s	4.4	* 5.7		4.9		5.7
Max Green Setting (Gmax), s	14.6	* 20		30.1		39.3
Max Q Clear Time (g_c+I1), s	2.9	6.7		13.4		2.0
Green Ext Time (p_c), s	0.0	5.3		2.5		1.7

Intersection Summary	
HCM 6th Ctrl Delay	14.9
HCM 6th LOS	B

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)	43	684	90	195	1472	94	156	99	81	58	135	72
Future Volume (veh/h)	43	684	90	195	1472	94	156	99	81	58	135	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	46	728	96	205	1549	99	208	132	108	77	180	96
Peak Hour Factor	0.94	0.94	0.94	0.95	0.95	0.95	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	58	1332	174	239	1926	123	238	127	104	380	242	129
Arrive On Green	0.03	0.29	0.29	0.14	0.40	0.40	0.13	0.13	0.13	0.22	0.22	0.22
Sat Flow, veh/h	1767	4533	593	1767	4863	311	1767	943	772	1767	1126	600
Grp Volume(v), veh/h	46	541	283	205	1076	572	208	0	240	77	0	276
Grp Sat Flow(s),veh/h/ln	1767	1689	1749	1767	1689	1796	1767	0	1715	1767	0	1726
Q Serve(g_s), s	2.5	12.9	13.1	10.9	27.1	27.1	11.1	0.0	12.9	3.4	0.0	14.3
Cycle Q Clear(g_c), s	2.5	12.9	13.1	10.9	27.1	27.1	11.1	0.0	12.9	3.4	0.0	14.3
Prop In Lane	1.00		0.34	1.00		0.17	1.00		0.45	1.00		0.35
Lane Grp Cap(c), veh/h	58	992	514	239	1337	711	238	0	231	380	0	371
V/C Ratio(X)	0.79	0.54	0.55	0.86	0.80	0.80	0.87	0.00	1.04	0.20	0.00	0.74
Avail Cap(c_a), veh/h	100	992	514	347	1441	767	238	0	231	738	0	721
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	46.0	28.4	28.5	40.5	25.7	25.7	40.7	0.0	41.5	30.9	0.0	35.1
Incr Delay (d2), s/veh	8.5	0.8	1.6	9.8	3.5	6.3	27.3	0.0	70.0	0.1	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	1.2	4.9	5.2	5.1	10.2	11.4	6.6	0.0	9.9	1.5	0.0	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.5	29.3	30.1	50.4	29.1	32.0	68.0	0.0	111.5	31.0	0.0	36.2
LnGrp LOS	D	C	C	D	C	C	E	A	F	C	A	D
Approach Vol, veh/h		870			1853			448			353	
Approach Delay, s/veh		30.9			32.3			91.3			35.1	
Approach LOS		C			C			F			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.4	35.2		25.5	7.6	44.9		17.8
Change Period (Y+Rc), s	4.4	7.0		4.9	4.4	* 7		4.9
Max Green Setting (Gmax), s	13.8	27.1		40.0	5.4	* 41		12.9
Max Q Clear Time (g_c+I1), s	12.9	15.1		16.3	4.5	29.1		14.9
Green Ext Time (p_c), s	0.1	4.9		1.2	0.0	8.9		0.0

Intersection Summary	
HCM 6th Ctrl Delay	39.7
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)	190	773	7	27	1236	171	113	26	27	201	17	211
Future Volume (veh/h)	190	773	7	27	1236	171	113	26	27	201	17	211
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	207	840	8	31	1405	194	151	35	36	263	0	260
Peak Hour Factor	0.92	0.92	0.92	0.88	0.88	0.88	0.75	0.75	0.75	0.81	0.81	0.81
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	293	2393	23	44	1804	249	258	121	124	385	0	169
Arrive On Green	0.09	0.46	0.46	0.02	0.40	0.40	0.15	0.15	0.15	0.11	0.00	0.11
Sat Flow, veh/h	3428	5173	49	1767	4490	620	1767	826	850	3534	0	1547
Grp Volume(v), veh/h	207	548	300	31	1057	542	151	0	71	263	0	260
Grp Sat Flow(s),veh/h/ln	1714	1689	1845	1767	1689	1733	1767	0	1676	1767	0	1547
Q Serve(g_s), s	4.9	8.6	8.6	1.4	22.5	22.5	6.6	0.0	3.1	5.9	0.0	9.0
Cycle Q Clear(g_c), s	4.9	8.6	8.6	1.4	22.5	22.5	6.6	0.0	3.1	5.9	0.0	9.0
Prop In Lane	1.00		0.03	1.00		0.36	1.00		0.51	1.00		1.00
Lane Grp Cap(c), veh/h	293	1562	854	44	1357	696	258	0	244	385	0	169
V/C Ratio(X)	0.71	0.35	0.35	0.71	0.78	0.78	0.59	0.00	0.29	0.68	0.00	1.54
Avail Cap(c_a), veh/h	814	1984	1084	133	1436	737	749	0	711	385	0	169
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	36.7	14.2	14.2	40.0	21.5	21.5	32.9	0.0	31.5	35.4	0.0	36.8
Incr Delay (d2), s/veh	1.2	0.4	0.6	7.7	3.1	5.9	3.0	0.0	0.9	5.4	0.0	271.1
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	1.9	2.8	3.1	0.7	8.0	8.8	3.0	0.0	1.3	2.7	0.0	16.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.9	14.6	14.9	47.7	24.6	27.4	35.9	0.0	32.4	40.8	0.0	307.8
LnGrp LOS	D	B	B	D	C	C	D	A	C	D	A	F
Approach Vol, veh/h		1055			1630			222			523	
Approach Delay, s/veh		19.3			26.0			34.8			173.6	
Approach LOS		B			C			C			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	44.2		15.0	11.5	39.2		16.9
Change Period (Y+Rc), s	4.4	6.0		6.0	4.4	6.0		4.9
Max Green Setting (Gmax), s	6.3	48.5		9.0	19.6	35.1		35.0
Max Q Clear Time (g_c+I1), s	3.4	10.6		11.0	6.9	24.5		8.6
Green Ext Time (p_c), s	0.0	12.5		0.0	0.3	8.7		1.8

Intersection Summary	
HCM 6th Ctrl Delay	47.0
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	373	325	342	90	511	17	327	620	48	7	655	405
Future Volume (veh/h)	373	325	342	90	511	17	327	620	48	7	655	405
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	444	387	367	100	568	19	404	765	59	8	771	428
Peak Hour Factor	0.84	0.84	0.84	0.90	0.90	0.90	0.81	0.81	0.81	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	510	958	421	125	935	31	468	1563	120	14	1183	516
Arrive On Green	0.15	0.27	0.27	0.07	0.19	0.19	0.14	0.47	0.47	0.01	0.34	0.34
Sat Flow, veh/h	3428	3526	1551	1767	5034	168	3428	3311	255	1767	3526	1539
Grp Volume(v), veh/h	444	387	367	100	380	207	404	407	417	8	771	428
Grp Sat Flow(s),veh/h/ln	1714	1763	1551	1767	1689	1824	1714	1763	1804	1767	1763	1539
Q Serve(g_s), s	14.9	10.5	26.5	6.5	12.1	12.2	13.5	18.6	18.6	0.5	21.8	30.0
Cycle Q Clear(g_c), s	14.9	10.5	26.5	6.5	12.1	12.2	13.5	18.6	18.6	0.5	21.8	30.0
Prop In Lane	1.00		1.00	1.00		0.09	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	510	958	421	125	628	339	468	832	851	14	1183	516
V/C Ratio(X)	0.87	0.40	0.87	0.80	0.61	0.61	0.86	0.49	0.49	0.58	0.65	0.83
Avail Cap(c_a), veh/h	745	1223	538	247	924	499	658	1022	1046	60	1485	648
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.8	35.0	40.8	53.7	43.8	43.8	49.6	21.3	21.3	58.0	33.1	35.9
Incr Delay (d2), s/veh	5.6	0.3	12.6	4.5	1.1	2.1	6.4	0.5	0.5	13.4	0.8	7.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	4.3	11.1	3.0	5.0	5.5	6.0	7.3	7.5	0.3	9.1	11.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.4	35.3	53.3	58.2	45.0	46.0	56.0	21.8	21.8	71.4	34.0	43.5
LnGrp LOS	D	D	D	E	D	D	E	C	C	E	C	D
Approach Vol, veh/h		1198			687			1228			1207	
Approach Delay, s/veh		47.9			47.2			33.1			37.6	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.5	62.0	11.9	39.0	20.5	46.0	21.9	28.9
Change Period (Y+Rc), s	3.6	6.6	3.6	7.1	4.5	* 6.6	4.5	* 7.1
Max Green Setting (Gmax), s	4.0	68.0	16.4	40.7	22.5	* 49	25.5	* 32
Max Q Clear Time (g_c+I1), s	2.5	20.6	8.5	28.5	15.5	32.0	16.9	14.2
Green Ext Time (p_c), s	0.0	6.8	0.1	3.4	0.5	7.3	0.6	3.6

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

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	9	27	97	29	62	20	264	65	99	252	36
Future Volume (veh/h)	98	9	27	97	29	62	20	264	65	99	252	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.98	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	131	12	36	129	39	83	24	318	78	132	336	48
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.83	0.83	0.83	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	389	47	71	299	84	123	62	742	179	202	1069	151
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.04	0.27	0.27	0.11	0.35	0.35
Sat Flow, veh/h	1008	202	305	706	360	527	1767	2791	672	1767	3098	439
Grp Volume(v), veh/h	179	0	0	251	0	0	24	199	197	132	190	194
Grp Sat Flow(s),veh/h/ln	1514	0	0	1593	0	0	1767	1763	1699	1767	1763	1774
Q Serve(g_s), s	0.0	0.0	0.0	1.7	0.0	0.0	0.5	3.8	3.9	2.9	3.2	3.3
Cycle Q Clear(g_c), s	3.8	0.0	0.0	5.5	0.0	0.0	0.5	3.8	3.9	2.9	3.2	3.3
Prop In Lane	0.73		0.20	0.51		0.33	1.00		0.40	1.00		0.25
Lane Grp Cap(c), veh/h	508	0	0	507	0	0	62	469	452	202	608	612
V/C Ratio(X)	0.35	0.00	0.00	0.50	0.00	0.00	0.39	0.42	0.44	0.65	0.31	0.32
Avail Cap(c_a), veh/h	1222	0	0	1317	0	0	265	1602	1545	265	1598	1609
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.4	0.0	0.0	13.9	0.0	0.0	19.2	12.4	12.4	17.3	9.8	9.8
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.3	0.0	0.0	1.5	1.2	1.3	1.3	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	1.8	0.0	0.0	0.2	1.3	1.3	1.0	0.9	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.5	0.0	0.0	14.2	0.0	0.0	20.7	13.5	13.7	18.6	10.3	10.3
LnGrp LOS	B	A	A	B	A	A	C	B	B	B	B	B
Approach Vol, veh/h		179			251			420			516	
Approach Delay, s/veh		13.5			14.2			14.0			12.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.1	16.5		15.1	5.8	19.7		15.1
Change Period (Y+Rc), s	4.4	* 5.7		* 5.6	4.4	5.7		5.6
Max Green Setting (Gmax), s	6.1	* 37		* 32	6.1	36.9		31.3
Max Q Clear Time (g_c+I1), s	4.9	5.9		7.5	2.5	5.3		5.8
Green Ext Time (p_c), s	0.0	4.4		1.1	0.0	3.7		0.8

Intersection Summary	
HCM 6th Ctrl Delay	13.4
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)	290	216	15	7	352	57	23	6	8	102	1	328
Future Volume (veh/h)	290	216	15	7	352	57	23	6	8	102	1	328
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.72	1.00		0.96	0.97		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	387	288	20	9	463	75	31	8	11	136	1	437
Peak Hour Factor	0.75	0.75	0.75	0.76	0.76	0.76	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	424	1496	103	16	620	98	216	58	60	170	14	441
Arrive On Green	0.24	0.45	0.45	0.01	0.22	0.22	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1767	3344	231	1767	2869	456	399	149	155	320	37	1138
Grp Volume(v), veh/h	387	151	157	9	281	257	50	0	0	574	0	0
Grp Sat Flow(s),veh/h/ln	1767	1763	1812	1767	1763	1562	703	0	0	1495	0	0
Q Serve(g_s), s	20.4	5.0	5.0	0.5	14.2	14.8	0.0	0.0	0.0	33.2	0.0	0.0
Cycle Q Clear(g_c), s	20.4	5.0	5.0	0.5	14.2	14.8	2.6	0.0	0.0	36.6	0.0	0.0
Prop In Lane	1.00		0.13	1.00		0.29	0.62		0.22	0.24		0.76
Lane Grp Cap(c), veh/h	424	788	810	16	381	338	333	0	0	625	0	0
V/C Ratio(X)	0.91	0.19	0.19	0.57	0.74	0.76	0.15	0.00	0.00	0.92	0.00	0.00
Avail Cap(c_a), veh/h	509	788	810	100	381	338	333	0	0	625	0	0
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	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	35.4	16.0	16.0	47.3	35.0	35.2	18.6	0.0	0.0	29.1	0.0	0.0
Incr Delay (d2), s/veh	18.7	0.5	0.5	28.8	12.1	15.0	1.0	0.0	0.0	20.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.6	2.0	2.1	0.3	7.1	6.8	0.8	0.0	0.0	16.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.1	16.5	16.6	76.1	47.1	50.2	19.5	0.0	0.0	49.7	0.0	0.0
LnGrp LOS	D	B	B	E	D	D	B	A	A	D	A	A
Approach Vol, veh/h		695			547			50			574	
Approach Delay, s/veh		37.5			49.0			19.5			49.7	
Approach LOS		D			D			B			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	27.4	26.4		42.0	5.3	48.5		42.0
Change Period (Y+Rc), s	4.4	* 5.7		4.9	4.4	5.7		4.9
Max Green Setting (Gmax), s	27.6	* 21		37.1	5.4	42.5		37.1
Max Q Clear Time (g_c+I1), s	22.4	16.8		38.6	2.5	7.0		4.6
Green Ext Time (p_c), s	0.6	1.2		0.0	0.0	1.7		0.3

Intersection Summary	
HCM 6th Ctrl Delay	44.1
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)	41	258	17	92	357	249	25	103	96	148	82	16
Future Volume (veh/h)	41	258	17	92	357	249	25	103	96	148	82	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.96	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	55	344	23	123	476	332	27	111	103	197	109	21
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.93	0.93	0.93	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	71	1321	88	155	869	604	39	309	255	232	832	156
Arrive On Green	0.04	0.39	0.39	0.09	0.44	0.44	0.02	0.17	0.17	0.13	0.28	0.28
Sat Flow, veh/h	1767	3353	223	1767	1969	1368	1767	1796	1485	1767	2955	555
Grp Volume(v), veh/h	55	180	187	123	426	382	27	109	105	197	64	66
Grp Sat Flow(s),veh/h/ln	1767	1763	1814	1767	1763	1574	1767	1763	1518	1767	1763	1747
Q Serve(g_s), s	2.7	6.1	6.2	6.0	15.7	15.8	1.3	4.8	5.5	9.6	2.4	2.5
Cycle Q Clear(g_c), s	2.7	6.1	6.2	6.0	15.7	15.8	1.3	4.8	5.5	9.6	2.4	2.5
Prop In Lane	1.00		0.12	1.00		0.87	1.00		0.98	1.00		0.32
Lane Grp Cap(c), veh/h	71	694	714	155	778	695	39	303	261	232	496	492
V/C Ratio(X)	0.78	0.26	0.26	0.79	0.55	0.55	0.70	0.36	0.40	0.85	0.13	0.13
Avail Cap(c_a), veh/h	262	694	714	262	778	695	262	798	687	262	798	791
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.0	18.1	18.1	39.5	18.2	18.2	42.9	32.3	32.5	37.5	23.7	23.7
Incr Delay (d2), s/veh	16.5	0.9	0.9	8.8	2.8	3.1	20.1	0.7	1.0	20.4	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	2.5	2.6	2.9	6.4	5.8	0.8	2.1	2.0	5.4	1.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.5	19.0	19.0	48.4	20.9	21.3	63.0	33.0	33.5	57.9	23.8	23.8
LnGrp LOS	E	B	B	D	C	C	E	C	C	E	C	C
Approach Vol, veh/h		422			931			241			327	
Approach Delay, s/veh		24.1			24.7			36.6			44.3	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	40.1	6.3	29.8	7.9	44.3	16.0	20.1
Change Period (Y+Rc), s	4.4	5.3	4.4	4.9	4.4	5.3	4.4	4.9
Max Green Setting (Gmax), s	13.1	34.8	13.1	40.0	13.1	34.8	13.1	40.0
Max Q Clear Time (g_c+I1), s	9.0	8.2	3.3	4.5	4.7	17.8	11.6	7.5
Green Ext Time (p_c), s	0.1	2.0	0.0	0.7	0.0	4.7	0.1	1.3

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

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	45	26	49	23	18	42
Future Vol, veh/h	45	26	49	23	18	42
Peak Hour Factor	0.75	0.75	0.86	0.86	0.94	0.94
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	60	35	57	27	19	45
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Righ	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	7.7	7.4	7.7
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	63%	30%
Vol Thru, %	68%	0%	70%
Vol Right, %	32%	37%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	72	71	60
LT Vol	0	45	18
Through Vol	49	0	42
RT Vol	23	26	0
Lane Flow Rate	84	95	64
Geometry Grp	1	1	1
Degree of Util (X)	0.092	0.108	0.075
Departure Headway (Hd)	3.974	4.111	4.241
Convergence, Y/N	Yes	Yes	Yes
Cap	892	862	837
Service Time	2.038	2.179	2.305
HCM Lane V/C Ratio	0.094	0.11	0.076
HCM Control Delay	7.4	7.7	7.7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.3	0.4	0.2

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	14	23	33	12	10	70
Future Vol, veh/h	14	23	33	12	10	70
Conflicting Peds, #/hr	0	3	0	7	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	75	75	91	91
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	19	31	44	16	11	77

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	158	62	0	0	67	0
Stage 1	59	-	-	-	-	-
Stage 2	99	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	831	1000	-	-	1528	-
Stage 1	961	-	-	-	-	-
Stage 2	922	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	819	990	-	-	1518	-
Mov Cap-2 Maneuver	819	-	-	-	-	-
Stage 1	954	-	-	-	-	-
Stage 2	915	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	0.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	918	1518	-
HCM Lane V/C Ratio	-	-	0.054	0.007	-
HCM Control Delay (s)	-	-	9.1	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	1	21	80	1	14	12	127	43	2	140	8
Future Vol, veh/h	5	1	21	80	1	14	12	127	43	2	140	8
Conflicting Peds, #/hr	0	0	3	0	0	15	0	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	85	85	85	75	75	75	75	75	75
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	7	1	28	94	1	16	16	169	57	3	187	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	454	459	198	446	436	213	200	0	0	226	0	0
Stage 1	201	201	-	230	230	-	-	-	-	-	-	-
Stage 2	253	258	-	216	206	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	515	497	841	521	512	825	1366	-	-	1337	-	-
Stage 1	799	733	-	771	712	-	-	-	-	-	-	-
Stage 2	749	692	-	784	729	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	489	488	837	494	502	813	1363	-	-	1337	-	-
Mov Cap-2 Maneuver	489	488	-	494	502	-	-	-	-	-	-	-
Stage 1	786	729	-	760	702	-	-	-	-	-	-	-
Stage 2	712	682	-	752	725	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.2	13.7	0.5	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1363	-	-	723	524	1337	-	-
HCM Lane V/C Ratio	0.012	-	-	0.05	0.213	0.002	-	-
HCM Control Delay (s)	7.7	0	-	10.2	13.7	7.7	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.8	0	-	-

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	14	9	61	20	12	10	15	11	1	79	16
Future Vol, veh/h	9	14	9	61	20	12	10	15	11	1	79	16
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.77	0.77	0.77
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	12	19	12	81	27	16	13	20	15	1	103	21
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.6	8.3	7.6	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	28%	28%	66%	1%
Vol Thru, %	42%	44%	22%	82%
Vol Right, %	31%	28%	13%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	36	32	93	96
LT Vol	10	9	61	1
Through Vol	15	14	20	79
RT Vol	11	9	12	16
Lane Flow Rate	48	43	124	125
Geometry Grp	1	1	1	1
Degree of Util (X)	0.058	0.052	0.153	0.149
Departure Headway (Hd)	4.342	4.365	4.44	4.29
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	827	823	810	839
Service Time	2.358	2.38	2.453	2.303
HCM Lane V/C Ratio	0.058	0.052	0.153	0.149
HCM Control Delay	7.6	7.6	8.3	8.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.2	0.5	0.5

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1020	1491	13	0	161
Future Vol, veh/h	0	1020	1491	13	0	161
Conflicting Peds, #/hr	6	0	0	6	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	92	92	82	82
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	1133	1621	14	0	196

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	824
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.93
Pot Cap-1 Maneuver	0	-	-	-	0	270
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	268
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	48
HCM LOS			E

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	268
HCM Lane V/C Ratio	-	-	-	0.733
HCM Control Delay (s)	-	-	-	48
HCM Lane LOS	-	-	-	E
HCM 95th %tile Q(veh)	-	-	-	5.2

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	15	2	27	6	95	3	78	67	93	17	5
Future Vol, veh/h	27	15	2	27	6	95	3	78	67	93	17	5
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.88	0.88	0.88	0.85	0.85	0.85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	36	20	3	36	8	127	3	89	76	109	20	6
Number of Lanes	0	1	0	0	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay	9.3	8.6	9.2	9.5
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	61%	82%	0%	100%	0%
Vol Thru, %	0%	54%	34%	18%	0%	0%	77%
Vol Right, %	0%	46%	5%	0%	100%	0%	23%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	3	145	44	33	95	93	22
LT Vol	3	0	27	27	0	93	0
Through Vol	0	78	15	6	0	0	17
RT Vol	0	67	2	0	95	0	5
Lane Flow Rate	3	165	59	44	127	109	26
Geometry Grp	7	7	6	7	7	7	7
Degree of Util (X)	0.005	0.227	0.092	0.071	0.165	0.176	0.037
Departure Headway (Hd)	5.784	4.955	5.646	5.811	4.696	5.796	5.132
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	617	722	632	615	761	617	695
Service Time	3.532	2.703	3.702	3.557	2.441	3.546	2.882
HCM Lane V/C Ratio	0.005	0.229	0.093	0.072	0.167	0.177	0.037
HCM Control Delay	8.6	9.2	9.3	9	8.4	9.8	8.1
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0	0.9	0.3	0.2	0.6	0.6	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	366	649	0	0	772	327	196	3	1021	0	0	0
Future Volume (veh/h)	366	649	0	0	772	327	196	3	1021	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1856	1856	0	1856	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	389	690	0	0	813	344	220	0	1134			
Peak Hour Factor	0.94	0.94	0.94	0.95	0.95	0.95	0.90	0.90	0.90			
Percent Heavy Veh, %	3	3	0	3	3	3	3	3	3			
Cap, veh/h	467	2398	0	80	914	405	1347	0	1197			
Arrive On Green	0.27	0.95	0.00	0.00	0.26	0.26	0.38	0.00	0.38			
Sat Flow, veh/h	3428	5233	0	747	3526	1562	3534	0	3140			
Grp Volume(v), veh/h	389	690	0	0	813	344	220	0	1134			
Grp Sat Flow(s),veh/h/ln	1714	1689	0	747	1763	1562	1767	0	1570			
Q Serve(g_s), s	9.6	0.9	0.0	0.0	20.0	18.8	3.7	0.0	31.5			
Cycle Q Clear(g_c), s	9.6	0.9	0.0	0.0	20.0	18.8	3.7	0.0	31.5			
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	467	2398	0	80	914	405	1347	0	1197			
V/C Ratio(X)	0.83	0.29	0.00	0.00	0.89	0.85	0.16	0.00	0.95			
Avail Cap(c_a), veh/h	467	2398	0	92	971	430	1378	0	1225			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.72	0.72	0.00	0.00	0.82	0.82	1.00	0.00	1.00			
Uniform Delay (d), s/veh	31.8	1.3	0.0	0.0	32.1	31.7	18.4	0.0	27.0			
Incr Delay (d2), s/veh	8.6	0.2	0.0	0.0	10.7	16.5	0.0	0.0	14.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.9	0.3	0.0	0.0	9.5	8.7	1.5	0.0	13.6			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.4	1.5	0.0	0.0	42.7	48.2	18.4	0.0	41.5			
LnGrp LOS	D	A	A	A	D	D	B	A	D			
Approach Vol, veh/h		1079			1157			1354				
Approach Delay, s/veh		15.5			44.4			37.8				
Approach LOS		B			D			D				

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		49.6			19.3	30.3		40.4				
Change Period (Y+Rc), s		7.0			7.0	* 7		6.1				
Max Green Setting (Gmax), s		41.8			11.3	* 25		35.1				
Max Q Clear Time (g_c+I1), s		2.9			11.6	22.0		33.5				
Green Ext Time (p_c), s		3.4			0.0	1.4		0.8				

Intersection Summary	
HCM 6th Ctrl Delay	33.2
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	752	650	528	440	0	0	0	0	263	1	254
Future Volume (veh/h)	0	752	650	528	440	0	0	0	0	263	1	254
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1856	1856	1856	1856	0				1856	1856	1856
Adj Flow Rate, veh/h	0	864	679	574	478	0				376	0	186
Peak Hour Factor	0.87	0.87	0.87	0.92	0.92	0.92				0.91	0.91	0.91
Percent Heavy Veh, %	0	3	3	3	3	0				3	3	3
Cap, veh/h	0	1579	704	642	2462	0				552	0	246
Arrive On Green	0.00	0.45	0.45	0.31	1.00	0.00				0.16	0.00	0.16
Sat Flow, veh/h	0	3618	1571	3428	3618	0				3534	0	1572
Grp Volume(v), veh/h	0	864	679	574	478	0				376	0	186
Grp Sat Flow(s),veh/h/ln	0	1763	1571	1714	1763	0				1767	0	1572
Q Serve(g_s), s	0.0	16.1	37.8	14.4	0.0	0.0				9.0	0.0	10.2
Cycle Q Clear(g_c), s	0.0	16.1	37.8	14.4	0.0	0.0				9.0	0.0	10.2
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1579	704	642	2462	0				552	0	246
V/C Ratio(X)	0.00	0.55	0.96	0.89	0.19	0.00				0.68	0.00	0.76
Avail Cap(c_a), veh/h	0	1579	704	693	2462	0				1139	0	507
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.59	0.59	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	18.2	24.2	30.1	0.0	0.0				35.9	0.0	36.3
Incr Delay (d2), s/veh	0.0	1.4	26.4	8.7	0.1	0.0				1.5	0.0	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.4	18.0	5.6	0.0	0.0				3.9	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	19.5	50.5	38.8	0.1	0.0				37.3	0.0	41.1
LnGrp LOS	A	B	D	D	A	A				D	A	D
Approach Vol, veh/h		1543			1052						562	
Approach Delay, s/veh		33.2			21.2						38.6	
Approach LOS		C			C						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	22.5	47.3		20.2		69.8
Change Period (Y+Rc), s *	5.7	7.0		6.1		7.0
Max Green Setting (Gmax), s *	18.8	24.0		29.0		47.9
Max Q Clear Time (g_c+I1), s	16.4	39.8		12.2		2.0
Green Ext Time (p_c), s	0.5	0.0		1.9		3.5

Intersection Summary	
HCM 6th Ctrl Delay	30.1
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	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	191	30	170	537	0	723	781
Future Volume (veh/h)	191	30	170	537	0	723	781
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856		1856	1856
Adj Flow Rate, veh/h	248	39	181	571		851	919
Peak Hour Factor	0.77	0.77	0.94	0.94		0.85	0.85
Percent Heavy Veh, %	3	3	3	3		3	3
Cap, veh/h	339	155	235	4101		2379	1104
Arrive On Green	0.10	0.10	0.14	1.00		0.70	0.70
Sat Flow, veh/h	3428	1572	3428	5233		3544	1567
Grp Volume(v), veh/h	248	39	181	571		851	919
Grp Sat Flow(s),veh/h/ln	1714	1572	1714	1689		1689	1567
Q Serve(g_s), s	8.4	2.8	6.1	0.0		12.0	50.3
Cycle Q Clear(g_c), s	8.4	2.8	6.1	0.0		12.0	50.3
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	339	155	235	4101		2379	1104
V/C Ratio(X)	0.73	0.25	0.77	0.14		0.36	0.83
Avail Cap(c_a), veh/h	1003	460	360	4101		2379	1104
HCM Platoon Ratio	1.00	1.00	2.00	2.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	0.97	0.97		0.63	0.63
Uniform Delay (d), s/veh	52.5	50.0	50.9	0.0		7.0	12.7
Incr Delay (d2), s/veh	4.0	1.1	2.1	0.1		0.3	4.8
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	2.5	2.5	0.0		3.9	16.5
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	56.6	51.1	53.0	0.1		7.3	17.5
LnGrp LOS	E	D	D	A		A	B
Approach Vol, veh/h	287			752		1770	
Approach Delay, s/veh	55.8			12.8		12.6	
Approach LOS	E			B		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		102.2		17.8	12.6	89.6
Change Period (Y+Rc), s		* 5.1		5.9	4.4	5.1
Max Green Setting (Gmax), s		* 66		35.1	12.6	56.9
Max Q Clear Time (g_c+I1), s		2.0		10.4	8.1	52.3
Green Ext Time (p_c), s		11.4		1.4	0.1	4.3

Intersection Summary	
HCM 6th Ctrl Delay	17.1
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	273	917	552	248	1112	251	286	390	68	304	562	397
Future Volume (veh/h)	273	917	552	248	1112	251	286	390	68	304	562	397
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	303	1019	552	264	1183	240	336	459	73	405	749	476
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.85	0.85	0.85	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	332	1738	539	298	1687	519	340	1547	476	359	1574	483
Arrive On Green	0.10	0.34	0.34	0.09	0.33	0.33	0.10	0.31	0.31	0.10	0.31	0.31
Sat Flow, veh/h	3428	5066	1570	3428	5066	1558	3428	5066	1559	3428	5066	1553
Grp Volume(v), veh/h	303	1019	552	264	1183	240	336	459	73	405	749	476
Grp Sat Flow(s),veh/h/ln	1714	1689	1570	1714	1689	1558	1714	1689	1559	1714	1689	1553
Q Serve(g_s), s	11.4	21.5	44.6	9.9	26.4	15.8	12.7	9.0	4.4	13.6	15.5	39.6
Cycle Q Clear(g_c), s	11.4	21.5	44.6	9.9	26.4	15.8	12.7	9.0	4.4	13.6	15.5	39.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	332	1738	539	298	1687	519	340	1547	476	359	1574	483
V/C Ratio(X)	0.91	0.59	1.02	0.89	0.70	0.46	0.99	0.30	0.15	1.13	0.48	0.99
Avail Cap(c_a), veh/h	332	1738	539	298	1734	533	340	1559	480	359	1574	483
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.1	35.1	42.7	58.7	37.7	34.2	58.5	34.5	32.9	58.2	36.2	44.5
Incr Delay (d2), s/veh	28.2	0.7	45.3	24.9	1.5	1.1	45.2	0.3	0.4	87.3	0.5	37.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	9.0	23.7	5.3	11.1	6.1	7.6	3.7	1.7	10.2	6.5	20.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	86.4	35.8	88.0	83.7	39.2	35.3	103.7	34.8	33.3	145.5	36.8	82.0
LnGrp LOS	F	D	F	F	D	D	F	C	C	F	D	F
Approach Vol, veh/h		1874			1687			868			1630	
Approach Delay, s/veh		59.4			45.6			61.3			77.0	
Approach LOS		E			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.7	51.1	17.3	45.9	17.0	49.8	18.0	45.2
Change Period (Y+Rc), s	4.4	6.5	4.4	5.5	4.4	* 6.5	4.4	* 5.5
Max Green Setting (Gmax), s	11.3	44.6	12.9	40.4	12.6	* 45	13.6	* 40
Max Q Clear Time (g_c+I1), s	11.9	46.6	14.7	41.6	13.4	28.4	15.6	11.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	11.4	0.0	7.2

Intersection Summary	
HCM 6th Ctrl Delay	60.6
HCM 6th LOS	E

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)	434	1075	164	286	994	68	148	238	234	121	331	903
Future Volume (veh/h)	434	1075	164	286	994	68	148	238	234	121	331	903
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	467	1156	176	311	1080	74	168	270	266	138	376	925
Peak Hour Factor	0.93	0.93	0.93	0.92	0.92	0.92	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	516	1512	230	367	1441	99	194	527	468	163	993	779
Arrive On Green	0.15	0.34	0.34	0.04	0.10	0.10	0.11	0.30	0.30	0.09	0.28	0.28
Sat Flow, veh/h	3428	4434	675	3428	4840	331	1767	1763	1565	1767	3526	2768
Grp Volume(v), veh/h	467	880	452	311	753	401	168	270	266	138	376	925
Grp Sat Flow(s),veh/h/ln	1714	1689	1731	1714	1689	1795	1767	1763	1565	1767	1763	1384
Q Serve(g_s), s	16.7	29.0	29.1	11.3	27.1	27.2	11.7	15.8	17.9	9.6	10.7	35.2
Cycle Q Clear(g_c), s	16.7	29.0	29.1	11.3	27.1	27.2	11.7	15.8	17.9	9.6	10.7	35.2
Prop In Lane	1.00		0.39	1.00		0.18	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	516	1152	590	367	1005	534	194	527	468	163	993	779
V/C Ratio(X)	0.91	0.76	0.76	0.85	0.75	0.75	0.87	0.51	0.57	0.85	0.38	1.19
Avail Cap(c_a), veh/h	524	1152	590	403	1005	534	216	550	488	164	993	779
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.72	0.72	0.72	0.82	0.82	0.82	0.93	0.93	0.93	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.2	36.7	36.7	59.3	51.8	51.8	54.8	36.3	37.0	55.9	36.1	44.9
Incr Delay (d2), s/veh	14.4	3.5	6.7	11.1	4.2	7.8	23.9	0.3	0.8	30.2	0.4	96.8
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	8.2	12.3	13.2	5.8	12.9	14.3	6.5	6.9	7.0	5.7	4.7	22.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.7	40.2	43.4	70.4	56.0	59.6	78.7	36.5	37.8	86.1	36.5	141.7
LnGrp LOS	E	D	D	E	E	E	E	D	D	F	D	F
Approach Vol, veh/h		1799			1465			704			1439	
Approach Delay, s/veh		47.9			60.1			47.1			108.9	
Approach LOS		D			E			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.3	47.6	18.1	41.0	23.7	42.2	15.9	43.2
Change Period (Y+Rc), s	4.9	5.0	4.4	5.8	4.9	* 5	4.4	* 5.8
Max Green Setting (Gmax), s	14.7	39.7	15.3	35.2	19.1	* 35	11.6	* 39
Max Q Clear Time (g_c+I1), s	13.3	31.1	13.7	37.2	18.7	29.2	11.6	19.9
Green Ext Time (p_c), s	0.1	7.8	0.0	0.0	0.0	5.6	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	67.3
HCM 6th LOS	E

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)	205	962	261	42	768	76	353	45	28	107	73	132
Future Volume (veh/h)	205	962	261	42	768	76	353	45	28	107	73	132
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	233	1093	297	49	893	88	462	0	0	120	82	148
Peak Hour Factor	0.88	0.88	0.88	0.86	0.86	0.86	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	256	2118	576	77	2033	200	568	298	0	195	205	174
Arrive On Green	0.29	1.00	1.00	0.04	0.43	0.43	0.16	0.00	0.00	0.11	0.11	0.11
Sat Flow, veh/h	1781	3989	1084	1781	4724	464	3563	1870	0	1781	1870	1585
Grp Volume(v), veh/h	233	933	457	49	643	338	462	0	0	120	82	148
Grp Sat Flow(s),veh/h/ln	1781	1702	1669	1781	1702	1784	1781	1870	0	1781	1870	1585
Q Serve(g_s), s	15.8	0.0	0.0	3.4	16.6	16.7	15.7	0.0	0.0	8.0	5.1	11.5
Cycle Q Clear(g_c), s	15.8	0.0	0.0	3.4	16.6	16.7	15.7	0.0	0.0	8.0	5.1	11.5
Prop In Lane	1.00		0.65	1.00		0.26	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	256	1808	886	77	1465	768	568	298	0	195	205	174
V/C Ratio(X)	0.91	0.52	0.52	0.64	0.44	0.44	0.81	0.00	0.00	0.62	0.40	0.85
Avail Cap(c_a), veh/h	368	1808	886	128	1465	768	943	495	0	229	241	204
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.56	0.56	0.56	0.93	0.93	0.93	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.7	0.0	0.0	58.8	25.0	25.0	50.7	0.0	0.0	53.1	51.8	54.7
Incr Delay (d2), s/veh	10.3	0.6	1.2	3.0	0.9	1.7	1.1	0.0	0.0	1.8	0.5	22.2
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	6.6	0.1	0.3	1.6	6.8	7.3	7.1	0.0	0.0	3.7	2.4	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.0	0.6	1.2	61.9	25.9	26.7	51.8	0.0	0.0	54.9	52.3	76.9
LnGrp LOS	D	A	A	E	C	C	D	A	A	D	D	E
Approach Vol, veh/h		1623			1030			462			350	
Approach Delay, s/veh		8.4			27.9			51.8			63.6	
Approach LOS		A			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.8	71.8		18.6	22.4	59.2		24.8
Change Period (Y+Rc), s	4.4	* 5.4		4.9	4.4	5.4		4.9
Max Green Setting (Gmax), s	9.6	* 48		16.1	25.8	30.4		33.1
Max Q Clear Time (g_c+I1), s	5.4	2.0		13.5	17.8	18.7		17.7
Green Ext Time (p_c), s	0.0	35.0		0.2	0.2	8.4		0.8

Intersection Summary	
HCM 6th Ctrl Delay	25.6
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)	90	79	83	218	18	184	150	762	139	340	599	116
Future Volume (veh/h)	90	79	83	218	18	184	150	762	139	340	599	116
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	115	101	106	291	-17	222	161	819	149	382	673	130
Peak Hour Factor	0.78	0.78	0.78	0.83	0.83	0.83	0.93	0.93	0.93	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	151	158	133	589	0	277	214	2020	365	434	2279	435
Arrive On Green	0.09	0.09	0.09	0.17	0.00	0.17	0.06	0.47	0.47	0.25	1.00	1.00
Sat Flow, veh/h	1767	1856	1556	3534	-127	1662	3428	4302	777	3428	4271	815
Grp Volume(v), veh/h	115	101	106	291	0	205	161	642	326	382	530	273
Grp Sat Flow(s),veh/h/ln	1767	1856	1556	1767	0	1535	1714	1689	1702	1714	1689	1709
Q Serve(g_s), s	8.0	6.6	8.4	9.3	0.0	16.0	5.8	15.6	15.7	13.4	0.0	0.0
Cycle Q Clear(g_c), s	8.0	6.6	8.4	9.3	0.0	16.0	5.8	15.6	15.7	13.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.08	1.00		0.46	1.00		0.48
Lane Grp Cap(c), veh/h	151	158	133	589	0	256	214	1586	799	434	1802	912
V/C Ratio(X)	0.76	0.64	0.80	0.49	0.00	0.80	0.75	0.40	0.41	0.88	0.29	0.30
Avail Cap(c_a), veh/h	206	217	182	987	0	429	291	1586	799	592	1802	912
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	0.93	0.00	0.93	0.82	0.82	0.82	0.91	0.91	0.91
Uniform Delay (d), s/veh	55.9	55.3	56.1	47.3	0.0	49.3	57.6	21.7	21.8	45.8	0.0	0.0
Incr Delay (d2), s/veh	6.7	1.6	11.2	0.2	0.0	2.1	3.6	0.6	1.3	8.3	0.4	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	3.2	3.7	4.1	0.0	6.2	2.6	6.2	6.5	5.4	0.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.6	56.9	67.3	47.5	0.0	51.3	61.2	22.3	23.0	54.1	0.4	0.8
LnGrp LOS	E	E	E	D	A	D	E	C	C	D	A	A
Approach Vol, veh/h		322			496			1129			1185	
Approach Delay, s/veh		62.4			49.1			28.1			17.8	
Approach LOS		E			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	30.2	63.8		15.1	12.2	71.8		25.9
Change Period (Y+Rc), s	4.4	* 5.1		4.4	4.4	5.1		5.1
Max Green Setting (Gmax), s	21.6	* 35		14.6	10.6	45.9		34.9
Max Q Clear Time (g_c+I1), s	15.4	17.7		10.4	7.8	2.0		18.0
Green Ext Time (p_c), s	0.4	12.4		0.3	0.1	16.3		1.3

Intersection Summary	
HCM 6th Ctrl Delay	31.0
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)	122	50	147	57	60	101	221	680	19	144	784	31
Future Volume (veh/h)	122	50	147	57	60	101	221	680	19	144	784	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	118	81	163	64	67	113	251	773	22	160	871	34
Peak Hour Factor	0.90	0.90	0.90	0.89	0.89	0.89	0.88	0.88	0.88	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	213	224	187	188	198	163	276	2612	74	184	2320	90
Arrive On Green	0.12	0.12	0.12	0.11	0.11	0.11	0.21	0.69	0.69	0.21	0.93	0.93
Sat Flow, veh/h	1767	1856	1553	1767	1856	1529	1767	5060	144	1767	5002	195
Grp Volume(v), veh/h	118	81	163	64	67	113	251	515	280	160	588	317
Grp Sat Flow(s),veh/h/ln	1767	1856	1553	1767	1856	1529	1767	1689	1827	1767	1689	1819
Q Serve(g_s), s	7.9	5.0	12.9	4.2	4.2	8.9	17.3	7.5	7.5	10.9	2.4	2.4
Cycle Q Clear(g_c), s	7.9	5.0	12.9	4.2	4.2	8.9	17.3	7.5	7.5	10.9	2.4	2.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.08	1.00		0.11
Lane Grp Cap(c), veh/h	213	224	187	188	198	163	276	1743	943	184	1567	844
V/C Ratio(X)	0.55	0.36	0.87	0.34	0.34	0.69	0.91	0.30	0.30	0.87	0.38	0.38
Avail Cap(c_a), veh/h	228	239	200	481	505	416	362	1743	943	270	1567	844
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.88	0.88	0.88	0.74	0.74	0.74
Uniform Delay (d), s/veh	51.8	50.6	54.0	51.8	51.8	53.9	48.6	10.7	10.7	48.7	2.5	2.5
Incr Delay (d2), s/veh	1.2	0.4	28.7	0.4	0.4	2.0	17.5	0.4	0.7	10.4	0.5	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	3.6	2.4	6.5	1.9	2.0	3.5	8.6	2.6	2.9	4.8	0.7	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.0	50.9	82.8	52.2	52.1	55.9	66.1	11.0	11.4	59.1	3.0	3.5
LnGrp LOS	D	D	F	D	D	E	E	B	B	E	A	A
Approach Vol, veh/h		362			244			1046			1065	
Approach Delay, s/veh		65.9			53.9			24.3			11.6	
Approach LOS		E			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.4	69.4		20.0	23.9	62.9		18.2
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9
Max Green Setting (Gmax), s	19.1	36.7		16.1	25.6	30.2		34.0
Max Q Clear Time (g_c+I1), s	12.9	9.5		14.9	19.3	4.4		10.9
Green Ext Time (p_c), s	0.1	14.1		0.2	0.2	16.6		0.5

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

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	36	68	34	19	64	27	521	53	110	591	19
Future Volume (veh/h)	39	36	68	34	19	64	27	521	53	110	591	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	45	41	78	40	22	74	28	543	55	121	649	21
Peak Hour Factor	0.87	0.87	0.87	0.86	0.86	0.86	0.96	0.96	0.96	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	237	145	244	329	58	195	48	1163	117	155	1465	47
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.03	0.36	0.36	0.09	0.42	0.42
Sat Flow, veh/h	520	933	1566	1259	373	1254	1767	3230	326	1767	3485	113
Grp Volume(v), veh/h	86	0	78	40	0	96	28	296	302	121	328	342
Grp Sat Flow(s),veh/h/ln	1452	0	1566	1259	0	1627	1767	1763	1794	1767	1763	1835
Q Serve(g_s), s	0.1	0.0	1.6	1.0	0.0	1.9	0.5	4.5	4.5	2.4	4.6	4.7
Cycle Q Clear(g_c), s	2.0	0.0	1.6	3.0	0.0	1.9	0.5	4.5	4.5	2.4	4.6	4.7
Prop In Lane	0.52		1.00	1.00		0.77	1.00		0.18	1.00		0.06
Lane Grp Cap(c), veh/h	383	0	244	329	0	253	48	635	646	155	741	771
V/C Ratio(X)	0.22	0.00	0.32	0.12	0.00	0.38	0.58	0.47	0.47	0.78	0.44	0.44
Avail Cap(c_a), veh/h	1352	0	1251	1125	0	1281	303	1283	1305	656	1655	1722
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.1	0.0	13.1	14.7	0.0	13.3	16.8	8.6	8.6	15.7	7.2	7.2
Incr Delay (d2), s/veh	0.1	0.0	0.3	0.1	0.0	0.3	4.1	0.7	0.7	3.2	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.5	0.3	0.0	0.6	0.2	1.3	1.3	0.9	1.3	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.2	0.0	13.4	14.8	0.0	13.6	20.9	9.4	9.4	18.9	8.0	8.0
LnGrp LOS	B	A	B	B	A	B	C	A	A	B	A	A
Approach Vol, veh/h		164			136			626			791	
Approach Delay, s/veh		13.3			14.0			9.9			9.7	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.1	18.1		9.9	5.0	20.2		9.9
Change Period (Y+Rc), s	4.0	5.5		* 4.4	4.0	* 5.5		4.4
Max Green Setting (Gmax), s	13.0	25.5		* 28	6.0	* 33		27.6
Max Q Clear Time (g_c+I1), s	4.0	6.5		4.0	2.5	6.7		5.0
Green Ext Time (p_c), s	0.1	4.8		0.4	0.0	7.9		0.4

Intersection Summary	
HCM 6th Ctrl Delay	10.4
HCM 6th LOS	B

Notes

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

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (veh/h)	36	77	0	580	50	82	603
Future Volume (veh/h)	36	77	0	580	50	82	603
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No
Adj Sat Flow, veh/h/ln	1856	1856		1856	1856	1856	1856
Adj Flow Rate, veh/h	40	85		699	60	96	709
Peak Hour Factor	0.91	0.91		0.83	0.83	0.85	0.85
Percent Heavy Veh, %	3	3		3	3	3	3
Cap, veh/h	147	131		1413	121	126	2202
Arrive On Green	0.08	0.08		0.43	0.43	0.07	0.62
Sat Flow, veh/h	1767	1572		3378	282	1767	3618
Grp Volume(v), veh/h	40	85		375	384	96	709
Grp Sat Flow(s),veh/h/ln	1767	1572		1763	1804	1767	1763
Q Serve(g_s), s	0.7	1.7		5.0	5.0	1.7	3.1
Cycle Q Clear(g_c), s	0.7	1.7		5.0	5.0	1.7	3.1
Prop In Lane	1.00	1.00			0.16	1.00	
Lane Grp Cap(c), veh/h	147	131		758	776	126	2202
V/C Ratio(X)	0.27	0.65		0.49	0.49	0.76	0.32
Avail Cap(c_a), veh/h	1413	1257		1599	1637	598	3828
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	14.0	14.4		6.7	6.7	14.8	2.9
Incr Delay (d2), s/veh	0.4	2.0		0.7	0.7	3.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.6		1.2	1.3	0.7	0.3
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	14.3	16.5		7.4	7.4	18.4	3.0
LnGrp LOS	B	B		A	A	B	A
Approach Vol, veh/h	125			759			805
Approach Delay, s/veh	15.8			7.4			4.9
Approach LOS	B			A			A

Timer - Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	6.3	19.5				25.8		6.7
Change Period (Y+Rc), s	4.0	5.5				* 5.5		4.0
Max Green Setting (Gmax), s	11.3	29.5				* 35		26.0
Max Q Clear Time (g_c+I1), s	3.7	7.0				5.1		3.7
Green Ext Time (p_c), s	0.1	7.0				9.6		0.2

Intersection Summary	
HCM 6th Ctrl Delay	6.8
HCM 6th LOS	A

Notes

User approved ignoring U-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)	14	3	24	56	1	26	18	606	65	43	574	20
Future Volume (veh/h)	14	3	24	56	1	26	18	606	65	43	574	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		1.00	1.00		0.96	1.00		0.99	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	19	4	32	66	1	31	19	645	69	50	667	23
Peak Hour Factor	0.75	0.75	0.75	0.85	0.85	0.85	0.94	0.94	0.94	0.86	0.86	0.86
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	178	46	131	397	5	218	34	1299	139	77	1490	51
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.02	0.40	0.40	0.04	0.43	0.43
Sat Flow, veh/h	330	322	907	1416	32	1510	1767	3209	343	1767	3473	120
Grp Volume(v), veh/h	55	0	0	67	0	31	19	354	360	50	338	352
Grp Sat Flow(s),veh/h/ln	1559	0	0	1448	0	1510	1767	1763	1789	1767	1763	1830
Q Serve(g_s), s	0.0	0.0	0.0	0.2	0.0	0.7	0.4	5.5	5.6	1.0	5.0	5.0
Cycle Q Clear(g_c), s	1.1	0.0	0.0	1.3	0.0	0.7	0.4	5.5	5.6	1.0	5.0	5.0
Prop In Lane	0.35		0.58	0.99		1.00	1.00		0.19	1.00		0.07
Lane Grp Cap(c), veh/h	355	0	0	402	0	218	34	714	724	77	756	785
V/C Ratio(X)	0.15	0.00	0.00	0.17	0.00	0.14	0.56	0.50	0.50	0.65	0.45	0.45
Avail Cap(c_a), veh/h	1231	0	0	1204	0	1105	219	1437	1459	363	1584	1645
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.0	0.0	0.0	14.1	0.0	13.9	18.0	8.2	8.2	17.4	7.5	7.5
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.1	5.3	0.8	0.8	3.4	0.9	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	0.3	0.0	0.0	0.4	0.0	0.2	0.2	1.6	1.6	0.4	1.4	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.1	0.0	0.0	14.2	0.0	14.0	23.3	9.0	9.0	20.9	8.4	8.4
LnGrp LOS	B	A	A	B	A	B	C	A	A	C	A	A
Approach Vol, veh/h		55			98			733			740	
Approach Delay, s/veh		14.1			14.1			9.3			9.2	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.0	20.8		10.2	5.1	21.7		10.2
Change Period (Y+Rc), s	4.4	5.8		4.9	4.4	* 5.8		4.9
Max Green Setting (Gmax), s	7.6	30.2		27.1	4.6	* 33		27.1
Max Q Clear Time (g_c+I1), s	3.0	7.6		3.1	2.4	7.0		3.3
Green Ext Time (p_c), s	0.0	6.5		0.2	0.0	8.9		0.2

Intersection Summary	
HCM 6th Ctrl Delay	9.7
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

* 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	1367	1292	0	1432	140	793	103	899	0	0	0
Future Volume (veh/h)	0	1367	1292	0	1432	140	793	103	899	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	0	1454	1374	0	1574	154	875	0	908			
Peak Hour Factor	0.94	0.94	0.94	0.91	0.91	0.91	0.99	0.99	0.99			
Percent Heavy Veh, %	0	3	3	0	3	3	3	3	3			
Cap, veh/h	0	2763	2451	0	1923	847	1202	0	1069			
Arrive On Green	0.00	1.00	1.00	0.00	0.55	0.55	0.34	0.00	0.34			
Sat Flow, veh/h	0	5233	2768	0	3618	1552	3534	0	3145			
Grp Volume(v), veh/h	0	1454	1374	0	1574	154	875	0	908			
Grp Sat Flow(s),veh/h/ln	0	1689	1384	0	1763	1552	1767	0	1572			
Q Serve(g_s), s	0.0	0.0	0.0	0.0	40.3	5.5	23.9	0.0	29.5			
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	40.3	5.5	23.9	0.0	29.5			
Prop In Lane	0.00		1.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	2763	2451	0	1923	847	1202	0	1069			
V/C Ratio(X)	0.00	0.53	0.56	0.00	0.82	0.18	0.73	0.00	0.85			
Avail Cap(c_a), veh/h	0	2763	2451	0	1923	847	1366	0	1215			
HCM Platoon Ratio	1.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	0.77	0.77	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	20.5	12.6	31.8	0.0	33.7			
Incr Delay (d2), s/veh	0.0	0.6	0.7	0.0	4.0	0.5	1.7	0.0	5.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.2	0.0	15.8	1.9	10.3	0.0	11.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.6	0.7	0.0	24.5	13.1	33.6	0.0	39.0			
LnGrp LOS	A	A	A	A	C	B	C	A	D			
Approach Vol, veh/h		2828			1728			1783				
Approach Delay, s/veh		0.6			23.5			36.3				
Approach LOS		A			C			D				

Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		67.5				67.5		42.5				
Change Period (Y+Rc), s		7.5				7.5		5.1				
Max Green Setting (Gmax), s		54.9				54.9		42.5				
Max Q Clear Time (g_c+I1), s		2.0				42.3		31.5				
Green Ext Time (p_c), s		30.7				8.5		5.9				

Intersection Summary			
HCM 6th Ctrl Delay			16.9
HCM 6th LOS			B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2265	606	0	1552	532	0	0	0	182	10	0
Future Volume (veh/h)	0	2265	606	0	1552	532	0	0	0	182	10	0
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856				1856	1856	0
Adj Flow Rate, veh/h	0	2335	625	0	1634	0				195	0	0
Peak Hour Factor	0.97	0.97	0.97	0.95	0.95	0.95				0.97	0.97	0.97
Percent Heavy Veh, %	0	3	3	0	3	3				3	3	0
Cap, veh/h	0	4099	1272	0	2853					270	142	0
Arrive On Green	0.00	0.81	0.81	0.00	1.00	0.00				0.08	0.00	0.00
Sat Flow, veh/h	0	5233	1572	0	3618	1572				3534	1856	0
Grp Volume(v), veh/h	0	2335	625	0	1634	0				195	0	0
Grp Sat Flow(s),veh/h/ln	0	1689	1572	0	1763	1572				1767	1856	0
Q Serve(g_s), s	0.0	17.9	13.8	0.0	0.0	0.0				5.9	0.0	0.0
Cycle Q Clear(g_c), s	0.0	17.9	13.8	0.0	0.0	0.0				5.9	0.0	0.0
Prop In Lane	0.00		1.00	0.00		1.00				1.00		0.00
Lane Grp Cap(c), veh/h	0	4099	1272	0	2853					270	142	0
V/C Ratio(X)	0.00	0.57	0.49	0.00	0.57					0.72	0.00	0.00
Avail Cap(c_a), veh/h	0	4099	1272	0	2853					639	336	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.40	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	3.7	3.3	0.0	0.0	0.0				49.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	1.4	0.0	0.3	0.0				3.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.5	2.8	0.0	0.1	0.0				2.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	4.3	4.7	0.0	0.3	0.0				53.3	0.0	0.0
LnGrp LOS	A	A	A	A	A					D	A	A
Approach Vol, veh/h		2960			1634	A					195	
Approach Delay, s/veh		4.4			0.3						53.3	
Approach LOS		A			A						D	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	96.5	13.5	96.5
Change Period (Y+Rc), s	7.5	5.1	7.5
Max Green Setting (Gmax), s	77.5	19.9	77.5
Max Q Clear Time (g_c+I1), s	19.9	7.9	2.0
Green Ext Time (p_c), s	39.8	0.5	19.8

Intersection Summary	
HCM 6th Ctrl Delay	5.0
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	103	6	57	392	688	0	0	315	371
Future Volume (veh/h)	0	0	0	103	6	57	392	688	0	0	315	371
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1856	1856	1856	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				113	7	63	445	782	0	0	375	442
Peak Hour Factor				0.91	0.91	0.91	0.88	0.88	0.88	0.84	0.84	0.84
Percent Heavy Veh, %				3	3	3	3	3	0	0	3	3
Cap, veh/h				205	13	191	542	2533	0	0	1782	1365
Arrive On Green				0.12	0.12	0.12	0.16	0.72	0.00	0.00	0.51	0.51
Sat Flow, veh/h				1669	103	1551	3428	3618	0	0	3618	2701
Grp Volume(v), veh/h				120	0	63	445	782	0	0	375	442
Grp Sat Flow(s),veh/h/ln				1772	0	1551	1714	1763	0	0	1763	1350
Q Serve(g_s), s				5.1	0.0	3.0	10.0	6.4	0.0	0.0	4.7	7.7
Cycle Q Clear(g_c), s				5.1	0.0	3.0	10.0	6.4	0.0	0.0	4.7	7.7
Prop In Lane				0.94		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				218	0	191	542	2533	0	0	1782	1365
V/C Ratio(X)				0.55	0.00	0.33	0.82	0.31	0.00	0.00	0.21	0.32
Avail Cap(c_a), veh/h				443	0	388	883	2533	0	0	1782	1365
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.96	0.96	0.00	0.00	0.97	0.97
Uniform Delay (d), s/veh				33.0	0.0	32.1	32.6	4.1	0.0	0.0	11.0	11.7
Incr Delay (d2), s/veh				0.8	0.0	0.4	1.3	0.3	0.0	0.0	0.3	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
%ile BackOfQ(50%),veh/ln				2.1	0.0	1.1	4.0	1.5	0.0	0.0	1.6	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				33.8	0.0	32.5	33.8	4.4	0.0	0.0	11.2	12.3
LnGrp LOS				C	A	C	C	A	A	A	B	B
Approach Vol, veh/h					183			1227			817	
Approach Delay, s/veh					33.4			15.1			11.8	
Approach LOS					C			B			B	

Timer - Assigned Phs	2	5	6	8
Phs Duration (G+Y+Rc), s	63.2	17.0	46.1	16.8
Change Period (Y+Rc), s	* 5.7	4.4	5.7	7.0
Max Green Setting (Gmax), s	* 48	20.6	22.3	20.0
Max Q Clear Time (g_c+I1), s	8.4	12.0	9.7	7.1
Green Ext Time (p_c), s	4.0	0.6	4.2	0.3

Intersection Summary	
HCM 6th Ctrl Delay	15.4
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)	348	0	261	0	0	0	0	636	146	22	297	0
Future Volume (veh/h)	348	0	261	0	0	0	0	636	146	22	297	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	1856	1856	1856				0	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	419	0	314				0	740	170	27	358	0
Peak Hour Factor	0.83	0.83	0.83				0.86	0.86	0.86	0.83	0.83	0.83
Percent Heavy Veh, %	3	3	3				0	3	3	3	3	0
Cap, veh/h	601	0	535				0	3246	720	40	2458	0
Arrive On Green	0.17	0.00	0.17				0.00	0.62	0.62	0.05	1.00	0.00
Sat Flow, veh/h	3534	0	3145				0	5497	1162	1767	3618	0
Grp Volume(v), veh/h	419	0	314				0	674	236	27	358	0
Grp Sat Flow(s),veh/h/ln	1767	0	1572				0	1596	1612	1767	1763	0
Q Serve(g_s), s	8.9	0.0	7.4				0.0	5.0	5.2	1.2	0.0	0.0
Cycle Q Clear(g_c), s	8.9	0.0	7.4				0.0	5.0	5.2	1.2	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.72	1.00		0.00
Lane Grp Cap(c), veh/h	601	0	535				0	2967	999	40	2458	0
V/C Ratio(X)	0.70	0.00	0.59				0.00	0.23	0.24	0.68	0.15	0.00
Avail Cap(c_a), veh/h	1241	0	1105				0	2967	999	389	2458	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.99	0.99	0.00
Uniform Delay (d), s/veh	31.2	0.0	30.6				0.0	6.7	6.8	37.9	0.0	0.0
Incr Delay (d2), s/veh	1.5	0.0	1.0				0.0	0.2	0.6	7.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.0	2.8				0.0	1.3	1.5	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.7	0.0	31.6				0.0	6.9	7.3	45.1	0.1	0.0
LnGrp LOS	C	A	C				A	A	A	D	A	A
Approach Vol, veh/h		733						910			385	
Approach Delay, s/veh		32.2						7.0			3.3	
Approach LOS		C						A			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.2	55.3		18.5		61.5
Change Period (Y+Rc), s	4.4	* 5.7		4.9		5.7
Max Green Setting (Gmax), s	17.6	* 19		28.1		41.3
Max Q Clear Time (g_c+I1), s	3.2	7.2		10.9		2.0
Green Ext Time (p_c), s	0.0	5.7		2.7		1.6

Intersection Summary	
HCM 6th Ctrl Delay	15.4
HCM 6th LOS	B

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)	228	1664	73	124	842	66	46	46	40	65	37	49
Future Volume (veh/h)	228	1664	73	124	842	66	46	46	40	65	37	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	248	1809	79	131	886	69	55	55	48	84	48	64
Peak Hour Factor	0.92	0.92	0.92	0.95	0.95	0.95	0.83	0.83	0.83	0.77	0.77	0.77
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	286	2287	100	162	1867	145	119	62	54	244	97	130
Arrive On Green	0.16	0.46	0.46	0.09	0.39	0.39	0.07	0.07	0.07	0.14	0.14	0.14
Sat Flow, veh/h	1767	4976	217	1767	4790	372	1767	912	796	1767	704	938
Grp Volume(v), veh/h	248	1227	661	131	624	331	55	0	103	84	0	112
Grp Sat Flow(s),veh/h/ln	1767	1689	1816	1767	1689	1785	1767	0	1708	1767	0	1642
Q Serve(g_s), s	11.9	26.9	27.0	6.3	12.1	12.1	2.6	0.0	5.2	3.8	0.0	5.5
Cycle Q Clear(g_c), s	11.9	26.9	27.0	6.3	12.1	12.1	2.6	0.0	5.2	3.8	0.0	5.5
Prop In Lane	1.00		0.12	1.00		0.21	1.00		0.47	1.00		0.57
Lane Grp Cap(c), veh/h	286	1552	835	162	1316	696	119	0	115	244	0	227
V/C Ratio(X)	0.87	0.79	0.79	0.81	0.47	0.48	0.46	0.00	0.89	0.34	0.00	0.49
Avail Cap(c_a), veh/h	437	1660	893	202	1316	696	119	0	115	810	0	753
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	35.7	20.0	20.0	38.9	19.9	20.0	39.2	0.0	40.4	34.0	0.0	34.8
Incr Delay (d2), s/veh	7.5	2.7	5.0	14.0	0.4	0.7	1.0	0.0	50.6	0.3	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	5.3	9.4	10.6	3.2	4.2	4.5	1.2	0.0	3.8	1.6	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.2	22.7	25.0	52.9	20.3	20.7	40.2	0.0	91.0	34.4	0.0	35.4
LnGrp LOS	D	C	C	D	C	C	D	A	F	C	A	D
Approach Vol, veh/h		2136			1086			158			196	
Approach Delay, s/veh		25.8			24.3			73.3			35.0	
Approach LOS		C			C			E			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.4	47.1		17.0	18.5	41.0		10.8
Change Period (Y+Rc), s	4.4	7.0		4.9	4.4	* 7		4.9
Max Green Setting (Gmax), s	10.6	42.9		40.0	21.6	* 32		5.9
Max Q Clear Time (g_c+I1), s	13.9	29.0		7.5	13.9	14.1		7.2
Green Ext Time (p_c), s	0.0	11.1		0.5	0.2	7.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	28.0
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)	360	1424	22	46	785	285	30	27	23	279	30	211
Future Volume (veh/h)	360	1424	22	46	785	285	30	27	23	279	30	211
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	383	1515	23	51	872	317	40	36	31	395	0	278
Peak Hour Factor	0.94	0.94	0.94	0.90	0.90	0.90	0.75	0.75	0.75	0.76	0.76	0.76
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	479	2555	39	64	1438	521	107	97	84	401	0	176
Arrive On Green	0.14	0.50	0.50	0.04	0.39	0.39	0.08	0.08	0.08	0.11	0.00	0.11
Sat Flow, veh/h	3428	5138	78	1767	3650	1321	1267	1154	1003	3534	0	1547
Grp Volume(v), veh/h	383	996	542	51	807	382	57	0	50	395	0	278
Grp Sat Flow(s),veh/h/ln	1714	1689	1839	1767	1689	1593	1792	0	1631	1767	0	1547
Q Serve(g_s), s	8.6	16.7	16.7	2.3	15.1	15.2	2.4	0.0	2.3	8.8	0.0	9.0
Cycle Q Clear(g_c), s	8.6	16.7	16.7	2.3	15.1	15.2	2.4	0.0	2.3	8.8	0.0	9.0
Prop In Lane	1.00		0.04	1.00		0.83	0.71		0.61	1.00		1.00
Lane Grp Cap(c), veh/h	479	1679	915	64	1331	628	151	0	137	401	0	176
V/C Ratio(X)	0.80	0.59	0.59	0.79	0.61	0.61	0.37	0.00	0.37	0.98	0.00	1.58
Avail Cap(c_a), veh/h	847	2014	1097	165	1495	705	791	0	720	401	0	176
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	33.0	14.2	14.2	37.9	19.1	19.2	34.3	0.0	34.3	35.1	0.0	35.1
Incr Delay (d2), s/veh	1.2	0.9	1.6	7.9	0.9	2.0	2.2	0.0	2.3	40.8	0.0	287.6
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	8.3	5.2	5.8	1.0	5.1	5.1	1.1	0.0	1.0	5.9	0.0	17.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.2	15.1	15.8	45.8	20.1	21.2	36.5	0.0	36.6	75.9	0.0	322.8
LnGrp LOS	C	B	B	D	C	C	D	A	D	E	A	F
Approach Vol, veh/h		1921			1240			107			673	
Approach Delay, s/veh		19.1			21.5			36.6			177.9	
Approach LOS		B			C			D			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.3	45.4		15.0	15.5	37.3		11.6
Change Period (Y+Rc), s	4.4	6.0		6.0	4.4	6.0		4.9
Max Green Setting (Gmax), s	7.4	47.3		9.0	19.6	35.1		35.0
Max Q Clear Time (g_c+I1), s	4.3	18.7		11.0	10.6	17.2		4.4
Green Ext Time (p_c), s	0.0	20.8		0.0	0.5	10.7		0.8

Intersection Summary	
HCM 6th Ctrl Delay	47.4
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	513	764	366	207	369	18	348	809	60	12	622	328
Future Volume (veh/h)	513	764	366	207	369	18	348	809	60	12	622	328
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		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	546	813	351	249	445	22	378	879	65	13	662	314
Peak Hour Factor	0.94	0.94	0.94	0.83	0.83	0.83	0.92	0.92	0.92	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	612	985	432	276	1234	61	436	1282	95	21	928	404
Arrive On Green	0.18	0.28	0.28	0.16	0.25	0.25	0.13	0.39	0.39	0.01	0.26	0.26
Sat Flow, veh/h	3428	3526	1546	1767	4945	243	3428	3322	246	1767	3526	1535
Grp Volume(v), veh/h	546	813	351	249	303	164	378	466	478	13	662	314
Grp Sat Flow(s),veh/h/ln	1714	1763	1546	1767	1689	1811	1714	1763	1805	1767	1763	1535
Q Serve(g_s), s	19.4	27.0	26.4	17.3	9.2	9.3	13.5	27.6	27.6	0.9	21.3	23.7
Cycle Q Clear(g_c), s	19.4	27.0	26.4	17.3	9.2	9.3	13.5	27.6	27.6	0.9	21.3	23.7
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	612	985	432	276	843	452	436	680	696	21	928	404
V/C Ratio(X)	0.89	0.83	0.81	0.90	0.36	0.36	0.87	0.69	0.69	0.63	0.71	0.78
Avail Cap(c_a), veh/h	925	1183	519	359	922	494	563	796	815	76	1163	506
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.1	42.2	42.0	51.8	38.6	38.7	53.5	32.0	32.0	61.4	41.7	42.6
Incr Delay (d2), s/veh	5.4	4.4	8.6	18.7	0.3	0.6	9.3	2.2	2.2	11.3	1.7	6.4
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	8.4	11.7	10.8	8.9	3.8	4.1	6.2	11.7	11.9	0.5	9.3	9.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.6	46.6	50.5	70.4	38.9	39.3	62.8	34.2	34.2	72.8	43.5	49.0
LnGrp LOS	E	D	D	E	D	D	E	C	C	E	D	D
Approach Vol, veh/h		1710			716			1322			989	
Approach Delay, s/veh		50.2			50.0			42.4			45.6	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.1	54.8	23.1	42.0	20.4	39.5	26.8	38.3
Change Period (Y+Rc), s	3.6	6.6	3.6	7.1	4.5	* 6.6	4.5	* 7.1
Max Green Setting (Gmax), s	5.4	56.4	25.4	41.9	20.5	* 41	33.7	* 34
Max Q Clear Time (g_c+I1), s	2.9	29.6	19.3	29.0	15.5	25.7	21.4	11.3
Green Ext Time (p_c), s	0.0	7.4	0.2	5.9	0.4	5.8	0.8	3.2

Intersection Summary	
HCM 6th Ctrl Delay	47.0
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)	62	3	18	22	6	23	49	524	47	43	472	88
Future Volume (veh/h)	62	3	18	22	6	23	49	524	47	43	472	88
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	0.99		0.98	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	83	4	24	26	7	27	55	589	53	46	502	94
Peak Hour Factor	0.75	0.75	0.75	0.85	0.85	0.85	0.89	0.89	0.89	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	307	20	44	202	56	99	123	1258	113	107	1118	208
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.07	0.39	0.39	0.06	0.38	0.38
Sat Flow, veh/h	1025	145	323	476	407	723	1767	3260	293	1767	2964	552
Grp Volume(v), veh/h	111	0	0	60	0	0	55	318	324	46	298	298
Grp Sat Flow(s),veh/h/ln	1493	0	0	1606	0	0	1767	1763	1790	1767	1763	1754
Q Serve(g_s), s	1.3	0.0	0.0	0.0	0.0	0.0	1.1	5.1	5.1	0.9	4.8	4.8
Cycle Q Clear(g_c), s	2.4	0.0	0.0	1.2	0.0	0.0	1.1	5.1	5.1	0.9	4.8	4.8
Prop In Lane	0.75		0.22	0.43		0.45	1.00		0.16	1.00		0.31
Lane Grp Cap(c), veh/h	372	0	0	357	0	0	123	680	691	107	665	661
V/C Ratio(X)	0.30	0.00	0.00	0.17	0.00	0.00	0.45	0.47	0.47	0.43	0.45	0.45
Avail Cap(c_a), veh/h	1386	0	0	1456	0	0	450	1560	1584	403	1509	1501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.0	0.0	0.0	14.6	0.0	0.0	16.9	8.7	8.7	17.1	8.8	8.8
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.1	0.0	0.0	0.9	1.0	1.0	1.0	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	0.4	0.0	0.0	0.4	1.4	1.4	0.3	1.3	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.2	0.0	0.0	14.6	0.0	0.0	17.8	9.7	9.7	18.1	9.6	9.6
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		111			60			697			642	
Approach Delay, s/veh		15.2			14.6			10.3			10.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.7	20.3		10.8	7.0	19.9		10.8
Change Period (Y+Rc), s	4.4	* 5.7		* 5.6	4.4	5.7		5.6
Max Green Setting (Gmax), s	8.6	* 33		* 33	9.6	32.3		32.4
Max Q Clear Time (g_c+I1), s	2.9	7.1		3.2	3.1	6.8		4.4
Green Ext Time (p_c), s	0.0	7.1		0.2	0.0	5.8		0.4

Intersection Summary	
HCM 6th Ctrl Delay	10.8
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)	138	511	8	15	510	73	4	1	6	38	2	128
Future Volume (veh/h)	138	511	8	15	510	73	4	1	6	38	2	128
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.83	0.99		0.96	0.97		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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	157	581	9	17	580	83	5	1	8	51	3	171
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	192	1642	25	27	1111	158	217	59	300	146	33	421
Arrive On Green	0.11	0.46	0.46	0.02	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
Sat Flow, veh/h	1767	3553	55	1767	3012	429	453	162	821	273	90	1149
Grp Volume(v), veh/h	157	288	302	17	338	325	14	0	0	225	0	0
Grp Sat Flow(s),veh/h/ln	1767	1763	1845	1767	1763	1678	1436	0	0	1511	0	0
Q Serve(g_s), s	8.3	10.1	10.1	0.9	14.4	14.5	0.0	0.0	0.0	3.5	0.0	0.0
Cycle Q Clear(g_c), s	8.3	10.1	10.1	0.9	14.4	14.5	0.5	0.0	0.0	10.2	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.26	0.36		0.57	0.23		0.76
Lane Grp Cap(c), veh/h	192	815	853	27	650	619	577	0	0	599	0	0
V/C Ratio(X)	0.82	0.35	0.35	0.63	0.52	0.53	0.02	0.00	0.00	0.38	0.00	0.00
Avail Cap(c_a), veh/h	343	815	853	103	650	619	577	0	0	599	0	0
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	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	41.8	16.6	16.6	46.9	23.6	23.7	19.4	0.0	0.0	22.4	0.0	0.0
Incr Delay (d2), s/veh	8.3	1.2	1.2	22.1	3.0	3.2	0.1	0.0	0.0	1.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	4.1	4.2	0.6	6.2	6.0	0.2	0.0	0.0	4.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.1	17.8	17.7	69.0	26.6	26.8	19.5	0.0	0.0	24.2	0.0	0.0
LnGrp LOS	D	B	B	E	C	C	B	A	A	C	A	A
Approach Vol, veh/h		747			680			14			225	
Approach Delay, s/veh		24.6			27.8			19.5			24.2	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.8	41.1		40.0	5.9	50.0		40.0
Change Period (Y+Rc), s	4.4	* 5.7		4.9	4.4	5.7		4.9
Max Green Setting (Gmax), s	18.6	* 32		35.1	5.6	44.3		35.1
Max Q Clear Time (g_c+I1), s	10.3	16.5		12.2	2.9	12.1		2.5
Green Ext Time (p_c), s	0.2	3.4		1.5	0.0	3.5		0.0

Intersection Summary	
HCM 6th Ctrl Delay	25.8
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)	161	292	34	168	234	179	33	155	153	179	201	50
Future Volume (veh/h)	161	292	34	168	234	179	33	155	153	179	201	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	181	328	38	175	244	186	36	168	166	211	236	59
Peak Hour Factor	0.89	0.89	0.89	0.96	0.96	0.96	0.92	0.92	0.92	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	220	1013	116	214	606	441	47	358	309	252	894	219
Arrive On Green	0.12	0.32	0.32	0.12	0.31	0.31	0.03	0.20	0.20	0.14	0.32	0.32
Sat Flow, veh/h	1767	3183	366	1767	1924	1400	1767	1763	1518	1767	2801	685
Grp Volume(v), veh/h	181	180	186	175	223	207	36	168	166	211	147	148
Grp Sat Flow(s),veh/h/ln	1767	1763	1786	1767	1763	1561	1767	1763	1518	1767	1763	1723
Q Serve(g_s), s	8.8	6.9	7.0	8.5	8.7	9.3	1.8	7.4	8.6	10.3	5.5	5.7
Cycle Q Clear(g_c), s	8.8	6.9	7.0	8.5	8.7	9.3	1.8	7.4	8.6	10.3	5.5	5.7
Prop In Lane	1.00		0.20	1.00		0.90	1.00		1.00	1.00		0.40
Lane Grp Cap(c), veh/h	220	561	568	214	555	491	47	358	309	252	563	550
V/C Ratio(X)	0.82	0.32	0.33	0.82	0.40	0.42	0.77	0.47	0.54	0.84	0.26	0.27
Avail Cap(c_a), veh/h	392	561	568	392	555	491	134	639	550	432	936	915
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.7	22.9	22.9	37.9	23.7	23.9	42.7	31.0	31.5	36.9	22.3	22.4
Incr Delay (d2), s/veh	7.5	1.5	1.5	7.6	2.2	2.6	22.5	1.0	1.5	7.3	0.2	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	4.1	2.9	3.0	4.0	3.8	3.6	1.1	3.1	3.2	4.8	2.2	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.2	24.4	24.4	45.4	25.9	26.6	65.2	31.9	32.9	44.2	22.6	22.7
LnGrp LOS	D	C	C	D	C	C	E	C	C	D	C	C
Approach Vol, veh/h		547			605			370			506	
Approach Delay, s/veh		31.3			31.8			35.6			31.6	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	33.4	6.7	33.1	15.4	33.1	17.0	22.9
Change Period (Y+Rc), s	4.4	5.3	4.4	4.9	4.4	5.3	4.4	4.9
Max Green Setting (Gmax), s	19.6	27.8	6.7	46.9	19.6	27.8	21.6	32.0
Max Q Clear Time (g_c+I1), s	10.5	9.0	3.8	7.7	10.8	11.3	12.3	10.6
Green Ext Time (p_c), s	0.3	1.8	0.0	1.8	0.3	2.2	0.4	1.9

Intersection Summary	
HCM 6th Ctrl Delay	32.3
HCM 6th LOS	C

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	43	41	47	48	43	48
Future Vol, veh/h	43	41	47	48	43	48
Peak Hour Factor	0.88	0.88	0.75	0.75	0.75	0.75
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	49	47	63	64	57	64
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Righ	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	7.9	7.6	8.1
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	51%	47%
Vol Thru, %	49%	0%	53%
Vol Right, %	51%	49%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	95	84	91
LT Vol	0	43	43
Through Vol	47	0	48
RT Vol	48	41	0
Lane Flow Rate	127	95	121
Geometry Grp	1	1	1
Degree of Util (X)	0.138	0.114	0.145
Departure Headway (Hd)	3.909	4.299	4.312
Convergence, Y/N	Yes	Yes	Yes
Cap	902	839	821
Service Time	2	2.299	2.392
HCM Lane V/C Ratio	0.141	0.113	0.147
HCM Control Delay	7.6	7.9	8.1
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.5	0.4	0.5

Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	11	79	44	45	56
Future Vol, veh/h	11	11	79	44	45	56
Conflicting Peds, #/hr	4	3	0	7	7	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	75	75	83	83	75	75
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	15	15	95	53	60	75

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	328	132	0	0	155	0
Stage 1	129	-	-	-	-	-
Stage 2	199	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	664	915	-	-	1419	-
Stage 1	894	-	-	-	-	-
Stage 2	832	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	628	906	-	-	1410	-
Mov Cap-2 Maneuver	628	-	-	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	792	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.1	0	3.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	742	1410	-
HCM Lane V/C Ratio	-	-	0.04	0.043	-
HCM Control Delay (s)	-	-	10.1	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	1	11	44	11	11	15	127	114	16	92	13
Future Vol, veh/h	6	1	11	44	11	11	15	127	114	16	92	13
Conflicting Peds, #/hr	15	0	3	3	0	15	2	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	79	79	79	84	84	84	84	84	84
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	8	1	15	56	14	14	18	151	136	19	110	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	442	481	123	422	420	234	127	0	0	287	0	0
Stage 1	158	158	-	255	255	-	-	-	-	-	-	-
Stage 2	284	323	-	167	165	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	524	483	925	540	523	803	1453	-	-	1269	-	-
Stage 1	842	765	-	747	695	-	-	-	-	-	-	-
Stage 2	721	649	-	833	760	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	484	467	921	516	506	792	1450	-	-	1269	-	-
Mov Cap-2 Maneuver	484	467	-	516	506	-	-	-	-	-	-	-
Stage 1	828	751	-	736	685	-	-	-	-	-	-	-
Stage 2	674	639	-	803	746	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.5	12.8	0.4	1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1450	-	-	680	546	1269	-	-
HCM Lane V/C Ratio	0.012	-	-	0.035	0.153	0.015	-	-
HCM Control Delay (s)	7.5	0	-	10.5	12.8	7.9	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.5	0	-	-

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	30	7	11	8	7	9	22	21	6	42	5
Future Vol, veh/h	18	30	7	11	8	7	9	22	21	6	42	5
Peak Hour Factor	0.75	0.75	0.75	0.81	0.81	0.81	0.81	0.81	0.81	0.83	0.83	0.83
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	24	40	9	14	10	9	11	27	26	7	51	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.6	7.4	7.4	7.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	17%	33%	42%	11%
Vol Thru, %	42%	55%	31%	79%
Vol Right, %	40%	13%	27%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	52	55	26	53
LT Vol	9	18	11	6
Through Vol	22	30	8	42
RT Vol	21	7	7	5
Lane Flow Rate	64	73	32	64
Geometry Grp	1	1	1	1
Degree of Util (X)	0.071	0.085	0.037	0.074
Departure Headway (Hd)	3.976	4.187	4.153	4.15
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	890	847	851	854
Service Time	2.046	2.254	2.231	2.217
HCM Lane V/C Ratio	0.072	0.086	0.038	0.075
HCM Control Delay	7.4	7.6	7.4	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.3	0.1	0.2

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1736	968	17	0	48
Future Vol, veh/h	0	1736	968	17	0	48
Conflicting Peds, #/hr	6	0	0	6	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	94	94	86	86
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	1908	1030	18	0	56

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	530
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.93
Pot Cap-1 Maneuver	0	-	-	-	0	420
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	418
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	14.9
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	418
HCM Lane V/C Ratio	-	-	-	0.134
HCM Control Delay (s)	-	-	-	14.9
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.5

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	9	0	89	21	151	2	40	66	129	71	13
Future Vol, veh/h	11	9	0	89	21	151	2	40	66	129	71	13
Peak Hour Factor	0.75	0.75	0.75	0.86	0.86	0.86	0.77	0.77	0.77	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	15	12	0	103	24	176	3	52	86	140	77	14
Number of Lanes	0	1	0	0	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay	9.4	9.6	9.3	10.1
HCM LOS	A	A	A	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	55%	81%	0%	100%	0%
Vol Thru, %	0%	38%	45%	19%	0%	0%	85%
Vol Right, %	0%	62%	0%	0%	100%	0%	15%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	2	106	20	110	151	129	84
LT Vol	2	0	11	89	0	129	0
Through Vol	0	40	9	21	0	0	71
RT Vol	0	66	0	0	151	0	13
Lane Flow Rate	3	138	27	128	176	140	91
Geometry Grp	7	7	6	7	7	7	7
Degree of Util (X)	0.004	0.2	0.045	0.212	0.236	0.235	0.138
Departure Headway (Hd)	6.178	5.232	6.026	5.955	4.844	6.043	5.429
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	575	679	588	600	736	590	655
Service Time	3.963	3.017	4.124	3.722	2.611	3.821	3.207
HCM Lane V/C Ratio	0.005	0.203	0.046	0.213	0.239	0.237	0.139
HCM Control Delay	9	9.3	9.4	10.3	9.1	10.7	9.1
HCM Lane LOS	A	A	A	B	A	B	A
HCM 95th-tile Q	0	0.7	0.1	0.8	0.9	0.9	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	266	907	0	0	1506	538	450	4	890	0	0	0
Future Volume (veh/h)	266	907	0	0	1506	538	450	4	890	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	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				
Adj Sat Flow, veh/h/ln	1856	1856	0	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	286	975	0	0	1585	509	492	0	870			
Peak Hour Factor	0.93	0.93	0.93	0.95	0.95	0.95	0.92	0.92	0.92			
Percent Heavy Veh, %	3	3	0	0	3	3	3	3	3			
Cap, veh/h	354	2847	0	0	1371	609	1085	0	965			
Arrive On Green	0.21	1.00	0.00	0.00	0.39	0.39	0.31	0.00	0.31			
Sat Flow, veh/h	3428	5233	0	0	3618	1566	3534	0	3145			
Grp Volume(v), veh/h	286	975	0	0	1585	509	492	0	870			
Grp Sat Flow(s),veh/h/ln	1714	1689	0	0	1763	1566	1767	0	1572			
Q Serve(g_s), s	7.9	0.0	0.0	0.0	38.9	29.4	11.2	0.0	26.5			
Cycle Q Clear(g_c), s	7.9	0.0	0.0	0.0	38.9	29.4	11.2	0.0	26.5			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	354	2847	0	0	1371	609	1085	0	965			
V/C Ratio(X)	0.81	0.34	0.00	0.00	1.16	0.84	0.45	0.00	0.90			
Avail Cap(c_a), veh/h	354	2847	0	0	1371	609	1237	0	1101			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.57	0.57	0.00	0.00	0.45	0.45	1.00	0.00	1.00			
Uniform Delay (d), s/veh	38.8	0.0	0.0	0.0	30.5	27.7	27.9	0.0	33.2			
Incr Delay (d2), s/veh	7.3	0.2	0.0	0.0	74.2	6.2	0.1	0.0	8.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.3	0.0	0.0	0.0	29.7	11.5	4.7	0.0	11.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.1	0.2	0.0	0.0	104.8	33.9	28.0	0.0	42.0			
LnGrp LOS	D	A	A	A	F	C	C	A	D			
Approach Vol, veh/h		1261			2094			1362				
Approach Delay, s/veh		10.6			87.5			36.9				
Approach LOS		B			F			D				

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		63.2			17.3	45.9		36.8				
Change Period (Y+Rc), s		7.0			7.0	* 7		6.1				
Max Green Setting (Gmax), s		51.9			7.3	* 39		35.0				
Max Q Clear Time (g_c+I1), s		2.0			9.9	40.9		28.5				
Green Ext Time (p_c), s		5.2			0.0	0.0		2.2				

Intersection Summary	
HCM 6th Ctrl Delay	52.4
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	726	289	928	1028	0	0	0	0	447	1	349
Future Volume (veh/h)	0	726	289	928	1028	0	0	0	0	447	1	349
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1856	1856	1856	1856	0				1856	1856	1856
Adj Flow Rate, veh/h	0	781	311	967	1071	0				592	0	248
Peak Hour Factor	0.93	0.93	0.93	0.96	0.96	0.96				0.94	0.94	0.94
Percent Heavy Veh, %	0	3	3	3	3	0				3	3	3
Cap, veh/h	0	849	378	1242	2372	0				693	0	308
Arrive On Green	0.00	0.24	0.24	0.72	1.00	0.00				0.20	0.00	0.20
Sat Flow, veh/h	0	3618	1571	3428	3618	0				3534	0	1572
Grp Volume(v), veh/h	0	781	311	967	1071	0				592	0	248
Grp Sat Flow(s),veh/h/ln	0	1763	1571	1714	1763	0				1767	0	1572
Q Serve(g_s), s	0.0	21.6	18.7	17.8	0.0	0.0				16.2	0.0	15.1
Cycle Q Clear(g_c), s	0.0	21.6	18.7	17.8	0.0	0.0				16.2	0.0	15.1
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	849	378	1242	2372	0				693	0	308
V/C Ratio(X)	0.00	0.92	0.82	0.78	0.45	0.00				0.85	0.00	0.80
Avail Cap(c_a), veh/h	0	864	385	1242	2372	0				1025	0	456
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.09	0.09	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	37.0	35.9	11.2	0.0	0.0				38.8	0.0	38.4
Incr Delay (d2), s/veh	0.0	16.7	18.0	0.3	0.1	0.0				3.2	0.0	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	11.0	8.9	3.5	0.0	0.0				7.2	0.0	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	53.8	54.0	11.5	0.1	0.0				42.1	0.0	42.1
LnGrp LOS	A	D	D	B	A	A				D	A	D
Approach Vol, veh/h		1092			2038						840	
Approach Delay, s/veh		53.8			5.5						42.1	
Approach LOS		D			A						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	13.2	31.1		25.7		74.3
Change Period (Y+Rc), s	7.0	* 7		6.1		7.0
Max Green Setting (Gmax), s	27.7	* 25		29.0		57.9
Max Q Clear Time (g_c+I1), s	19.8	23.6		18.2		2.0
Green Ext Time (p_c), s	1.5	0.5		1.4		5.9

Intersection Summary	
HCM 6th Ctrl Delay	26.5
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	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	817	193	149	918	0	1039	394
Future Volume (veh/h)	817	193	149	918	0	1039	394
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				0.99
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	1856	1856	1856	1856		1856	1856
Adj Flow Rate, veh/h	869	205	162	998		1129	428
Peak Hour Factor	0.94	0.94	0.92	0.92		0.92	0.92
Percent Heavy Veh, %	3	3	3	3		3	3
Cap, veh/h	1013	465	213	3123		1873	710
Arrive On Green	0.30	0.30	0.12	1.00		0.52	0.52
Sat Flow, veh/h	3428	1572	3428	5233		3775	1367
Grp Volume(v), veh/h	869	205	162	998		1057	500
Grp Sat Flow(s),veh/h/ln	1714	1572	1714	1689		1689	1599
Q Serve(g_s), s	29.9	13.2	5.7	0.0		27.4	27.4
Cycle Q Clear(g_c), s	29.9	13.2	5.7	0.0		27.4	27.4
Prop In Lane	1.00	1.00	1.00				0.86
Lane Grp Cap(c), veh/h	1013	465	213	3123		1753	830
V/C Ratio(X)	0.86	0.44	0.76	0.32		0.60	0.60
Avail Cap(c_a), veh/h	1237	567	318	3123		1753	830
HCM Platoon Ratio	1.00	1.00	2.00	2.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	0.93	0.93		0.61	0.61
Uniform Delay (d), s/veh	41.5	35.7	53.8	0.0		21.0	21.0
Incr Delay (d2), s/veh	5.7	0.9	2.4	0.3		0.9	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	18.4	12.2	2.4	0.1		10.7	10.4
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	47.2	36.5	56.2	0.3		22.0	23.0
LnGrp LOS	D	D	E	A		C	C
Approach Vol, veh/h	1074			1160		1557	
Approach Delay, s/veh	45.2			8.1		22.3	
Approach LOS	D			A		C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		82.2		42.8	12.2	70.0
Change Period (Y+Rc), s		* 5.1		5.9	4.4	5.1
Max Green Setting (Gmax), s		* 61		45.1	11.6	52.9
Max Q Clear Time (g_c+I1), s		2.0		31.9	7.7	29.4
Green Ext Time (p_c), s		23.4		5.0	0.1	17.5

Intersection Summary	
HCM 6th Ctrl Delay	24.4
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	398	1064	605	287	1159	224	632	778	282	171	399	168
Future Volume (veh/h)	398	1064	605	287	1159	224	632	778	282	171	399	168
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	433	1157	513	312	1260	158	710	874	221	192	448	113
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	463	1797	557	367	1655	509	720	1502	466	248	804	249
Arrive On Green	0.14	0.35	0.35	0.11	0.33	0.33	0.21	0.30	0.30	0.07	0.16	0.16
Sat Flow, veh/h	3428	5066	1570	3428	5066	1557	3428	5066	1571	3428	5066	1570
Grp Volume(v), veh/h	433	1157	513	312	1260	158	710	874	221	192	448	113
Grp Sat Flow(s),veh/h/ln	1714	1689	1570	1714	1689	1557	1714	1689	1571	1714	1689	1570
Q Serve(g_s), s	15.4	23.5	38.5	11.0	27.4	9.3	25.3	18.0	14.1	6.8	10.0	8.0
Cycle Q Clear(g_c), s	15.4	23.5	38.5	11.0	27.4	9.3	25.3	18.0	14.1	6.8	10.0	8.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	463	1797	557	367	1655	509	720	1502	466	248	804	249
V/C Ratio(X)	0.93	0.64	0.92	0.85	0.76	0.31	0.99	0.58	0.47	0.78	0.56	0.45
Avail Cap(c_a), veh/h	463	1810	561	433	1773	545	720	2157	669	357	1608	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	1.00	1.00
Uniform Delay (d), s/veh	52.6	33.1	38.0	53.9	37.1	31.0	48.3	36.7	35.4	56.0	47.7	46.8
Incr Delay (d2), s/veh	26.3	1.0	21.2	11.5	2.2	0.6	29.9	0.9	2.0	3.6	1.4	3.0
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	8.3	9.7	17.7	5.3	11.6	3.6	13.7	7.5	5.6	3.0	4.3	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.9	34.1	59.2	65.4	39.2	31.6	78.2	37.7	37.3	59.6	49.1	49.9
LnGrp LOS	E	C	E	E	D	C	E	D	D	E	D	D
Approach Vol, veh/h		2103			1730			1805			753	
Approach Delay, s/veh		49.5			43.2			53.6			51.9	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.6	50.1	30.2	25.0	21.0	46.6	13.3	41.9
Change Period (Y+Rc), s	4.4	6.5	4.4	5.5	4.4	* 6.5	4.4	* 5.5
Max Green Setting (Gmax), s	15.5	43.9	25.8	39.0	16.6	* 43	12.8	* 52
Max Q Clear Time (g_c+I1), s	13.0	40.5	27.3	12.0	17.4	29.4	8.8	20.0
Green Ext Time (p_c), s	0.2	3.1	0.0	6.9	0.0	10.1	0.1	16.4

Intersection Summary	
HCM 6th Ctrl Delay	49.2
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)	745	740	124	132	729	42	233	200	130	30	80	203
Future Volume (veh/h)	745	740	124	132	729	42	233	200	130	30	80	203
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	828	822	138	140	776	45	262	225	146	36	95	218
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.89	0.89	0.89	0.84	0.84	0.84
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	1085	2178	363	192	1164	67	289	528	328	46	366	287
Arrive On Green	0.32	0.50	0.50	0.11	0.48	0.48	0.16	0.25	0.25	0.03	0.10	0.10
Sat Flow, veh/h	3428	4371	729	3428	4898	283	1767	2082	1294	1767	3526	2768
Grp Volume(v), veh/h	828	634	326	140	534	287	262	189	182	36	95	218
Grp Sat Flow(s),veh/h/ln	1714	1689	1723	1714	1689	1804	1767	1763	1614	1767	1763	1384
Q Serve(g_s), s	26.1	13.9	14.1	4.7	14.6	14.7	17.5	10.8	11.4	2.4	3.0	9.2
Cycle Q Clear(g_c), s	26.1	13.9	14.1	4.7	14.6	14.7	17.5	10.8	11.4	2.4	3.0	9.2
Prop In Lane	1.00		0.42	1.00		0.16	1.00		0.80	1.00		1.00
Lane Grp Cap(c), veh/h	1085	1682	858	192	802	429	289	447	409	46	366	287
V/C Ratio(X)	0.76	0.38	0.38	0.73	0.67	0.67	0.91	0.42	0.45	0.79	0.26	0.76
Avail Cap(c_a), veh/h	1085	1682	858	257	957	511	358	573	524	59	546	429
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.65	0.65	0.65	0.96	0.96	0.96	0.96	0.96	0.96	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.9	18.6	18.6	52.4	27.8	27.9	49.3	37.5	37.7	58.1	49.5	52.3
Incr Delay (d2), s/veh	1.9	0.4	0.8	3.8	4.2	7.8	19.8	0.2	0.3	31.6	0.6	6.6
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	11.0	5.4	5.7	2.0	5.1	5.9	9.3	4.7	4.5	1.5	1.3	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.9	19.0	19.5	56.2	32.0	35.6	69.1	37.7	38.0	89.7	50.1	58.9
LnGrp LOS	D	B	B	E	C	D	E	D	D	F	D	E
Approach Vol, veh/h		1788			961			633			349	
Approach Delay, s/veh		28.3			36.6			50.8			59.7	
Approach LOS		C			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	64.8	25.3	18.2	43.0	33.4	7.5	36.1
Change Period (Y+Rc), s	4.9	5.0	5.7	* 5.8	5.0	* 4.9	4.4	5.7
Max Green Setting (Gmax), s	9.0	48.0	24.3	* 19	23.1	* 34	4.0	39.0
Max Q Clear Time (g_c+I1), s	6.7	16.1	19.5	11.2	28.1	16.7	4.4	13.4
Green Ext Time (p_c), s	0.0	18.8	0.2	1.3	0.0	11.6	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	37.2
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)	49	708	113	20	586	28	274	6	32	22	10	12
Future Volume (veh/h)	49	708	113	20	586	28	274	6	32	22	10	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	52	745	119	21	617	29	327	0	0	27	12	15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.82	0.82	0.82
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	67	2923	463	30	3184	149	456	239	0	49	52	44
Arrive On Green	0.08	1.00	1.00	0.02	0.64	0.64	0.13	0.00	0.00	0.03	0.03	0.03
Sat Flow, veh/h	1767	4409	698	1767	4958	232	3534	1856	0	1767	1856	1572
Grp Volume(v), veh/h	52	569	295	21	419	227	327	0	0	27	12	15
Grp Sat Flow(s),veh/h/ln	1767	1689	1730	1767	1689	1813	1767	1856	0	1767	1856	1572
Q Serve(g_s), s	3.5	0.0	0.0	1.4	6.1	6.1	10.7	0.0	0.0	1.8	0.8	1.1
Cycle Q Clear(g_c), s	3.5	0.0	0.0	1.4	6.1	6.1	10.7	0.0	0.0	1.8	0.8	1.1
Prop In Lane	1.00		0.40	1.00		0.13	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	67	2239	1147	30	2169	1164	456	239	0	49	52	44
V/C Ratio(X)	0.78	0.25	0.26	0.71	0.19	0.19	0.72	0.00	0.00	0.55	0.23	0.34
Avail Cap(c_a), veh/h	156	2239	1147	141	2169	1164	1211	636	0	134	141	119
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	0.95	0.95	0.95	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.0	0.0	0.0	58.7	8.8	8.8	50.2	0.0	0.0	57.6	57.1	57.3
Incr Delay (d2), s/veh	6.7	0.3	0.5	10.4	0.2	0.4	0.8	0.0	0.0	3.5	0.8	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.1	0.2	0.7	2.2	2.4	4.8	0.0	0.0	0.9	0.4	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.7	0.3	0.5	69.1	9.0	9.1	51.0	0.0	0.0	61.1	57.9	59.0
LnGrp LOS	E	A	A	E	A	A	D	A	A	E	E	E
Approach Vol, veh/h		916			667			327			54	
Approach Delay, s/veh		3.8			10.9			51.0			59.8	
Approach LOS		A			B			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	85.0		8.2	8.9	82.5		20.4
Change Period (Y+Rc), s	4.4	* 5.4		4.9	4.4	5.4		4.9
Max Green Setting (Gmax), s	9.6	* 41		9.1	10.6	39.6		41.1
Max Q Clear Time (g_c+I1), s	3.4	2.0		3.8	5.5	8.1		12.7
Green Ext Time (p_c), s	0.0	19.6		0.0	0.0	10.9		0.6

Intersection Summary	
HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

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)	7	5	21	212	23	263	34	565	115	295	365	14
Future Volume (veh/h)	7	5	21	212	23	263	34	565	115	295	365	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	9	7	28	208	109	329	37	621	126	393	487	19
Peak Hour Factor	0.75	0.75	0.75	0.80	0.80	0.80	0.91	0.91	0.91	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	49	51	40	421	442	373	81	1879	375	448	2763	107
Arrive On Green	0.03	0.03	0.03	0.24	0.24	0.24	0.02	0.45	0.45	0.26	1.00	1.00
Sat Flow, veh/h	1767	1856	1445	1767	1856	1565	3428	4222	842	3428	5004	194
Grp Volume(v), veh/h	9	7	28	208	109	329	37	495	252	393	328	178
Grp Sat Flow(s),veh/h/ln	1767	1856	1445	1767	1856	1565	1714	1689	1686	1714	1689	1821
Q Serve(g_s), s	0.6	0.4	2.3	12.2	5.7	24.3	1.3	11.4	11.7	13.2	0.0	0.0
Cycle Q Clear(g_c), s	0.6	0.4	2.3	12.2	5.7	24.3	1.3	11.4	11.7	13.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.50	1.00		0.11
Lane Grp Cap(c), veh/h	49	51	40	421	442	373	81	1503	751	448	1865	1005
V/C Ratio(X)	0.18	0.14	0.70	0.49	0.25	0.88	0.46	0.33	0.34	0.88	0.18	0.18
Avail Cap(c_a), veh/h	82	87	67	573	602	507	160	1503	751	646	1865	1005
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	0.76	0.76	0.76	0.97	0.97	0.97	0.96	0.96	0.96
Uniform Delay (d), s/veh	57.0	56.9	57.9	39.5	37.0	44.1	57.8	21.6	21.7	43.4	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.4	8.0	0.3	0.1	8.4	1.4	0.6	1.2	6.9	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.2	0.9	5.3	2.6	10.2	0.6	4.6	4.8	5.2	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.7	57.4	65.9	39.7	37.1	52.5	59.3	22.2	22.9	50.3	0.2	0.4
LnGrp LOS	E	E	E	D	D	D	E	C	C	D	A	A
Approach Vol, veh/h		44			646			784			899	
Approach Delay, s/veh		62.8			45.8			24.2			22.1	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	30.1	58.5		7.7	7.2	71.4		33.7
Change Period (Y+Rc), s	4.4	* 5.1		4.4	4.4	5.1		5.1
Max Green Setting (Gmax), s	22.6	* 34		5.6	5.6	50.9		38.9
Max Q Clear Time (g_c+I1), s	15.2	13.7		4.3	3.3	2.0		26.3
Green Ext Time (p_c), s	0.5	11.4		0.0	0.0	9.4		1.9

Intersection Summary	
HCM 6th Ctrl Delay	30.0
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)	54	27	114	25	23	75	159	622	71	49	531	18
Future Volume (veh/h)	54	27	114	25	23	75	159	622	71	49	531	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	59	29	124	28	28	88	204	797	91	65	708	24
Peak Hour Factor	0.92	0.92	0.92	0.85	0.85	0.85	0.78	0.78	0.78	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	163	172	143	161	169	139	228	2810	319	84	2657	90
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.26	1.00	1.00	0.02	0.17	0.17
Sat Flow, veh/h	1767	1856	1547	1767	1856	1524	1767	4607	523	1767	5031	170
Grp Volume(v), veh/h	59	29	124	28	28	88	204	583	305	65	475	257
Grp Sat Flow(s),veh/h/ln	1767	1856	1547	1767	1856	1524	1767	1689	1753	1767	1689	1824
Q Serve(g_s), s	3.8	1.7	9.5	1.8	1.7	6.7	13.4	0.0	0.0	4.4	14.6	14.7
Cycle Q Clear(g_c), s	3.8	1.7	9.5	1.8	1.7	6.7	13.4	0.0	0.0	4.4	14.6	14.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.30	1.00		0.09
Lane Grp Cap(c), veh/h	163	172	143	161	169	139	228	2060	1069	84	1783	963
V/C Ratio(X)	0.36	0.17	0.87	0.17	0.17	0.63	0.89	0.28	0.29	0.78	0.27	0.27
Avail Cap(c_a), veh/h	163	172	143	502	527	433	348	2060	1069	156	1783	963
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.96	0.96	0.96	0.79	0.79	0.79
Uniform Delay (d), s/veh	51.1	50.2	53.7	50.4	50.3	52.6	43.7	0.0	0.0	58.4	29.4	29.4
Incr Delay (d2), s/veh	0.5	0.2	37.8	0.2	0.2	1.8	12.1	0.3	0.6	4.5	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.8	5.2	0.8	0.8	2.6	5.8	0.1	0.2	2.1	6.7	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.6	50.4	91.5	50.6	50.5	54.4	55.8	0.3	0.6	63.0	29.7	30.0
LnGrp LOS	D	D	F	D	D	D	E	A	A	E	C	C
Approach Vol, veh/h		212			144			1092			797	
Approach Delay, s/veh		74.8			52.9			10.8			32.5	
Approach LOS		E			D			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.1	78.1		16.0	19.9	68.3		15.8
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9
Max Green Setting (Gmax), s	10.6	45.1		11.1	23.6	32.1		34.1
Max Q Clear Time (g_c+I1), s	16.4	2.0		11.5	15.4	16.7		8.7
Green Ext Time (p_c), s	0.0	20.5		0.0	0.2	9.5		0.3

Intersection Summary	
HCM 6th Ctrl Delay	27.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	9	38	60	15	156	60	377	13	45	278	6
Future Volume (veh/h)	55	9	38	60	15	156	60	377	13	45	278	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	69	11	48	79	20	205	66	414	14	51	312	7
Peak Hour Factor	0.80	0.80	0.80	0.76	0.76	0.76	0.91	0.91	0.91	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	370	46	466	377	42	431	94	986	33	78	967	22
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.05	0.28	0.28	0.04	0.27	0.27
Sat Flow, veh/h	638	156	1571	1332	142	1452	1767	3479	117	1767	3525	79
Grp Volume(v), veh/h	80	0	48	79	0	225	66	209	219	51	156	163
Grp Sat Flow(s),veh/h/ln	794	0	1571	1332	0	1594	1767	1763	1834	1767	1763	1841
Q Serve(g_s), s	1.6	0.0	0.8	2.0	0.0	4.3	1.4	3.6	3.6	1.1	2.6	2.6
Cycle Q Clear(g_c), s	5.9	0.0	0.8	7.9	0.0	4.3	1.4	3.6	3.6	1.1	2.6	2.6
Prop In Lane	0.86		1.00	1.00		0.91	1.00		0.06	1.00		0.04
Lane Grp Cap(c), veh/h	417	0	466	377	0	473	94	500	520	78	484	505
V/C Ratio(X)	0.19	0.00	0.10	0.21	0.00	0.48	0.70	0.42	0.42	0.65	0.32	0.32
Avail Cap(c_a), veh/h	1040	0	1274	1049	0	1276	430	1359	1413	382	1330	1389
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.1	0.0	9.4	14.6	0.0	10.7	17.2	10.8	10.8	17.4	10.7	10.7
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.3	3.5	0.8	0.7	3.4	0.7	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	0.5	0.0	0.2	0.5	0.0	1.2	0.6	1.2	1.2	0.4	0.9	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.2	0.0	9.5	14.7	0.0	10.9	20.7	11.5	11.5	20.8	11.4	11.4
LnGrp LOS	B	A	A	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		128			304			494			370	
Approach Delay, s/veh		11.2			11.9			12.8			12.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.6	16.0		15.3	6.0	15.6		15.3
Change Period (Y+Rc), s	4.0	5.5		* 4.4	4.0	* 5.5		4.4
Max Green Setting (Gmax), s	8.0	28.5		* 30	9.0	* 28		29.6
Max Q Clear Time (g_c+I1), s	3.1	5.6		7.9	3.4	4.6		9.9
Green Ext Time (p_c), s	0.0	3.5		0.4	0.0	3.2		1.1

Intersection Summary	
HCM 6th Ctrl Delay	12.4
HCM 6th LOS	B

Notes

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

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (veh/h)	99	125	0	285	53	72	349
Future Volume (veh/h)	99	125	0	285	53	72	349
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No
Adj Sat Flow, veh/h/ln	1856	1856		1856	1856	1856	1856
Adj Flow Rate, veh/h	130	164		320	60	75	364
Peak Hour Factor	0.76	0.76		0.89	0.89	0.96	0.96
Percent Heavy Veh, %	3	3		3	3	3	3
Cap, veh/h	288	257		981	182	109	1847
Arrive On Green	0.16	0.16		0.33	0.33	0.06	0.52
Sat Flow, veh/h	1767	1572		3061	550	1767	3618
Grp Volume(v), veh/h	130	164		188	192	75	364
Grp Sat Flow(s),veh/h/ln	1767	1572		1763	1756	1767	1763
Q Serve(g_s), s	2.0	3.0		2.4	2.5	1.3	1.7
Cycle Q Clear(g_c), s	2.0	3.0		2.4	2.5	1.3	1.7
Prop In Lane	1.00	1.00			0.31	1.00	
Lane Grp Cap(c), veh/h	288	257		582	580	109	1847
V/C Ratio(X)	0.45	0.64		0.32	0.33	0.69	0.20
Avail Cap(c_a), veh/h	1630	1450		1481	1475	757	3867
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	11.5	11.9		7.6	7.6	14.0	3.8
Incr Delay (d2), s/veh	0.4	1.0		0.5	0.5	2.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.8		0.7	0.7	0.5	0.3
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	11.9	12.9		8.1	8.1	16.8	3.9
LnGrp LOS	B	B		A	A	B	A
Approach Vol, veh/h	294			380			439
Approach Delay, s/veh	12.4			8.1			6.1
Approach LOS	B			A			A

Timer - Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	5.9	15.5				21.4		9.0
Change Period (Y+Rc), s	4.0	5.5				* 5.5		4.0
Max Green Setting (Gmax), s	13.0	25.5				* 33		28.0
Max Q Clear Time (g_c+I1), s	3.3	4.5				3.7		5.0
Green Ext Time (p_c), s	0.0	3.1				4.5		0.4

Intersection Summary	
HCM 6th Ctrl Delay	8.5
HCM 6th LOS	A

Notes

User approved ignoring U-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)	3	0	1	137	0	25	4	268	20	38	458	6
Future Volume (veh/h)	3	0	1	137	0	25	4	268	20	38	458	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	4	0	1	146	0	27	5	308	23	39	467	6
Peak Hour Factor	0.75	0.75	0.75	0.94	0.94	0.94	0.87	0.87	0.87	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	272	23	20	449	0	203	10	1109	82	65	1300	17
Arrive On Green	0.13	0.00	0.13	0.13	0.00	0.13	0.01	0.33	0.33	0.04	0.36	0.36
Sat Flow, veh/h	442	176	154	1626	0	1569	1767	3326	247	1767	3563	46
Grp Volume(v), veh/h	5	0	0	146	0	27	5	162	169	39	231	242
Grp Sat Flow(s),veh/h/ln	772	0	0	1626	0	1569	1767	1763	1811	1767	1763	1846
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.5	0.1	2.0	2.1	0.7	2.9	2.9
Cycle Q Clear(g_c), s	2.4	0.0	0.0	2.4	0.0	0.5	0.1	2.0	2.1	0.7	2.9	2.9
Prop In Lane	0.80		0.20	1.00		1.00	1.00		0.14	1.00		0.02
Lane Grp Cap(c), veh/h	314	0	0	449	0	203	10	588	604	65	643	674
V/C Ratio(X)	0.02	0.00	0.00	0.33	0.00	0.13	0.52	0.28	0.28	0.60	0.36	0.36
Avail Cap(c_a), veh/h	1536	0	0	1669	0	1565	328	1706	1752	328	1712	1793
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.5	0.0	0.0	12.5	0.0	11.6	15.0	7.4	7.4	14.3	7.0	7.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.1	15.2	0.4	0.4	3.2	0.8	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	0.0	0.0	0.0	0.7	0.0	0.1	0.1	0.5	0.6	0.3	0.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.5	0.0	0.0	12.6	0.0	11.8	30.2	7.7	7.7	17.5	7.8	7.7
LnGrp LOS	B	A	A	B	A	B	C	A	A	B	A	A
Approach Vol, veh/h		5			173			336			512	
Approach Delay, s/veh		11.5			12.5			8.1			8.5	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	15.9		8.8	4.6	16.8		8.8
Change Period (Y+Rc), s	4.4	5.8		4.9	4.4	* 5.8		4.9
Max Green Setting (Gmax), s	5.6	29.2		30.1	5.6	* 29		30.1
Max Q Clear Time (g_c+I1), s	2.7	4.1		4.4	2.1	4.9		4.4
Green Ext Time (p_c), s	0.0	2.8		0.0	0.0	5.6		0.5

Intersection Summary	
HCM 6th Ctrl Delay	9.0
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

* 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	908	1153	0	2028	176	541	21	426	0	0	0
Future Volume (veh/h)	0	908	1153	0	2028	176	541	21	426	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	0	956	1214	0	2112	183	646	0	495			
Peak Hour Factor	0.95	0.95	0.95	0.96	0.96	0.96	0.86	0.86	0.86			
Percent Heavy Veh, %	0	3	3	0	3	3	3	3	3			
Cap, veh/h	0	3453	2477	0	2403	1058	754	0	671			
Arrive On Green	0.00	1.00	1.00	0.00	0.68	0.68	0.21	0.00	0.21			
Sat Flow, veh/h	0	5233	2768	0	3618	1553	3534	0	3145			
Grp Volume(v), veh/h	0	956	1214	0	2112	183	646	0	495			
Grp Sat Flow(s),veh/h/ln	0	1689	1384	0	1763	1553	1767	0	1572			
Q Serve(g_s), s	0.0	0.0	0.0	0.0	57.1	5.1	21.1	0.0	17.6			
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	57.1	5.1	21.1	0.0	17.6			
Prop In Lane	0.00		1.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	3453	2477	0	2403	1058	754	0	671			
V/C Ratio(X)	0.00	0.28	0.49	0.00	0.88	0.17	0.86	0.00	0.74			
Avail Cap(c_a), veh/h	0	3453	2477	0	2403	1058	851	0	757			
HCM Platoon Ratio	1.00	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	0.83	0.83	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	15.2	6.9	45.4	0.0	44.1			
Incr Delay (d2), s/veh	0.0	0.2	0.6	0.0	5.0	0.4	7.9	0.0	3.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.2	0.0	20.3	1.6	10.0	0.0	7.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.2	0.6	0.0	20.1	7.2	53.3	0.0	47.4			
LnGrp LOS	A	A	A	A	C	A	D	A	D			
Approach Vol, veh/h		2170			2295			1141				
Approach Delay, s/veh		0.4			19.1			50.8				
Approach LOS		A			B			D				

Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		89.3				89.3		30.7				
Change Period (Y+Rc), s		7.5				7.5		5.1				
Max Green Setting (Gmax), s		78.5				78.5		28.9				
Max Q Clear Time (g_c+I1), s		2.0				59.1		23.1				
Green Ext Time (p_c), s		20.4				15.4		2.5				

Intersection Summary			
HCM 6th Ctrl Delay			18.3
HCM 6th LOS			B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1755	720	0	1673	1088	0	0	0	180	50	0
Future Volume (veh/h)	0	1755	720	0	1673	1088	0	0	0	180	50	0
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856				1856	1856	0
Adj Flow Rate, veh/h	0	2017	828	0	1838	0				144	176	0
Peak Hour Factor	0.87	0.87	0.87	0.91	0.91	0.91				0.80	0.80	0.80
Percent Heavy Veh, %	0	3	3	0	3	3				3	3	0
Cap, veh/h	0	4040	1254	0	2812					172	181	0
Arrive On Green	0.00	0.80	0.80	0.00	1.00	0.00				0.10	0.10	0.00
Sat Flow, veh/h	0	5233	1572	0	3618	1572				1767	1856	0
Grp Volume(v), veh/h	0	2017	828	0	1838	0				144	176	0
Grp Sat Flow(s),veh/h/ln	0	1689	1572	0	1763	1572				1767	1856	0
Q Serve(g_s), s	0.0	16.1	27.0	0.0	0.0	0.0				9.6	11.3	0.0
Cycle Q Clear(g_c), s	0.0	16.1	27.0	0.0	0.0	0.0				9.6	11.3	0.0
Prop In Lane	0.00		1.00	0.00		1.00				1.00		0.00
Lane Grp Cap(c), veh/h	0	4040	1254	0	2812					172	181	0
V/C Ratio(X)	0.00	0.50	0.66	0.00	0.65					0.84	0.97	0.00
Avail Cap(c_a), veh/h	0	4040	1254	0	2812					278	292	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.33	1.33				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.30	0.00				1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	4.1	5.2	0.0	0.0	0.0				53.2	54.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	2.7	0.0	0.4	0.0				11.3	34.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.7	6.5	0.0	0.1	0.0				4.8	7.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	4.5	7.9	0.0	0.4	0.0				64.5	88.9	0.0
LnGrp LOS	A	A	A	A	A					E	F	A
Approach Vol, veh/h		2845			1838	A					320	
Approach Delay, s/veh		5.5			0.4						77.9	
Approach LOS		A			A						E	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		103.2		16.8		103.2
Change Period (Y+Rc), s		7.5		5.1		7.5
Max Green Setting (Gmax), s		88.5		18.9		88.5
Max Q Clear Time (g_c+I1), s		29.0		11.6		2.0
Green Ext Time (p_c), s		36.6		0.1		26.3

Intersection Summary	
HCM 6th Ctrl Delay	8.3
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	172	3	42	286	320	0	0	252	361
Future Volume (veh/h)	0	0	0	172	3	42	286	320	0	0	252	361
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1856	1856	1856	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				187	3	46	311	348	0	0	268	384
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.94	0.94	0.94
Percent Heavy Veh, %				3	3	3	3	3	0	0	3	3
Cap, veh/h				234	4	208	406	2493	0	0	1882	1442
Arrive On Green				0.13	0.13	0.13	0.12	0.71	0.00	0.00	0.53	0.53
Sat Flow, veh/h				1741	28	1551	3428	3618	0	0	3618	2701
Grp Volume(v), veh/h				190	0	46	311	348	0	0	268	384
Grp Sat Flow(s),veh/h/ln				1769	0	1551	1714	1763	0	0	1763	1351
Q Serve(g_s), s				8.3	0.0	2.1	7.0	2.6	0.0	0.0	3.1	6.2
Cycle Q Clear(g_c), s				8.3	0.0	2.1	7.0	2.6	0.0	0.0	3.1	6.2
Prop In Lane				0.98		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				237	0	208	406	2493	0	0	1882	1442
V/C Ratio(X)				0.80	0.00	0.22	0.77	0.14	0.00	0.00	0.14	0.27
Avail Cap(c_a), veh/h				442	0	388	883	2493	0	0	1882	1442
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.98	0.98	0.00	0.00	0.98	0.98
Uniform Delay (d), s/veh				33.6	0.0	30.9	34.2	3.8	0.0	0.0	9.4	10.1
Incr Delay (d2), s/veh				2.4	0.0	0.2	1.1	0.1	0.0	0.0	0.2	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
%ile BackOfQ(50%),veh/ln				3.5	0.0	0.8	2.8	0.6	0.0	0.0	1.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				36.0	0.0	31.1	35.3	3.9	0.0	0.0	9.6	10.6
LnGrp LOS				D	A	C	D	A	A	A	A	B
Approach Vol, veh/h					236			659			652	
Approach Delay, s/veh					35.0			18.7			10.2	
Approach LOS					D			B			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	62.3		13.9	48.4		17.7
Change Period (Y+Rc), s	* 5.7		4.4	5.7		7.0
Max Green Setting (Gmax), s	* 48		20.6	22.3		20.0
Max Q Clear Time (g_c+I1), s	4.6		9.0	8.2		10.3
Green Ext Time (p_c), s	1.6		0.4	3.5		0.5

Intersection Summary	
HCM 6th Ctrl Delay	17.6
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)	175	6	397	0	0	0	0	472	118	24	339	0
Future Volume (veh/h)	175	6	397	0	0	0	0	472	118	24	339	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	1856	1856	1856				0	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	213	0	473				0	629	157	29	413	0
Peak Hour Factor	0.84	0.84	0.84				0.75	0.75	0.75	0.82	0.82	0.82
Percent Heavy Veh, %	3	3	3				0	3	3	3	3	0
Cap, veh/h	703	0	626				0	3042	724	42	2357	0
Arrive On Green	0.20	0.00	0.20				0.00	0.59	0.59	0.05	1.00	0.00
Sat Flow, veh/h	3534	0	3145				0	5417	1228	1767	3618	0
Grp Volume(v), veh/h	213	0	473				0	582	204	29	413	0
Grp Sat Flow(s),veh/h/ln	1767	0	1572				0	1596	1598	1767	1763	0
Q Serve(g_s), s	4.1	0.0	11.3				0.0	4.5	4.8	1.3	0.0	0.0
Cycle Q Clear(g_c), s	4.1	0.0	11.3				0.0	4.5	4.8	1.3	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.77	1.00		0.00
Lane Grp Cap(c), veh/h	703	0	626				0	2824	942	42	2357	0
V/C Ratio(X)	0.30	0.00	0.76				0.00	0.21	0.22	0.69	0.18	0.00
Avail Cap(c_a), veh/h	1330	0	1183				0	2824	942	323	2357	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.99	0.99	0.00
Uniform Delay (d), s/veh	27.3	0.0	30.2				0.0	7.7	7.7	37.8	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	1.9				0.0	0.2	0.5	7.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	4.3				0.0	1.3	1.4	0.6	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.6	0.0	32.1				0.0	7.8	8.2	45.0	0.2	0.0
LnGrp LOS	C	A	C				A	A	A	D	A	A
Approach Vol, veh/h		686						786			442	
Approach Delay, s/veh		30.7						7.9			3.1	
Approach LOS		C						A			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.3	52.9		20.8		59.2
Change Period (Y+Rc), s	4.4	* 5.7		4.9		5.7
Max Green Setting (Gmax), s	14.6	* 20		30.1		39.3
Max Q Clear Time (g_c+I1), s	13.3	6.8		13.3		2.0
Green Ext Time (p_c), s	0.0	5.3		2.6		1.8

Intersection Summary	
HCM 6th Ctrl Delay	15.0
HCM 6th LOS	B

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)	77	697	90	198	1599	100	156	99	81	89	135	101
Future Volume (veh/h)	77	697	90	198	1599	100	156	99	81	89	135	101
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	82	741	96	208	1683	105	208	132	108	119	180	135
Peak Hour Factor	0.94	0.94	0.94	0.95	0.95	0.95	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	92	1377	177	239	1883	117	219	117	96	413	227	170
Arrive On Green	0.05	0.30	0.30	0.14	0.39	0.39	0.12	0.12	0.12	0.23	0.23	0.23
Sat Flow, veh/h	1767	4543	584	1767	4871	304	1767	943	772	1767	971	729
Grp Volume(v), veh/h	82	549	288	208	1166	622	208	0	240	119	0	315
Grp Sat Flow(s),veh/h/ln	1767	1689	1750	1767	1689	1798	1767	0	1714	1767	0	1700
Q Serve(g_s), s	4.8	14.1	14.3	12.0	33.6	33.7	12.1	0.0	12.9	5.8	0.0	18.1
Cycle Q Clear(g_c), s	4.8	14.1	14.3	12.0	33.6	33.7	12.1	0.0	12.9	5.8	0.0	18.1
Prop In Lane	1.00		0.33	1.00		0.17	1.00		0.45	1.00		0.43
Lane Grp Cap(c), veh/h	92	1024	531	239	1305	695	219	0	213	413	0	397
V/C Ratio(X)	0.89	0.54	0.54	0.87	0.89	0.89	0.95	0.00	1.13	0.29	0.00	0.79
Avail Cap(c_a), veh/h	92	1024	531	320	1328	707	219	0	213	680	0	654
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	49.0	30.2	30.2	44.1	29.9	29.9	45.2	0.0	45.5	32.7	0.0	37.5
Incr Delay (d2), s/veh	59.2	0.7	1.5	14.4	8.2	14.1	46.0	0.0	100.5	0.1	0.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	5.4	5.8	5.9	13.7	15.8	8.1	0.0	11.4	2.5	0.0	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	108.2	30.9	31.7	58.5	38.1	44.1	91.2	0.0	146.0	32.9	0.0	38.9
LnGrp LOS	F	C	C	E	D	D	F	A	F	C	A	D
Approach Vol, veh/h		919			1996			448			434	
Approach Delay, s/veh		38.0			42.1			120.6			37.2	
Approach LOS		D			D			F			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.5	38.5		29.2	9.8	47.2		17.8
Change Period (Y+Rc), s	4.4	7.0		4.9	4.4	* 7		4.9
Max Green Setting (Gmax), s	13.8	27.1		40.0	5.4	* 41		12.9
Max Q Clear Time (g_c+I1), s	14.0	16.3		20.1	6.8	35.7		14.9
Green Ext Time (p_c), s	0.1	4.6		1.4	0.0	4.5		0.0

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	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	809	7	27	1250	180	113	28	27	257	18	233
Future Volume (veh/h)	200	809	7	27	1250	180	113	28	27	257	18	233
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	217	879	8	31	1420	205	151	37	36	306	0	265
Peak Hour Factor	0.92	0.92	0.92	0.88	0.88	0.88	0.75	0.75	0.75	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	303	2410	22	43	1793	259	257	124	121	382	0	167
Arrive On Green	0.09	0.47	0.47	0.02	0.40	0.40	0.15	0.15	0.15	0.11	0.00	0.11
Sat Flow, veh/h	3428	5176	47	1767	4461	644	1767	852	829	3534	0	1547
Grp Volume(v), veh/h	217	573	314	31	1075	550	151	0	73	306	0	265
Grp Sat Flow(s),veh/h/ln	1714	1689	1846	1767	1689	1728	1767	0	1681	1767	0	1547
Q Serve(g_s), s	5.1	9.1	9.1	1.4	23.2	23.3	6.6	0.0	3.2	7.0	0.0	9.0
Cycle Q Clear(g_c), s	5.1	9.1	9.1	1.4	23.2	23.3	6.6	0.0	3.2	7.0	0.0	9.0
Prop In Lane	1.00		0.03	1.00		0.37	1.00		0.49	1.00		1.00
Lane Grp Cap(c), veh/h	303	1573	860	43	1357	694	257	0	245	382	0	167
V/C Ratio(X)	0.72	0.36	0.36	0.71	0.79	0.79	0.59	0.00	0.30	0.80	0.00	1.58
Avail Cap(c_a), veh/h	807	1968	1076	132	1424	729	743	0	707	382	0	167
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	36.9	14.3	14.3	40.3	21.8	21.8	33.2	0.0	31.8	36.2	0.0	37.1
Incr Delay (d2), s/veh	1.2	0.4	0.7	7.8	3.4	6.6	3.0	0.0	1.0	12.1	0.0	289.3
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	2.0	3.0	3.3	0.7	8.4	9.2	3.0	0.0	1.4	3.5	0.0	16.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.1	14.7	15.0	48.1	25.3	28.4	36.2	0.0	32.7	48.3	0.0	326.4
LnGrp LOS	D	B	B	D	C	C	D	A	C	D	A	F
Approach Vol, veh/h		1104			1656			224			571	
Approach Delay, s/veh		19.4			26.7			35.1			177.4	
Approach LOS		B			C			D			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	44.8		15.0	11.8	39.4		17.0
Change Period (Y+Rc), s	4.4	6.0		6.0	4.4	6.0		4.9
Max Green Setting (Gmax), s	6.3	48.5		9.0	19.6	35.1		35.0
Max Q Clear Time (g_c+I1), s	3.4	11.1		11.0	7.1	25.3		8.6
Green Ext Time (p_c), s	0.0	13.1		0.0	0.3	8.2		1.9

Intersection Summary	
HCM 6th Ctrl Delay	49.2
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	401	356	375	90	519	17	338	620	48	7	655	409
Future Volume (veh/h)	401	356	375	90	519	17	338	620	48	7	655	409
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	477	424	406	100	577	19	417	765	59	8	771	433
Peak Hour Factor	0.84	0.84	0.84	0.90	0.90	0.90	0.81	0.81	0.81	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	536	1018	448	124	983	32	475	1550	120	14	1165	508
Arrive On Green	0.16	0.29	0.29	0.07	0.20	0.20	0.14	0.47	0.47	0.01	0.33	0.33
Sat Flow, veh/h	3428	3526	1551	1767	5037	165	3428	3311	255	1767	3526	1539
Grp Volume(v), veh/h	477	424	406	100	386	210	417	407	417	8	771	433
Grp Sat Flow(s),veh/h/ln	1714	1763	1551	1767	1689	1825	1714	1763	1804	1767	1763	1539
Q Serve(g_s), s	17.2	12.3	31.9	7.1	13.1	13.2	15.1	20.2	20.2	0.6	23.7	33.1
Cycle Q Clear(g_c), s	17.2	12.3	31.9	7.1	13.1	13.2	15.1	20.2	20.2	0.6	23.7	33.1
Prop In Lane	1.00		1.00	1.00		0.09	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	536	1018	448	124	659	356	475	825	845	14	1165	508
V/C Ratio(X)	0.89	0.42	0.91	0.81	0.59	0.59	0.88	0.49	0.49	0.58	0.66	0.85
Avail Cap(c_a), veh/h	692	1135	500	229	858	464	610	949	971	56	1378	602
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.2	36.3	43.3	57.9	46.2	46.3	53.4	23.2	23.2	62.5	36.3	39.4
Incr Delay (d2), s/veh	9.7	0.3	19.3	4.7	1.0	1.9	9.7	0.6	0.5	13.8	1.0	10.3
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	7.8	5.1	14.2	3.2	5.5	6.0	7.0	8.1	8.3	0.3	10.0	13.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.9	36.7	62.6	62.7	47.2	48.1	63.1	23.8	23.8	76.3	37.3	49.8
LnGrp LOS	E	D	E	E	D	D	E	C	C	E	D	D
Approach Vol, veh/h		1307			696			1241			1212	
Approach Delay, s/veh		53.9			49.7			37.0			42.0	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.6	65.8	12.4	43.6	22.0	48.3	24.3	31.8
Change Period (Y+Rc), s	3.6	6.6	3.6	7.1	4.5	* 6.6	4.5	* 7.1
Max Green Setting (Gmax), s	4.0	68.0	16.4	40.7	22.5	* 49	25.5	* 32
Max Q Clear Time (g_c+I1), s	2.6	22.2	9.1	33.9	17.1	35.1	19.2	15.2
Green Ext Time (p_c), s	0.0	6.8	0.1	2.6	0.4	6.6	0.5	3.7

Intersection Summary	
HCM 6th Ctrl Delay	45.3
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)	154	9	66	97	29	63	25	280	65	107	292	52
Future Volume (veh/h)	154	9	66	97	29	63	25	280	65	107	292	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		0.99	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	205	12	88	129	39	84	30	337	78	143	389	69
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.83	0.83	0.83	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	391	33	117	308	105	146	74	737	168	197	990	174
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.04	0.26	0.26	0.11	0.33	0.33
Sat Flow, veh/h	925	118	423	672	379	525	1767	2825	643	1767	2994	526
Grp Volume(v), veh/h	305	0	0	252	0	0	30	208	207	143	228	230
Grp Sat Flow(s),veh/h/ln	1466	0	0	1576	0	0	1767	1763	1706	1767	1763	1758
Q Serve(g_s), s	2.3	0.0	0.0	0.0	0.0	0.0	0.7	4.4	4.6	3.5	4.4	4.5
Cycle Q Clear(g_c), s	8.1	0.0	0.0	5.8	0.0	0.0	0.7	4.4	4.6	3.5	4.4	4.5
Prop In Lane	0.67		0.29	0.51		0.33	1.00		0.38	1.00		0.30
Lane Grp Cap(c), veh/h	541	0	0	558	0	0	74	460	445	197	583	581
V/C Ratio(X)	0.56	0.00	0.00	0.45	0.00	0.00	0.41	0.45	0.46	0.73	0.39	0.40
Avail Cap(c_a), veh/h	1109	0	0	1185	0	0	241	1457	1410	241	1453	1449
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.5	0.0	0.0	13.7	0.0	0.0	20.9	13.9	13.9	19.2	11.5	11.5
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.2	0.0	0.0	1.3	1.4	1.5	5.9	0.7	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	2.4	0.0	0.0	1.9	0.0	0.0	0.3	1.6	1.6	1.5	1.4	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.8	0.0	0.0	14.0	0.0	0.0	22.2	15.2	15.4	25.1	12.2	12.3
LnGrp LOS	B	A	A	B	A	A	C	B	B	C	B	B
Approach Vol, veh/h		305			252			445			601	
Approach Delay, s/veh		14.8			14.0			15.8			15.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.4	17.4		18.0	6.3	20.5		18.0
Change Period (Y+Rc), s	4.4	* 5.7		* 5.6	4.4	5.7		5.6
Max Green Setting (Gmax), s	6.1	* 37		* 32	6.1	36.9		31.3
Max Q Clear Time (g_c+I1), s	5.5	6.6		7.8	2.7	6.5		10.1
Green Ext Time (p_c), s	0.0	4.6		1.1	0.0	4.5		1.4

Intersection Summary	
HCM 6th Ctrl Delay	15.1
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)	293	236	29	37	427	65	53	8	31	104	2	328
Future Volume (veh/h)	293	236	29	37	427	65	53	8	31	104	2	328
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.73	1.00		0.96	0.98		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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	391	315	39	49	562	86	71	11	41	139	3	437
Peak Hour Factor	0.75	0.75	0.75	0.76	0.76	0.76	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	427	1369	168	62	661	100	204	40	93	172	15	435
Arrive On Green	0.24	0.43	0.43	0.04	0.23	0.23	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1767	3158	388	1767	2908	441	386	105	245	334	40	1150
Grp Volume(v), veh/h	391	175	179	49	338	310	123	0	0	579	0	0
Grp Sat Flow(s),veh/h/ln	1767	1763	1783	1767	1763	1586	736	0	0	1523	0	0
Q Serve(g_s), s	21.1	6.1	6.2	2.7	18.0	18.4	0.0	0.0	0.0	26.6	0.0	0.0
Cycle Q Clear(g_c), s	21.1	6.1	6.2	2.7	18.0	18.4	10.5	0.0	0.0	37.1	0.0	0.0
Prop In Lane	1.00		0.22	1.00		0.28	0.58		0.33	0.24		0.75
Lane Grp Cap(c), veh/h	427	764	773	62	401	360	336	0	0	622	0	0
V/C Ratio(X)	0.92	0.23	0.23	0.78	0.84	0.86	0.37	0.00	0.00	0.93	0.00	0.00
Avail Cap(c_a), veh/h	497	764	773	97	401	360	336	0	0	622	0	0
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	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	36.2	17.5	17.5	46.9	36.2	36.4	21.6	0.0	0.0	30.2	0.0	0.0
Incr Delay (d2), s/veh	20.1	0.7	0.7	19.4	19.2	22.4	3.1	0.0	0.0	22.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	2.5	2.6	1.5	9.5	9.1	2.3	0.0	0.0	17.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.3	18.2	18.2	66.3	55.4	58.8	24.7	0.0	0.0	52.8	0.0	0.0
LnGrp LOS	E	B	B	E	E	E	C	A	A	D	A	A
Approach Vol, veh/h		745			697			123			579	
Approach Delay, s/veh		38.2			57.7			24.7			52.8	
Approach LOS		D			E			C			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	28.1	28.0		42.0	7.9	48.2		42.0
Change Period (Y+Rc), s	4.4	* 5.7		4.9	4.4	5.7		4.9
Max Green Setting (Gmax), s	27.6	* 21		37.1	5.4	42.5		37.1
Max Q Clear Time (g_c+I1), s	23.1	20.4		39.1	4.7	8.2		12.5
Green Ext Time (p_c), s	0.5	0.1		0.0	0.0	2.0		0.9

Intersection Summary	
HCM 6th Ctrl Delay	47.7
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)	43	286	17	101	445	258	25	104	100	153	82	16
Future Volume (veh/h)	43	286	17	101	445	258	25	104	100	153	82	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.96	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	57	381	23	135	593	344	27	112	108	204	109	21
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.93	0.93	0.93	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	73	1305	79	168	937	543	39	304	261	238	844	158
Arrive On Green	0.04	0.39	0.39	0.09	0.44	0.44	0.02	0.17	0.17	0.13	0.29	0.29
Sat Flow, veh/h	1767	3377	203	1767	2129	1235	1767	1763	1512	1767	2956	555
Grp Volume(v), veh/h	57	198	206	135	491	446	27	112	108	204	64	66
Grp Sat Flow(s),veh/h/ln	1767	1763	1817	1767	1763	1602	1767	1763	1512	1767	1763	1747
Q Serve(g_s), s	2.9	7.0	7.1	6.7	19.5	19.5	1.4	5.1	5.7	10.2	2.4	2.5
Cycle Q Clear(g_c), s	2.9	7.0	7.1	6.7	19.5	19.5	1.4	5.1	5.7	10.2	2.4	2.5
Prop In Lane	1.00		0.11	1.00		0.77	1.00		1.00	1.00		0.32
Lane Grp Cap(c), veh/h	73	681	702	168	776	705	39	304	261	238	503	499
V/C Ratio(X)	0.78	0.29	0.29	0.80	0.63	0.63	0.70	0.37	0.41	0.86	0.13	0.13
Avail Cap(c_a), veh/h	257	681	702	257	776	705	257	783	672	257	783	776
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.7	19.1	19.1	39.9	19.6	19.6	43.7	32.9	33.2	38.1	23.8	23.9
Incr Delay (d2), s/veh	15.8	1.1	1.1	10.1	3.9	4.3	20.5	0.7	1.0	22.5	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	2.9	3.0	3.3	8.1	7.4	0.8	2.2	2.1	5.8	1.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.6	20.2	20.2	50.0	23.5	23.9	64.2	33.7	34.2	60.6	23.9	24.0
LnGrp LOS	E	C	C	D	C	C	E	C	C	E	C	C
Approach Vol, veh/h		461			1072			247			334	
Approach Delay, s/veh		24.9			27.0			37.3			46.3	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	40.1	6.4	30.6	8.1	44.9	16.5	20.4
Change Period (Y+Rc), s	4.4	5.3	4.4	4.9	4.4	5.3	4.4	4.9
Max Green Setting (Gmax), s	13.1	34.8	13.1	40.0	13.1	34.8	13.1	40.0
Max Q Clear Time (g_c+I1), s	9.7	9.1	3.4	4.5	4.9	21.5	12.2	7.7
Green Ext Time (p_c), s	0.1	2.2	0.0	0.7	0.1	4.9	0.1	1.3

Intersection Summary	
HCM 6th Ctrl Delay	30.8
HCM 6th LOS	C

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	46	26	76	27	18	49
Future Vol, veh/h	46	26	76	27	18	49
Peak Hour Factor	0.75	0.75	0.86	0.86	0.94	0.94
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	61	35	88	31	19	52
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Righ	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	7.8	7.7	7.7
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	64%	27%
Vol Thru, %	74%	0%	73%
Vol Right, %	26%	36%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	103	72	67
LT Vol	0	46	18
Through Vol	76	0	49
RT Vol	27	26	0
Lane Flow Rate	120	96	71
Geometry Grp	1	1	1
Degree of Util (X)	0.134	0.112	0.084
Departure Headway (Hd)	4.016	4.188	4.265
Convergence, Y/N	Yes	Yes	Yes
Cap	883	843	830
Service Time	2.088	2.28	2.344
HCM Lane V/C Ratio	0.136	0.114	0.086
HCM Control Delay	7.7	7.8	7.7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.5	0.4	0.3

Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	39	36	28	14	88
Future Vol, veh/h	16	39	36	28	14	88
Conflicting Peds, #/hr	0	3	0	7	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	75	75	91	91
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	21	52	48	37	15	97

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	201	77	0	0	92	0
Stage 1	74	-	-	-	-	-
Stage 2	127	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	785	981	-	-	1496	-
Stage 1	946	-	-	-	-	-
Stage 2	896	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	771	972	-	-	1486	-
Mov Cap-2 Maneuver	771	-	-	-	-	-
Stage 1	939	-	-	-	-	-
Stage 2	886	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	903	1486	-
HCM Lane V/C Ratio	-	-	0.081	0.01	-
HCM Control Delay (s)	-	-	9.3	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	1	21	98	1	16	12	163	62	2	170	8
Future Vol, veh/h	5	1	21	98	1	16	12	163	62	2	170	8
Conflicting Peds, #/hr	0	0	3	0	0	15	0	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	85	85	85	75	75	75	75	75	75
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	7	1	28	115	1	19	16	217	83	3	227	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	557	573	238	547	537	274	240	0	0	300	0	0
Stage 1	241	241	-	291	291	-	-	-	-	-	-	-
Stage 2	316	332	-	256	246	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	439	428	798	446	449	762	1321	-	-	1255	-	-
Stage 1	760	704	-	715	670	-	-	-	-	-	-	-
Stage 2	693	643	-	746	701	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	414	419	794	422	440	751	1318	-	-	1255	-	-
Mov Cap-2 Maneuver	414	419	-	422	440	-	-	-	-	-	-	-
Stage 1	747	700	-	704	660	-	-	-	-	-	-	-
Stage 2	655	633	-	714	697	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.8	16.4	0.4	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1318	-	-	660	450	1255	-	-
HCM Lane V/C Ratio	0.012	-	-	0.055	0.301	0.002	-	-
HCM Control Delay (s)	7.8	0	-	10.8	16.4	7.9	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	1.2	0	-	-

Intersection	
Intersection Delay, s/veh	9.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	29	14	9	61	20	12	11	30	11	1	185	33
Future Vol, veh/h	29	14	9	61	20	12	11	30	11	1	185	33
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.77	0.77	0.77
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	39	19	12	81	27	16	15	40	15	1	240	43
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.5	9	8.2	9.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	21%	56%	66%	0%
Vol Thru, %	58%	27%	22%	84%
Vol Right, %	21%	17%	13%	15%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	52	52	93	219
LT Vol	11	29	61	1
Through Vol	30	14	20	185
RT Vol	11	9	12	33
Lane Flow Rate	69	69	124	284
Geometry Grp	1	1	1	1
Degree of Util (X)	0.09	0.095	0.169	0.35
Departure Headway (Hd)	4.669	4.933	4.905	4.424
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	765	725	729	813
Service Time	2.71	2.978	2.947	2.454
HCM Lane V/C Ratio	0.09	0.095	0.17	0.349
HCM Control Delay	8.2	8.5	9	9.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.3	0.6	1.6

Intersection	
Int Delay, s/veh	18.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑↳			↱
Traffic Vol, veh/h	0	1064	1521	19	0	267
Future Vol, veh/h	0	1064	1521	19	0	267
Conflicting Peds, #/hr	6	0	0	6	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	92	92	82	82
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	1182	1653	21	0	326

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	843
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.93
Pot Cap-1 Maneuver	0	-	-	-	0	~ 262
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	~ 261
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	178.6
HCM LOS			F

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	261
HCM Lane V/C Ratio	-	-	-	1.248
HCM Control Delay (s)	-	-	-	178.6
HCM Lane LOS	-	-	-	F
HCM 95th %tile Q(veh)	-	-	-	15.8

Notes

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

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	15	2	28	6	95	3	79	70	93	17	5
Future Vol, veh/h	27	15	2	28	6	95	3	79	70	93	17	5
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.88	0.88	0.88	0.85	0.85	0.85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	36	20	3	37	8	127	3	90	80	109	20	6
Number of Lanes	0	1	0	0	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay	9.3	8.6	9.2	9.5
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	61%	82%	0%	100%	0%
Vol Thru, %	0%	53%	34%	18%	0%	0%	77%
Vol Right, %	0%	47%	5%	0%	100%	0%	23%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	3	149	44	34	95	93	22
LT Vol	3	0	27	28	0	93	0
Through Vol	0	79	15	6	0	0	17
RT Vol	0	70	2	0	95	0	5
Lane Flow Rate	3	169	59	45	127	109	26
Geometry Grp	7	7	6	7	7	7	7
Degree of Util (X)	0.005	0.233	0.092	0.073	0.166	0.176	0.037
Departure Headway (Hd)	5.79	4.956	5.663	5.827	4.709	5.806	5.142
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	617	721	631	614	760	616	694
Service Time	3.538	2.703	3.717	3.57	2.452	3.556	2.892
HCM Lane V/C Ratio	0.005	0.234	0.094	0.073	0.167	0.177	0.037
HCM Control Delay	8.6	9.2	9.3	9	8.4	9.8	8.1
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0	0.9	0.3	0.2	0.6	0.6	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	366	659	0	0	807	353	196	3	1027	0	0	0
Future Volume (veh/h)	366	659	0	0	807	353	196	3	1027	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1856	1856	0	1856	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	389	701	0	0	849	372	220	0	1141			
Peak Hour Factor	0.94	0.94	0.94	0.95	0.95	0.95	0.90	0.90	0.90			
Percent Heavy Veh, %	3	3	0	3	3	3	3	3	3			
Cap, veh/h	439	2391	0	80	938	415	1352	0	1201			
Arrive On Green	0.26	0.94	0.00	0.00	0.27	0.27	0.38	0.00	0.38			
Sat Flow, veh/h	3428	5233	0	740	3526	1562	3534	0	3140			
Grp Volume(v), veh/h	389	701	0	0	849	372	220	0	1141			
Grp Sat Flow(s),veh/h/ln	1714	1689	0	740	1763	1562	1767	0	1570			
Q Serve(g_s), s	9.8	1.0	0.0	0.0	21.0	20.7	3.7	0.0	31.7			
Cycle Q Clear(g_c), s	9.8	1.0	0.0	0.0	21.0	20.7	3.7	0.0	31.7			
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	439	2391	0	80	938	415	1352	0	1201			
V/C Ratio(X)	0.89	0.29	0.00	0.00	0.91	0.90	0.16	0.00	0.95			
Avail Cap(c_a), veh/h	439	2391	0	87	971	430	1378	0	1225			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.71	0.71	0.00	0.00	0.79	0.79	1.00	0.00	1.00			
Uniform Delay (d), s/veh	32.8	1.4	0.0	0.0	31.9	31.8	18.3	0.0	27.0			
Incr Delay (d2), s/veh	14.0	0.2	0.0	0.0	11.4	20.4	0.0	0.0	15.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.3	0.3	0.0	0.0	10.0	9.8	1.5	0.0	13.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.8	1.6	0.0	0.0	43.4	52.2	18.3	0.0	41.9			
LnGrp LOS	D	A	A	A	D	D	B	A	D			
Approach Vol, veh/h		1090			1221			1361				
Approach Delay, s/veh		17.7			46.1			38.1				
Approach LOS		B			D			D				

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		49.5			18.5	30.9		40.5				
Change Period (Y+Rc), s		7.0			7.0	* 7		6.1				
Max Green Setting (Gmax), s		41.8			11.3	* 25		35.1				
Max Q Clear Time (g_c+I1), s		3.0			11.8	23.0		33.7				
Green Ext Time (p_c), s		3.4			0.0	1.0		0.7				

Intersection Summary	
HCM 6th Ctrl Delay	34.7
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	755	650	549	454	0	0	0	0	270	1	254
Future Volume (veh/h)	0	755	650	549	454	0	0	0	0	270	1	254
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1856	1856	1856	1856	0				1856	1856	1856
Adj Flow Rate, veh/h	0	868	679	597	493	0				384	0	186
Peak Hour Factor	0.87	0.87	0.87	0.92	0.92	0.92				0.91	0.91	0.91
Percent Heavy Veh, %	0	3	3	3	3	0				3	3	3
Cap, veh/h	0	1559	695	660	2461	0				553	0	246
Arrive On Green	0.00	0.44	0.44	0.32	1.00	0.00				0.16	0.00	0.16
Sat Flow, veh/h	0	3618	1571	3428	3618	0				3534	0	1572
Grp Volume(v), veh/h	0	868	679	597	493	0				384	0	186
Grp Sat Flow(s),veh/h/ln	0	1763	1571	1714	1763	0				1767	0	1572
Q Serve(g_s), s	0.0	16.4	38.2	15.0	0.0	0.0				9.3	0.0	10.2
Cycle Q Clear(g_c), s	0.0	16.4	38.2	15.0	0.0	0.0				9.3	0.0	10.2
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1559	695	660	2461	0				553	0	246
V/C Ratio(X)	0.00	0.56	0.98	0.90	0.20	0.00				0.69	0.00	0.76
Avail Cap(c_a), veh/h	0	1559	695	693	2461	0				1139	0	507
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.54	0.54	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	18.6	24.7	29.7	0.0	0.0				35.9	0.0	36.3
Incr Delay (d2), s/veh	0.0	1.4	29.1	9.0	0.1	0.0				1.6	0.0	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.6	18.6	5.8	0.0	0.0				4.0	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	20.0	53.7	38.8	0.1	0.0				37.5	0.0	41.0
LnGrp LOS	A	C	D	D	A	A				D	A	D
Approach Vol, veh/h		1547			1090						570	
Approach Delay, s/veh		34.8			21.3						38.6	
Approach LOS		C			C						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	23.0	46.8		20.2		69.8
Change Period (Y+Rc), s *	5.7	7.0		6.1		7.0
Max Green Setting (Gmax), s *	18.3	24.0		29.0		47.9
Max Q Clear Time (g_c+I1), s	17.0	40.2		12.2		2.0
Green Ext Time (p_c), s	0.3	0.0		1.9		3.6

Intersection Summary	
HCM 6th Ctrl Delay	30.9
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	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	191	32	176	589	0	737	781
Future Volume (veh/h)	191	32	176	589	0	737	781
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856		1856	1856
Adj Flow Rate, veh/h	248	42	187	627		867	919
Peak Hour Factor	0.77	0.77	0.94	0.94		0.85	0.85
Percent Heavy Veh, %	3	3	3	3		3	3
Cap, veh/h	339	156	241	4100		2372	1101
Arrive On Green	0.10	0.10	0.14	1.00		0.70	0.70
Sat Flow, veh/h	3428	1572	3428	5233		3544	1567
Grp Volume(v), veh/h	248	42	187	627		867	919
Grp Sat Flow(s),veh/h/ln	1714	1572	1714	1689		1689	1567
Q Serve(g_s), s	8.4	3.0	6.3	0.0		12.3	50.6
Cycle Q Clear(g_c), s	8.4	3.0	6.3	0.0		12.3	50.6
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	339	156	241	4100		2372	1101
V/C Ratio(X)	0.73	0.27	0.78	0.15		0.37	0.83
Avail Cap(c_a), veh/h	1003	460	360	4100		2372	1101
HCM Platoon Ratio	1.00	1.00	2.00	2.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	0.96	0.96		0.62	0.62
Uniform Delay (d), s/veh	52.5	50.1	50.7	0.0		7.1	12.8
Incr Delay (d2), s/veh	4.0	1.2	2.8	0.1		0.3	4.8
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	2.7	2.6	0.0		4.1	16.6
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	56.5	51.3	53.5	0.1		7.4	17.7
LnGrp LOS	E	D	D	A		A	B
Approach Vol, veh/h	290			814		1786	
Approach Delay, s/veh	55.8			12.3		12.7	
Approach LOS	E			B		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		102.2		17.8	12.8	89.4
Change Period (Y+Rc), s		* 5.1		5.9	4.4	5.1
Max Green Setting (Gmax), s		* 66		35.1	12.6	56.9
Max Q Clear Time (g_c+I1), s		2.0		10.4	8.3	52.6
Green Ext Time (p_c), s		12.8		1.4	0.1	4.0

Intersection Summary	
HCM 6th Ctrl Delay	16.9
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	273	917	559	248	1112	251	312	416	68	304	569	397
Future Volume (veh/h)	273	917	559	248	1112	251	312	416	68	304	569	397
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	303	1019	560	264	1183	240	367	489	73	405	759	476
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.85	0.85	0.85	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	332	1738	539	298	1687	519	340	1547	476	359	1574	483
Arrive On Green	0.10	0.34	0.34	0.09	0.33	0.33	0.10	0.31	0.31	0.10	0.31	0.31
Sat Flow, veh/h	3428	5066	1570	3428	5066	1558	3428	5066	1559	3428	5066	1553
Grp Volume(v), veh/h	303	1019	560	264	1183	240	367	489	73	405	759	476
Grp Sat Flow(s),veh/h/ln	1714	1689	1570	1714	1689	1558	1714	1689	1559	1714	1689	1553
Q Serve(g_s), s	11.4	21.5	44.6	9.9	26.4	15.8	12.9	9.6	4.4	13.6	15.8	39.6
Cycle Q Clear(g_c), s	11.4	21.5	44.6	9.9	26.4	15.8	12.9	9.6	4.4	13.6	15.8	39.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	332	1738	539	298	1687	519	340	1547	476	359	1574	483
V/C Ratio(X)	0.91	0.59	1.04	0.89	0.70	0.46	1.08	0.32	0.15	1.13	0.48	0.99
Avail Cap(c_a), veh/h	332	1738	539	298	1734	533	340	1559	480	359	1574	483
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.1	35.1	42.7	58.7	37.7	34.2	58.5	34.7	32.9	58.2	36.3	44.5
Incr Delay (d2), s/veh	28.2	0.7	49.5	24.9	1.5	1.1	71.4	0.3	0.4	87.3	0.5	37.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	9.0	24.3	5.3	11.1	6.1	8.9	4.0	1.7	10.2	6.6	20.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	86.4	35.8	92.2	83.7	39.2	35.3	130.0	35.0	33.3	145.5	36.9	82.0
LnGrp LOS	F	D	F	F	D	D	F	D	C	F	D	F
Approach Vol, veh/h		1882			1687			929			1640	
Approach Delay, s/veh		60.7			45.6			72.4			76.8	
Approach LOS		E			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.7	51.1	17.3	45.9	17.0	49.8	18.0	45.2
Change Period (Y+Rc), s	4.4	6.5	4.4	5.5	4.4	* 6.5	4.4	* 5.5
Max Green Setting (Gmax), s	11.3	44.6	12.9	40.4	12.6	* 45	13.6	* 40
Max Q Clear Time (g_c+I1), s	11.9	46.6	14.9	41.6	13.4	28.4	15.6	11.6
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	11.4	0.0	7.6

Intersection Summary	
HCM 6th Ctrl Delay	62.6
HCM 6th LOS	E

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)	434	1105	195	323	1007	68	160	243	251	122	342	903
Future Volume (veh/h)	434	1105	195	323	1007	68	160	243	251	122	342	903
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	467	1188	210	351	1095	74	182	276	285	139	389	925
Peak Hour Factor	0.93	0.93	0.93	0.92	0.92	0.92	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	516	1396	247	403	1405	95	207	540	479	164	993	779
Arrive On Green	0.15	0.32	0.32	0.04	0.10	0.10	0.12	0.31	0.31	0.09	0.28	0.28
Sat Flow, veh/h	3428	4327	765	3428	4845	327	1767	1763	1565	1767	3526	2768
Grp Volume(v), veh/h	467	927	471	351	763	406	182	276	285	139	389	925
Grp Sat Flow(s),veh/h/ln	1714	1689	1715	1714	1689	1795	1767	1763	1565	1767	1763	1384
Q Serve(g_s), s	16.7	32.0	32.0	12.7	27.6	27.6	12.7	16.1	19.3	9.7	11.1	35.2
Cycle Q Clear(g_c), s	16.7	32.0	32.0	12.7	27.6	27.6	12.7	16.1	19.3	9.7	11.1	35.2
Prop In Lane	1.00		0.45	1.00		0.18	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	516	1090	553	403	979	521	207	540	479	164	993	779
V/C Ratio(X)	0.91	0.85	0.85	0.87	0.78	0.78	0.88	0.51	0.59	0.85	0.39	1.19
Avail Cap(c_a), veh/h	524	1090	553	403	979	521	216	550	488	164	993	779
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.70	0.70	0.70	0.80	0.80	0.80	0.92	0.92	0.92	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.2	39.5	39.5	59.1	52.6	52.6	54.3	35.7	36.8	55.8	36.3	44.9
Incr Delay (d2), s/veh	14.1	6.0	11.1	14.6	4.9	9.0	27.2	0.3	1.2	30.6	0.4	96.8
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	8.1	14.0	15.0	6.7	13.2	14.6	7.2	7.0	7.6	5.7	4.9	22.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.3	45.6	50.7	73.8	57.6	61.6	81.5	35.9	38.0	86.4	36.7	141.7
LnGrp LOS	E	D	D	E	E	E	F	D	D	F	D	F
Approach Vol, veh/h		1865			1520			743			1453	
Approach Delay, s/veh		52.1			62.4			47.9			108.3	
Approach LOS		D			E			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.6	45.3	19.1	41.0	23.7	41.2	16.0	44.1
Change Period (Y+Rc), s	4.9	5.0	4.4	5.8	4.9	* 5	4.4	* 5.8
Max Green Setting (Gmax), s	14.7	39.7	15.3	35.2	19.1	* 35	11.6	* 39
Max Q Clear Time (g_c+I1), s	14.7	34.0	14.7	37.2	18.7	29.6	11.7	21.3
Green Ext Time (p_c), s	0.0	5.2	0.0	0.0	0.0	5.2	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	69.0
HCM 6th LOS	E

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)	205	1008	263	42	810	79	357	45	28	113	74	136
Future Volume (veh/h)	205	1008	263	42	810	79	357	45	28	113	74	136
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	233	1145	299	49	942	92	466	0	0	127	83	153
Peak Hour Factor	0.88	0.88	0.88	0.86	0.86	0.86	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	256	2123	554	77	2016	196	572	300	0	200	210	178
Arrive On Green	0.29	1.00	1.00	0.04	0.43	0.43	0.16	0.00	0.00	0.11	0.11	0.11
Sat Flow, veh/h	1781	4027	1052	1781	4728	460	3563	1870	0	1781	1870	1585
Grp Volume(v), veh/h	233	968	476	49	677	357	466	0	0	127	83	153
Grp Sat Flow(s),veh/h/ln	1781	1702	1675	1781	1702	1785	1781	1870	0	1781	1870	1585
Q Serve(g_s), s	15.8	0.0	0.0	3.4	17.8	17.9	15.8	0.0	0.0	8.5	5.2	11.9
Cycle Q Clear(g_c), s	15.8	0.0	0.0	3.4	17.8	17.9	15.8	0.0	0.0	8.5	5.2	11.9
Prop In Lane	1.00		0.63	1.00		0.26	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	256	1794	883	77	1451	761	572	300	0	200	210	178
V/C Ratio(X)	0.91	0.54	0.54	0.64	0.47	0.47	0.81	0.00	0.00	0.63	0.39	0.86
Avail Cap(c_a), veh/h	368	1794	883	128	1451	761	943	495	0	229	241	204
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.46	0.46	0.46	0.92	0.92	0.92	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.7	0.0	0.0	58.8	25.7	25.7	50.7	0.0	0.0	53.0	51.5	54.5
Incr Delay (d2), s/veh	8.7	0.5	1.1	3.0	1.0	1.9	1.1	0.0	0.0	2.7	0.4	24.0
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	6.5	0.1	0.3	1.6	7.3	7.9	7.1	0.0	0.0	4.0	2.5	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.4	0.5	1.1	61.8	26.7	27.6	51.8	0.0	0.0	55.8	52.0	78.5
LnGrp LOS	D	A	A	E	C	C	D	A	A	E	D	E
Approach Vol, veh/h		1677			1083			466			363	
Approach Delay, s/veh		7.9			28.6			51.8			64.5	
Approach LOS		A			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.8	71.3		19.0	22.4	58.7		25.0
Change Period (Y+Rc), s	4.4	* 5.4		4.9	4.4	5.4		4.9
Max Green Setting (Gmax), s	9.6	* 48		16.1	25.8	30.4		33.1
Max Q Clear Time (g_c+I1), s	5.4	2.0		13.9	17.8	19.9		17.8
Green Ext Time (p_c), s	0.0	36.1		0.2	0.2	7.9		0.8

Intersection Summary	
HCM 6th Ctrl Delay	25.6
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)	90	89	84	241	23	202	150	774	182	381	623	116
Future Volume (veh/h)	90	89	84	241	23	202	150	774	182	381	623	116
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	115	114	108	323	-18	243	161	832	196	428	700	130
Peak Hour Factor	0.78	0.78	0.78	0.83	0.83	0.83	0.93	0.93	0.93	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	153	161	135	631	0	296	214	1813	424	478	2237	411
Arrive On Green	0.09	0.09	0.09	0.18	0.00	0.18	0.06	0.44	0.44	0.28	1.00	1.00
Sat Flow, veh/h	1767	1856	1556	3534	-123	1660	3428	4088	956	3428	4301	790
Grp Volume(v), veh/h	115	114	108	323	0	225	161	686	342	428	548	282
Grp Sat Flow(s),veh/h/ln	1767	1856	1556	1767	0	1537	1714	1689	1666	1714	1689	1713
Q Serve(g_s), s	7.9	7.5	8.5	10.3	0.0	17.5	5.8	17.7	17.9	15.0	0.0	0.0
Cycle Q Clear(g_c), s	7.9	7.5	8.5	10.3	0.0	17.5	5.8	17.7	17.9	15.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.08	1.00		0.57	1.00		0.46
Lane Grp Cap(c), veh/h	153	161	135	631	0	274	214	1497	739	478	1757	891
V/C Ratio(X)	0.75	0.71	0.80	0.51	0.00	0.82	0.75	0.46	0.46	0.90	0.31	0.32
Avail Cap(c_a), veh/h	206	217	182	987	0	429	291	1497	739	592	1757	891
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	0.91	0.00	0.91	0.79	0.79	0.79	0.90	0.90	0.90
Uniform Delay (d), s/veh	55.8	55.5	56.0	46.4	0.0	48.5	57.6	24.3	24.4	44.2	0.0	0.0
Incr Delay (d2), s/veh	6.2	3.4	12.0	0.2	0.0	3.3	3.5	0.8	1.6	11.5	0.4	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	3.7	3.8	4.6	0.0	6.9	2.6	7.1	7.3	6.1	0.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.0	58.9	68.0	46.6	0.0	51.8	61.1	25.1	26.0	55.7	0.4	0.8
LnGrp LOS	E	E	E	D	A	D	E	C	C	E	A	A
Approach Vol, veh/h		337			548			1189			1258	
Approach Delay, s/veh		62.9			48.8			30.2			19.3	
Approach LOS		E			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	21.8	60.5		15.2	12.2	70.1		27.4
Change Period (Y+Rc), s	4.4	* 5.1		4.4	4.4	5.1		5.1
Max Green Setting (Gmax), s	21.6	* 35		14.6	10.6	45.9		34.9
Max Q Clear Time (g_c+I1), s	17.5	19.9		10.5	7.8	2.0		19.5
Green Ext Time (p_c), s	0.4	11.6		0.3	0.1	16.9		1.5

Intersection Summary	
HCM 6th Ctrl Delay	32.5
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)	122	50	150	57	60	101	224	705	19	144	844	31
Future Volume (veh/h)	122	50	150	57	60	101	224	705	19	144	844	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	120	79	167	64	67	113	255	801	22	160	938	34
Peak Hour Factor	0.90	0.90	0.90	0.89	0.89	0.89	0.88	0.88	0.88	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	217	228	191	188	198	163	280	2604	71	184	2305	83
Arrive On Green	0.12	0.12	0.12	0.11	0.11	0.11	0.21	0.68	0.68	0.21	0.92	0.92
Sat Flow, veh/h	1767	1856	1553	1767	1856	1529	1767	5066	139	1767	5017	182
Grp Volume(v), veh/h	120	79	167	64	67	113	255	533	290	160	631	341
Grp Sat Flow(s),veh/h/ln	1767	1856	1553	1767	1856	1529	1767	1689	1828	1767	1689	1822
Q Serve(g_s), s	8.0	4.9	13.2	4.2	4.2	8.9	17.6	7.9	7.9	10.9	3.0	3.0
Cycle Q Clear(g_c), s	8.0	4.9	13.2	4.2	4.2	8.9	17.6	7.9	7.9	10.9	3.0	3.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.08	1.00		0.10
Lane Grp Cap(c), veh/h	217	228	191	188	198	163	280	1736	939	184	1552	837
V/C Ratio(X)	0.55	0.35	0.88	0.34	0.34	0.69	0.91	0.31	0.31	0.87	0.41	0.41
Avail Cap(c_a), veh/h	228	239	200	481	505	416	362	1736	939	270	1552	837
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.85	0.85	0.85	0.72	0.72	0.72
Uniform Delay (d), s/veh	51.6	50.2	53.9	51.8	51.8	53.9	48.5	10.9	10.9	48.7	2.9	2.9
Incr Delay (d2), s/veh	1.3	0.3	30.2	0.4	0.4	2.0	17.6	0.4	0.7	10.1	0.6	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	3.6	2.3	6.8	1.9	2.0	3.5	8.7	2.8	3.1	4.8	0.9	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.9	50.6	84.1	52.2	52.1	55.9	66.1	11.3	11.6	58.8	3.4	3.9
LnGrp LOS	D	D	F	D	D	E	E	B	B	E	A	A
Approach Vol, veh/h		366			244			1078			1132	
Approach Delay, s/veh		66.6			53.9			24.3			11.4	
Approach LOS		E			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.4	69.1		20.2	24.2	62.3		18.2
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9
Max Green Setting (Gmax), s	19.1	36.7		16.1	25.6	30.2		34.0
Max Q Clear Time (g_c+I1), s	12.9	9.9		15.2	19.6	5.0		10.9
Green Ext Time (p_c), s	0.1	14.4		0.1	0.2	17.3		0.5

Intersection Summary	
HCM 6th Ctrl Delay	27.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	36	68	34	19	76	27	543	53	139	641	19
Future Volume (veh/h)	39	36	68	34	19	76	27	543	53	139	641	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	45	41	78	40	22	88	28	566	55	153	704	21
Peak Hour Factor	0.87	0.87	0.87	0.86	0.86	0.86	0.96	0.96	0.96	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	228	152	254	321	52	210	48	1133	110	198	1518	45
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.03	0.35	0.35	0.11	0.43	0.43
Sat Flow, veh/h	488	941	1567	1259	324	1296	1767	3244	315	1767	3495	104
Grp Volume(v), veh/h	86	0	78	40	0	110	28	307	314	153	355	370
Grp Sat Flow(s),veh/h/ln	1429	0	1567	1259	0	1619	1767	1763	1796	1767	1763	1836
Q Serve(g_s), s	0.0	0.0	1.6	1.1	0.0	2.3	0.6	5.1	5.1	3.1	5.3	5.3
Cycle Q Clear(g_c), s	2.3	0.0	1.6	3.4	0.0	2.3	0.6	5.1	5.1	3.1	5.3	5.3
Prop In Lane	0.52		1.00	1.00		0.80	1.00		0.18	1.00		0.06
Lane Grp Cap(c), veh/h	380	0	254	321	0	262	48	616	627	198	766	798
V/C Ratio(X)	0.23	0.00	0.31	0.12	0.00	0.42	0.59	0.50	0.50	0.77	0.46	0.46
Avail Cap(c_a), veh/h	1273	0	1189	1059	0	1212	287	1219	1241	623	1572	1638
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.6	0.0	13.6	15.4	0.0	13.9	17.7	9.5	9.5	15.9	7.4	7.4
Incr Delay (d2), s/veh	0.1	0.0	0.3	0.1	0.0	0.4	4.2	0.9	0.9	2.4	0.9	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	0.5	0.0	0.5	0.3	0.0	0.7	0.3	1.6	1.6	1.2	1.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.7	0.0	13.9	15.5	0.0	14.3	21.9	10.3	10.3	18.3	8.2	8.2
LnGrp LOS	B	A	B	B	A	B	C	B	B	B	A	A
Approach Vol, veh/h		164			150			649			878	
Approach Delay, s/veh		13.8			14.6			10.8			10.0	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.1	18.4		10.4	5.0	21.5		10.4
Change Period (Y+Rc), s	4.0	5.5		* 4.4	4.0	* 5.5		4.4
Max Green Setting (Gmax), s	13.0	25.5		* 28	6.0	* 33		27.6
Max Q Clear Time (g_c+I1), s	5.1	7.1		4.3	2.6	7.3		5.4
Green Ext Time (p_c), s	0.1	4.9		0.4	0.0	8.6		0.5

Intersection Summary	
HCM 6th Ctrl Delay	11.0
HCM 6th LOS	B

Notes

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

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (veh/h)	56	88	0	591	80	108	627
Future Volume (veh/h)	56	88	0	591	80	108	627
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No
Adj Sat Flow, veh/h/ln	1856	1856		1856	1856	1856	1856
Adj Flow Rate, veh/h	62	97		712	96	127	738
Peak Hour Factor	0.91	0.91		0.83	0.83	0.85	0.85
Percent Heavy Veh, %	3	3		3	3	3	3
Cap, veh/h	171	152		1348	182	163	2244
Arrive On Green	0.10	0.10		0.43	0.43	0.09	0.64
Sat Flow, veh/h	1767	1572		3214	421	1767	3618
Grp Volume(v), veh/h	62	97		402	406	127	738
Grp Sat Flow(s),veh/h/ln	1767	1572		1763	1779	1767	1763
Q Serve(g_s), s	1.2	2.1		6.0	6.0	2.5	3.4
Cycle Q Clear(g_c), s	1.2	2.1		6.0	6.0	2.5	3.4
Prop In Lane	1.00	1.00			0.24	1.00	
Lane Grp Cap(c), veh/h	171	152		761	769	163	2244
V/C Ratio(X)	0.36	0.64		0.53	0.53	0.78	0.33
Avail Cap(c_a), veh/h	1291	1149		1462	1475	546	3498
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	15.0	15.5		7.4	7.4	15.8	3.0
Incr Delay (d2), s/veh	0.5	1.7		0.8	0.8	3.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.7		1.6	1.6	1.0	0.4
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	15.5	17.1		8.2	8.2	18.9	3.1
LnGrp LOS	B	B		A	A	B	A
Approach Vol, veh/h	159			808			865
Approach Delay, s/veh	16.5			8.2			5.4
Approach LOS	B			A			A

Timer - Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	7.3	20.9				28.1		7.4
Change Period (Y+Rc), s	4.0	5.5				* 5.5		4.0
Max Green Setting (Gmax), s	11.3	29.5				* 35		26.0
Max Q Clear Time (g_c+I1), s	4.5	8.0				5.4		4.1
Green Ext Time (p_c), s	0.1	7.4				10.1		0.2

Intersection Summary	
HCM 6th Ctrl Delay	7.6
HCM 6th LOS	A

Notes

User approved ignoring U-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)	17	3	24	56	1	26	18	675	65	68	605	21
Future Volume (veh/h)	17	3	24	56	1	26	18	675	65	68	605	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		1.00	1.00		0.96	1.00		0.99	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	23	4	32	66	1	31	19	718	69	79	703	24
Peak Hour Factor	0.75	0.75	0.75	0.85	0.85	0.85	0.94	0.94	0.94	0.86	0.86	0.86
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	182	46	119	385	5	214	34	1338	129	104	1571	54
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.02	0.41	0.41	0.06	0.45	0.45
Sat Flow, veh/h	382	327	840	1423	32	1509	1767	3246	312	1767	3475	119
Grp Volume(v), veh/h	59	0	0	67	0	31	19	390	397	79	357	370
Grp Sat Flow(s),veh/h/ln	1549	0	0	1455	0	1509	1767	1763	1795	1767	1763	1830
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.0	0.7	0.4	6.5	6.5	1.7	5.4	5.4
Cycle Q Clear(g_c), s	1.2	0.0	0.0	1.3	0.0	0.7	0.4	6.5	6.5	1.7	5.4	5.4
Prop In Lane	0.39		0.54	0.99		1.00	1.00		0.17	1.00		0.06
Lane Grp Cap(c), veh/h	348	0	0	390	0	214	34	727	740	104	797	827
V/C Ratio(X)	0.17	0.00	0.00	0.17	0.00	0.14	0.56	0.54	0.54	0.76	0.45	0.45
Avail Cap(c_a), veh/h	1165	0	0	1145	0	1048	208	1364	1389	344	1504	1562
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.9	0.0	0.0	14.9	0.0	14.7	19.0	8.7	8.7	18.1	7.3	7.3
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.1	5.4	0.9	0.9	4.2	0.9	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	0.4	0.0	0.0	0.5	0.0	0.2	0.2	1.9	2.0	0.7	1.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.0	0.0	0.0	15.0	0.0	14.8	24.4	9.5	9.5	22.3	8.2	8.2
LnGrp LOS	B	A	A	B	A	B	C	A	A	C	A	A
Approach Vol, veh/h		59			98			806			806	
Approach Delay, s/veh		15.0			14.9			9.9			9.6	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.7	21.9		10.4	5.1	23.4		10.4
Change Period (Y+Rc), s	4.4	5.8		4.9	4.4	* 5.8		4.9
Max Green Setting (Gmax), s	7.6	30.2		27.1	4.6	* 33		27.1
Max Q Clear Time (g_c+I1), s	3.7	8.5		3.2	2.4	7.4		3.3
Green Ext Time (p_c), s	0.0	7.2		0.2	0.0	9.4		0.2

Intersection Summary	
HCM 6th Ctrl Delay	10.2
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* 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	1471	1296	0	1506	153	793	103	991	0	0	0
Future Volume (veh/h)	0	1471	1296	0	1506	153	793	103	991	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	0	1565	1379	0	1655	168	875	0	1001			
Peak Hour Factor	0.94	0.94	0.94	0.91	0.91	0.91	0.99	0.99	0.99			
Percent Heavy Veh, %	0	3	3	0	3	3	3	3	3			
Cap, veh/h	0	2659	2451	0	1851	815	1274	0	1134			
Arrive On Green	0.00	1.00	1.00	0.00	0.52	0.52	0.36	0.00	0.36			
Sat Flow, veh/h	0	5233	2768	0	3618	1552	3534	0	3145			
Grp Volume(v), veh/h	0	1565	1379	0	1655	168	875	0	1001			
Grp Sat Flow(s),veh/h/ln	0	1689	1384	0	1763	1552	1767	0	1572			
Q Serve(g_s), s	0.0	0.0	0.0	0.0	46.2	6.3	23.1	0.0	32.8			
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	46.2	6.3	23.1	0.0	32.8			
Prop In Lane	0.00		1.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	2659	2451	0	1851	815	1274	0	1134			
V/C Ratio(X)	0.00	0.59	0.56	0.00	0.89	0.21	0.69	0.00	0.88			
Avail Cap(c_a), veh/h	0	2659	2451	0	1851	815	1366	0	1215			
HCM Platoon Ratio	1.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	0.74	0.74	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	23.4	13.9	29.9	0.0	33.0			
Incr Delay (d2), s/veh	0.0	0.7	0.7	0.0	7.2	0.6	1.3	0.0	7.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.2	0.0	18.9	2.2	9.9	0.0	13.4			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.7	0.7	0.0	30.6	14.5	31.2	0.0	40.6			
LnGrp LOS	A	A	A	A	C	B	C	A	D			
Approach Vol, veh/h		2944			1823			1876				
Approach Delay, s/veh		0.7			29.1			36.2				
Approach LOS		A			C			D				

Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		65.2				65.2		44.8				
Change Period (Y+Rc), s		7.5				7.5		5.1				
Max Green Setting (Gmax), s		54.9				54.9		42.5				
Max Q Clear Time (g_c+I1), s		2.0				48.2		34.8				
Green Ext Time (p_c), s		32.8				5.2		4.8				

Intersection Summary		
HCM 6th Ctrl Delay		18.5
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2346	606	0	1586	572	0	0	0	209	10	0
Future Volume (veh/h)	0	2346	606	0	1586	572	0	0	0	209	10	0
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856				1856	1856	0
Adj Flow Rate, veh/h	0	2419	625	0	1669	0				222	0	0
Peak Hour Factor	0.97	0.97	0.97	0.95	0.95	0.95				0.97	0.97	0.97
Percent Heavy Veh, %	0	3	3	0	3	3				3	3	0
Cap, veh/h	0	4058	1260	0	2824					298	157	0
Arrive On Green	0.00	0.80	0.80	0.00	1.00	0.00				0.08	0.00	0.00
Sat Flow, veh/h	0	5233	1572	0	3618	1572				3534	1856	0
Grp Volume(v), veh/h	0	2419	625	0	1669	0				222	0	0
Grp Sat Flow(s),veh/h/ln	0	1689	1572	0	1763	1572				1767	1856	0
Q Serve(g_s), s	0.0	20.0	14.4	0.0	0.0	0.0				6.8	0.0	0.0
Cycle Q Clear(g_c), s	0.0	20.0	14.4	0.0	0.0	0.0				6.8	0.0	0.0
Prop In Lane	0.00		1.00	0.00		1.00				1.00		0.00
Lane Grp Cap(c), veh/h	0	4058	1260	0	2824					298	157	0
V/C Ratio(X)	0.00	0.60	0.50	0.00	0.59					0.74	0.00	0.00
Avail Cap(c_a), veh/h	0	4058	1260	0	2824					639	336	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.33	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	4.2	3.6	0.0	0.0	0.0				49.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	1.4	0.0	0.3	0.0				3.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.1	3.1	0.0	0.1	0.0				3.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	4.8	5.0	0.0	0.3	0.0				52.9	0.0	0.0
LnGrp LOS	A	A	A	A	A					D	A	A
Approach Vol, veh/h		3044			1669	A					222	
Approach Delay, s/veh		4.9			0.3						52.9	
Approach LOS		A			A						D	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	95.6	14.4	95.6
Change Period (Y+Rc), s	7.5	5.1	7.5
Max Green Setting (Gmax), s	77.5	19.9	77.5
Max Q Clear Time (g_c+I1), s	22.0	8.8	2.0
Green Ext Time (p_c), s	40.4	0.5	20.7

Intersection Summary	
HCM 6th Ctrl Delay	5.5
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	111	6	64	392	750	0	0	321	396
Future Volume (veh/h)	0	0	0	111	6	64	392	750	0	0	321	396
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1856	1856	1856	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				122	7	70	445	852	0	0	382	471
Peak Hour Factor				0.91	0.91	0.91	0.88	0.88	0.88	0.84	0.84	0.84
Percent Heavy Veh, %				3	3	3	3	3	0	0	3	3
Cap, veh/h				207	12	192	542	2530	0	0	1779	1363
Arrive On Green				0.12	0.12	0.12	0.16	0.72	0.00	0.00	0.50	0.50
Sat Flow, veh/h				1676	96	1551	3428	3618	0	0	3618	2701
Grp Volume(v), veh/h				129	0	70	445	852	0	0	382	471
Grp Sat Flow(s),veh/h/ln				1772	0	1551	1714	1763	0	0	1763	1350
Q Serve(g_s), s				5.5	0.0	3.3	10.0	7.2	0.0	0.0	4.8	8.4
Cycle Q Clear(g_c), s				5.5	0.0	3.3	10.0	7.2	0.0	0.0	4.8	8.4
Prop In Lane				0.95		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				219	0	192	542	2530	0	0	1779	1363
V/C Ratio(X)				0.59	0.00	0.37	0.82	0.34	0.00	0.00	0.21	0.35
Avail Cap(c_a), veh/h				443	0	388	883	2530	0	0	1779	1363
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.95	0.95	0.00	0.00	0.97	0.97
Uniform Delay (d), s/veh				33.1	0.0	32.2	32.6	4.2	0.0	0.0	11.0	11.9
Incr Delay (d2), s/veh				0.9	0.0	0.4	1.3	0.3	0.0	0.0	0.3	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
%ile BackOfQ(50%),veh/ln				2.3	0.0	1.2	4.0	1.6	0.0	0.0	1.7	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				34.1	0.0	32.6	33.8	4.5	0.0	0.0	11.3	12.6
LnGrp LOS				C	A	C	C	A	A	A	B	B
Approach Vol, veh/h					199			1297			853	
Approach Delay, s/veh					33.6			14.6			12.0	
Approach LOS					C			B			B	

Timer - Assigned Phs	2	5	6	8
Phs Duration (G+Y+Rc), s	63.1	17.0	46.1	16.9
Change Period (Y+Rc), s	* 5.7	4.4	5.7	7.0
Max Green Setting (Gmax), s	* 48	20.6	22.3	20.0
Max Q Clear Time (g_c+I1), s	9.2	12.0	10.4	7.5
Green Ext Time (p_c), s	4.5	0.6	4.3	0.4

Intersection Summary	
HCM 6th Ctrl Delay	15.3
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)	404	0	261	0	0	0	0	642	150	25	308	0
Future Volume (veh/h)	404	0	261	0	0	0	0	642	150	25	308	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	1856	1856	1856				0	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	487	0	314				0	747	174	30	371	0
Peak Hour Factor	0.83	0.83	0.83				0.86	0.86	0.86	0.83	0.83	0.83
Percent Heavy Veh, %	3	3	3				0	3	3	3	3	0
Cap, veh/h	673	0	599				0	3121	702	43	2387	0
Arrive On Green	0.19	0.00	0.19				0.00	0.60	0.60	0.05	1.00	0.00
Sat Flow, veh/h	3534	0	3145				0	5481	1175	1767	3618	0
Grp Volume(v), veh/h	487	0	314				0	683	238	30	371	0
Grp Sat Flow(s),veh/h/ln	1767	0	1572				0	1596	1609	1767	1763	0
Q Serve(g_s), s	10.4	0.0	7.2				0.0	5.4	5.6	1.3	0.0	0.0
Cycle Q Clear(g_c), s	10.4	0.0	7.2				0.0	5.4	5.6	1.3	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.73	1.00		0.00
Lane Grp Cap(c), veh/h	673	0	599				0	2862	962	43	2387	0
V/C Ratio(X)	0.72	0.00	0.52				0.00	0.24	0.25	0.70	0.16	0.00
Avail Cap(c_a), veh/h	1241	0	1105				0	2862	962	389	2387	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.98	0.98	0.00
Uniform Delay (d), s/veh	30.4	0.0	29.1				0.0	7.5	7.6	37.8	0.0	0.0
Incr Delay (d2), s/veh	1.5	0.0	0.7				0.0	0.2	0.6	7.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.0	2.7				0.0	1.5	1.7	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.9	0.0	29.8				0.0	7.7	8.2	45.0	0.1	0.0
LnGrp LOS	C	A	C				A	A	A	D	A	A
Approach Vol, veh/h		801						921			401	
Approach Delay, s/veh		31.1						7.9			3.5	
Approach LOS		C						A			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.3	53.5		20.1		59.9
Change Period (Y+Rc), s	4.4	* 5.7		4.9		5.7
Max Green Setting (Gmax), s	17.6	* 19		28.1		41.3
Max Q Clear Time (g_c+I1), s	13.3	7.6		12.4		2.0
Green Ext Time (p_c), s	0.0	5.7		2.9		1.6

Intersection Summary	
HCM 6th Ctrl Delay	15.8
HCM 6th LOS	B

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)	367	1688	73	124	906	92	46	50	41	78	37	62
Future Volume (veh/h)	367	1688	73	124	906	92	46	50	41	78	37	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	399	1835	79	131	954	97	55	60	49	101	48	81
Peak Hour Factor	0.92	0.92	0.92	0.95	0.95	0.95	0.83	0.83	0.83	0.77	0.77	0.77
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	429	2272	98	162	1425	144	117	62	51	261	89	151
Arrive On Green	0.24	0.46	0.46	0.09	0.31	0.31	0.07	0.07	0.07	0.15	0.15	0.15
Sat Flow, veh/h	1767	4980	214	1767	4668	473	1767	943	770	1767	605	1021
Grp Volume(v), veh/h	399	1244	670	131	689	362	55	0	109	101	0	129
Grp Sat Flow(s),veh/h/ln	1767	1689	1817	1767	1689	1764	1767	0	1713	1767	0	1626
Q Serve(g_s), s	19.7	28.2	28.3	6.5	15.9	15.9	2.7	0.0	5.6	4.6	0.0	6.5
Cycle Q Clear(g_c), s	19.7	28.2	28.3	6.5	15.9	15.9	2.7	0.0	5.6	4.6	0.0	6.5
Prop In Lane	1.00		0.12	1.00		0.27	1.00		0.45	1.00		0.63
Lane Grp Cap(c), veh/h	429	1541	829	162	1031	538	117	0	114	261	0	240
V/C Ratio(X)	0.93	0.81	0.81	0.81	0.67	0.67	0.47	0.00	0.96	0.39	0.00	0.54
Avail Cap(c_a), veh/h	429	1627	876	199	1203	628	117	0	114	794	0	731
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	33.0	20.8	20.9	39.7	27.0	27.0	40.1	0.0	41.4	34.3	0.0	35.1
Incr Delay (d2), s/veh	26.5	3.2	5.8	15.0	1.4	2.8	1.1	0.0	71.2	0.3	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	10.0	11.4	3.3	5.9	6.4	1.2	0.0	4.6	2.0	0.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.5	24.0	26.7	54.6	28.4	29.8	41.1	0.0	112.7	34.6	0.0	35.8
LnGrp LOS	E	C	C	D	C	C	D	A	F	C	A	D
Approach Vol, veh/h		2313			1182			164			230	
Approach Delay, s/veh		30.9			31.7			88.7			35.3	
Approach LOS		C			C			F			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.6	47.6		18.0	26.0	34.2		10.8
Change Period (Y+Rc), s	4.4	7.0		4.9	4.4	* 7		4.9
Max Green Setting (Gmax), s	10.6	42.9		40.0	21.6	* 32		5.9
Max Q Clear Time (g_c+I1), s	8.5	30.3		8.5	21.7	17.9		7.6
Green Ext Time (p_c), s	0.0	10.3		0.6	0.0	6.8		0.0

Intersection Summary	
HCM 6th Ctrl Delay	33.9
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)	384	1440	22	46	843	321	30	29	23	304	32	224
Future Volume (veh/h)	384	1440	22	46	843	321	30	29	23	304	32	224
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	409	1532	23	51	937	357	40	39	31	430	0	295
Peak Hour Factor	0.94	0.94	0.94	0.90	0.90	0.90	0.75	0.75	0.75	0.76	0.76	0.76
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	504	2562	38	64	1394	530	105	104	84	399	0	175
Arrive On Green	0.15	0.50	0.50	0.04	0.39	0.39	0.09	0.09	0.09	0.11	0.00	0.11
Sat Flow, veh/h	3428	5139	77	1767	3594	1367	1234	1218	979	3534	0	1547
Grp Volume(v), veh/h	409	1007	548	51	880	414	58	0	52	430	0	295
Grp Sat Flow(s),veh/h/ln	1714	1689	1840	1767	1689	1584	1794	0	1637	1767	0	1547
Q Serve(g_s), s	9.2	17.0	17.0	2.3	17.2	17.3	2.4	0.0	2.4	9.0	0.0	9.0
Cycle Q Clear(g_c), s	9.2	17.0	17.0	2.3	17.2	17.3	2.4	0.0	2.4	9.0	0.0	9.0
Prop In Lane	1.00		0.04	1.00		0.86	0.69		0.60	1.00		1.00
Lane Grp Cap(c), veh/h	504	1683	917	64	1310	614	153	0	140	399	0	175
V/C Ratio(X)	0.81	0.60	0.60	0.79	0.67	0.67	0.38	0.00	0.37	1.08	0.00	1.69
Avail Cap(c_a), veh/h	842	2002	1090	164	1486	697	787	0	718	399	0	175
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	33.0	14.3	14.3	38.1	20.2	20.2	34.5	0.0	34.5	35.4	0.0	35.4
Incr Delay (d2), s/veh	1.2	0.9	1.6	7.9	1.4	3.0	2.2	0.0	2.3	67.7	0.0	334.0
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	8.5	5.3	6.0	1.1	6.0	5.9	1.1	0.0	1.0	7.4	0.0	19.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.2	15.2	15.9	46.0	21.7	23.3	36.7	0.0	36.8	103.1	0.0	369.4
LnGrp LOS	C	B	B	D	C	C	D	A	D	F	A	F
Approach Vol, veh/h		1964			1345			110			725	
Approach Delay, s/veh		19.4			23.1			36.7			211.5	
Approach LOS		B			C			D			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.3	45.8		15.0	16.1	36.9		11.7
Change Period (Y+Rc), s	4.4	6.0		6.0	4.4	6.0		4.9
Max Green Setting (Gmax), s	7.4	47.3		9.0	19.6	35.1		35.0
Max Q Clear Time (g_c+I1), s	4.3	19.0		11.0	11.2	19.3		4.4
Green Ext Time (p_c), s	0.0	20.8		0.0	0.5	10.5		0.9

Intersection Summary	
HCM 6th Ctrl Delay	54.6
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	524	777	383	207	399	18	384	809	60	12	622	356
Future Volume (veh/h)	524	777	383	207	399	18	384	809	60	12	622	356
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		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	557	827	369	249	481	22	417	879	65	13	662	344
Peak Hour Factor	0.94	0.94	0.94	0.83	0.83	0.83	0.92	0.92	0.92	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	617	981	430	273	1223	56	467	1327	98	20	945	411
Arrive On Green	0.18	0.28	0.28	0.15	0.25	0.25	0.14	0.40	0.40	0.01	0.27	0.27
Sat Flow, veh/h	3428	3526	1546	1767	4965	226	3428	3322	246	1767	3526	1536
Grp Volume(v), veh/h	557	827	369	249	326	177	417	466	478	13	662	344
Grp Sat Flow(s),veh/h/ln	1714	1763	1546	1767	1689	1814	1714	1763	1805	1767	1763	1536
Q Serve(g_s), s	21.3	29.6	30.3	18.6	10.8	10.9	16.0	29.0	29.0	1.0	22.7	28.3
Cycle Q Clear(g_c), s	21.3	29.6	30.3	18.6	10.8	10.9	16.0	29.0	29.0	1.0	22.7	28.3
Prop In Lane	1.00		1.00	1.00		0.12	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	617	981	430	273	832	447	467	704	721	20	945	411
V/C Ratio(X)	0.90	0.84	0.86	0.91	0.39	0.40	0.89	0.66	0.66	0.64	0.70	0.84
Avail Cap(c_a), veh/h	862	1102	483	335	859	462	524	742	760	71	1084	472
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.8	45.6	45.8	55.7	42.1	42.2	56.9	32.8	32.9	66.0	44.2	46.3
Incr Delay (d2), s/veh	8.0	5.7	13.5	22.7	0.4	0.7	15.1	2.2	2.2	11.9	1.9	11.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.5	13.1	12.9	9.8	4.5	4.9	7.8	12.3	12.6	0.5	10.0	11.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.7	51.3	59.4	78.4	42.5	42.9	72.1	35.1	35.0	77.9	46.1	57.8
LnGrp LOS	E	D	E	E	D	D	E	D	D	E	D	E
Approach Vol, veh/h		1753			752			1361			1019	
Approach Delay, s/veh		56.3			54.5			46.4			50.4	
Approach LOS		E			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.1	60.2	24.3	44.4	22.8	42.5	28.6	40.1
Change Period (Y+Rc), s	3.6	6.6	3.6	7.1	4.5	* 6.6	4.5	* 7.1
Max Green Setting (Gmax), s	5.4	56.4	25.4	41.9	20.5	* 41	33.7	* 34
Max Q Clear Time (g_c+I1), s	13.0	31.0	20.6	32.3	18.0	30.3	23.3	12.9
Green Ext Time (p_c), s	0.0	7.2	0.2	5.0	0.2	4.8	0.8	3.4

Intersection Summary	
HCM 6th Ctrl Delay	52.0
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)	87	3	36	22	6	24	69	566	47	72	494	145
Future Volume (veh/h)	87	3	36	22	6	24	69	566	47	72	494	145
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.98	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	116	4	48	26	7	28	78	636	53	77	526	154
Peak Hour Factor	0.75	0.75	0.75	0.85	0.85	0.85	0.89	0.89	0.89	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	304	26	76	203	73	135	149	1234	103	148	1009	294
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.08	0.38	0.38	0.08	0.38	0.38
Sat Flow, veh/h	909	144	421	474	408	749	1767	3284	273	1767	2690	784
Grp Volume(v), veh/h	168	0	0	61	0	0	78	341	348	77	344	336
Grp Sat Flow(s),veh/h/ln	1475	0	0	1631	0	0	1767	1763	1794	1767	1763	1711
Q Serve(g_s), s	3.1	0.0	0.0	0.0	0.0	0.0	1.8	6.5	6.5	1.8	6.6	6.7
Cycle Q Clear(g_c), s	4.4	0.0	0.0	1.3	0.0	0.0	1.8	6.5	6.5	1.8	6.6	6.7
Prop In Lane	0.69		0.29	0.43		0.46	1.00		0.15	1.00		0.46
Lane Grp Cap(c), veh/h	405	0	0	412	0	0	149	662	674	148	661	642
V/C Ratio(X)	0.41	0.00	0.00	0.15	0.00	0.00	0.52	0.51	0.52	0.52	0.52	0.52
Avail Cap(c_a), veh/h	1203	0	0	1267	0	0	390	1353	1377	349	1308	1269
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.4	0.0	0.0	15.2	0.0	0.0	19.1	10.5	10.5	19.1	10.6	10.6
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.1	0.0	0.0	1.1	1.2	1.2	1.1	1.0	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	1.4	0.0	0.0	0.5	0.0	0.0	0.7	2.0	2.0	0.7	2.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.6	0.0	0.0	15.2	0.0	0.0	20.2	11.7	11.7	20.2	11.6	11.7
LnGrp LOS	B	A	A	B	A	A	C	B	B	C	B	B
Approach Vol, veh/h		168			61			767			757	
Approach Delay, s/veh		16.6			15.2			12.6			12.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.0	22.1		13.4	8.1	22.0		13.4
Change Period (Y+Rc), s	4.4	* 5.7		* 5.6	4.4	5.7		5.6
Max Green Setting (Gmax), s	8.6	* 33		* 33	9.6	32.3		32.4
Max Q Clear Time (g_c+I1), s	3.8	8.5		3.3	3.8	8.7		6.4
Green Ext Time (p_c), s	0.0	7.6		0.2	0.0	6.6		0.7

Intersection Summary	
HCM 6th Ctrl Delay	13.0
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)	138	589	41	49	544	75	23	2	20	47	4	131
Future Volume (veh/h)	138	589	41	49	544	75	23	2	20	47	4	131
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.84	0.99		0.95	0.97		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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	157	669	47	56	618	85	31	3	27	63	5	175
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	191	1504	106	72	1161	159	275	40	206	161	35	385
Arrive On Green	0.11	0.45	0.45	0.04	0.38	0.38	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	1767	3340	234	1767	3035	416	615	111	577	321	98	1080
Grp Volume(v), veh/h	157	353	363	56	358	345	61	0	0	243	0	0
Grp Sat Flow(s),veh/h/ln	1767	1763	1811	1767	1763	1688	1302	0	0	1499	0	0
Q Serve(g_s), s	8.6	13.5	13.6	3.1	15.5	15.6	0.0	0.0	0.0	6.2	0.0	0.0
Cycle Q Clear(g_c), s	8.6	13.5	13.6	3.1	15.5	15.6	2.6	0.0	0.0	11.8	0.0	0.0
Prop In Lane	1.00		0.13	1.00		0.25	0.51		0.44	0.26		0.72
Lane Grp Cap(c), veh/h	191	794	816	72	675	646	520	0	0	581	0	0
V/C Ratio(X)	0.82	0.44	0.45	0.78	0.53	0.53	0.12	0.00	0.00	0.42	0.00	0.00
Avail Cap(c_a), veh/h	334	794	816	101	675	646	520	0	0	581	0	0
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	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	42.9	18.6	18.6	46.8	23.5	23.6	21.1	0.0	0.0	24.1	0.0	0.0
Incr Delay (d2), s/veh	8.5	1.8	1.8	22.3	3.0	3.1	0.5	0.0	0.0	2.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	5.6	5.7	1.8	6.6	6.4	1.0	0.0	0.0	4.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.4	20.4	20.4	69.1	26.5	26.7	21.6	0.0	0.0	26.3	0.0	0.0
LnGrp LOS	D	C	C	E	C	C	C	A	A	C	A	A
Approach Vol, veh/h		873			759			61			243	
Approach Delay, s/veh		26.0			29.7			21.6			26.3	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.0	43.4		40.0	8.4	50.0		40.0
Change Period (Y+Rc), s	4.4	* 5.7		4.9	4.4	5.7		4.9
Max Green Setting (Gmax), s	13.6	* 32		35.1	5.6	44.3		35.1
Max Q Clear Time (g_c+I1), s	10.6	17.6		13.8	5.1	15.6		4.6
Green Ext Time (p_c), s	0.2	3.6		1.6	0.0	4.4		0.3

Intersection Summary	
HCM 6th Ctrl Delay	27.3
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)	161	384	34	174	278	185	33	155	162	188	202	52
Future Volume (veh/h)	161	384	34	174	278	185	33	155	162	188	202	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	181	431	38	181	290	193	36	168	176	221	238	61
Peak Hour Factor	0.89	0.89	0.89	0.96	0.96	0.96	0.92	0.92	0.92	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	219	1014	89	219	630	405	47	365	314	261	914	229
Arrive On Green	0.12	0.31	0.31	0.12	0.31	0.31	0.03	0.21	0.21	0.15	0.33	0.33
Sat Flow, veh/h	1767	3276	288	1767	2034	1309	1767	1763	1519	1767	2785	698
Grp Volume(v), veh/h	181	231	238	181	250	233	36	168	176	221	149	150
Grp Sat Flow(s),veh/h/ln	1767	1763	1801	1767	1763	1580	1767	1763	1519	1767	1763	1721
Q Serve(g_s), s	9.0	9.4	9.4	9.0	10.2	10.7	1.8	7.5	9.3	10.9	5.6	5.8
Cycle Q Clear(g_c), s	9.0	9.4	9.4	9.0	10.2	10.7	1.8	7.5	9.3	10.9	5.6	5.8
Prop In Lane	1.00		0.16	1.00		0.83	1.00		1.00	1.00		0.41
Lane Grp Cap(c), veh/h	219	546	558	219	546	489	47	365	314	261	579	565
V/C Ratio(X)	0.83	0.42	0.43	0.83	0.46	0.48	0.77	0.46	0.56	0.85	0.26	0.27
Avail Cap(c_a), veh/h	386	546	558	386	546	489	132	628	541	425	921	899
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.4	24.6	24.7	38.4	24.9	25.1	43.4	31.2	31.9	37.3	22.1	22.2
Incr Delay (d2), s/veh	7.6	2.4	2.4	7.6	2.8	3.3	23.0	0.9	1.6	8.3	0.2	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	4.2	4.1	4.2	4.2	4.5	4.2	1.1	3.2	3.5	5.2	2.3	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.0	27.0	27.0	46.0	27.7	28.4	66.5	32.1	33.5	45.6	22.4	22.4
LnGrp LOS	D	C	C	D	C	C	E	C	C	D	C	C
Approach Vol, veh/h		650			664			380			520	
Approach Delay, s/veh		32.3			32.9			36.0			32.3	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.5	33.1	6.8	34.4	15.5	33.1	17.7	23.5
Change Period (Y+Rc), s	4.4	5.3	4.4	4.9	4.4	5.3	4.4	4.9
Max Green Setting (Gmax), s	19.6	27.8	6.7	46.9	19.6	27.8	21.6	32.0
Max Q Clear Time (g_c+I1), s	11.0	11.4	3.8	7.8	11.0	12.7	12.9	11.3
Green Ext Time (p_c), s	0.3	2.3	0.0	1.8	0.3	2.4	0.4	2.0

Intersection Summary	
HCM 6th Ctrl Delay	33.1
HCM 6th LOS	C

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	47	41	59	50	43	77
Future Vol, veh/h	47	41	59	50	43	77
Peak Hour Factor	0.88	0.88	0.75	0.75	0.75	0.75
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	53	47	79	67	57	103
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Righ	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	8.1	7.9	8.5
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	53%	36%
Vol Thru, %	54%	0%	64%
Vol Right, %	46%	47%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	109	88	120
LT Vol	0	47	43
Through Vol	59	0	77
RT Vol	50	41	0
Lane Flow Rate	145	100	160
Geometry Grp	1	1	1
Degree of Util (X)	0.165	0.123	0.196
Departure Headway (Hd)	4.079	4.444	4.412
Convergence, Y/N	Yes	Yes	Yes
Cap	882	808	818
Service Time	2.091	2.461	2.412
HCM Lane V/C Ratio	0.164	0.124	0.196
HCM Control Delay	7.9	8.1	8.5
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.6	0.4	0.7

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	24	92	112	61	64
Future Vol, veh/h	12	24	92	112	61	64
Conflicting Peds, #/hr	4	3	0	7	7	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	75	75	83	83	75	75
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	16	32	111	135	81	85

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	437	189	0	0	253	0
Stage 1	186	-	-	-	-	-
Stage 2	251	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	575	850	-	-	1306	-
Stage 1	843	-	-	-	-	-
Stage 2	788	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	531	842	-	-	1297	-
Mov Cap-2 Maneuver	531	-	-	-	-	-
Stage 1	837	-	-	-	-	-
Stage 2	733	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.5	0	3.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	704	1297	-
HCM Lane V/C Ratio	-	-	0.068	0.063	-
HCM Control Delay (s)	-	-	10.5	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.2	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	1	11	52	11	12	15	163	193	18	133	13
Future Vol, veh/h	6	1	11	52	11	12	15	163	193	18	133	13
Conflicting Peds, #/hr	15	0	3	3	0	15	2	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	79	79	79	84	84	84	84	84	84
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	8	1	15	66	14	15	18	194	230	21	158	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	585	670	171	564	562	324	175	0	0	424	0	0
Stage 1	210	210	-	345	345	-	-	-	-	-	-	-
Stage 2	375	460	-	219	217	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	421	377	870	435	434	715	1395	-	-	1130	-	-
Stage 1	790	727	-	668	634	-	-	-	-	-	-	-
Stage 2	644	564	-	781	721	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	384	362	866	413	417	705	1392	-	-	1130	-	-
Mov Cap-2 Maneuver	384	362	-	413	417	-	-	-	-	-	-	-
Stage 1	775	710	-	657	623	-	-	-	-	-	-	-
Stage 2	597	554	-	748	704	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.5	15.3	0.3	0.9
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1392	-	-	579	443	1130	-	-
HCM Lane V/C Ratio	0.013	-	-	0.041	0.214	0.019	-	-
HCM Control Delay (s)	7.6	0	-	11.5	15.3	8.2	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.8	0.1	-	-

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	102	30	7	11	8	7	16	87	21	6	90	12
Future Vol, veh/h	102	30	7	11	8	7	16	87	21	6	90	12
Peak Hour Factor	0.75	0.75	0.75	0.81	0.81	0.81	0.81	0.81	0.81	0.83	0.83	0.83
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	136	40	9	14	10	9	20	107	26	7	108	14
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.3	8	8.7	8.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	13%	73%	42%	6%
Vol Thru, %	70%	22%	31%	83%
Vol Right, %	17%	5%	27%	11%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	124	139	26	108
LT Vol	16	102	11	6
Through Vol	87	30	8	90
RT Vol	21	7	7	12
Lane Flow Rate	153	185	32	130
Geometry Grp	1	1	1	1
Degree of Util (X)	0.194	0.245	0.042	0.167
Departure Headway (Hd)	4.562	4.763	4.766	4.608
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	787	752	749	778
Service Time	2.592	2.797	2.809	2.639
HCM Lane V/C Ratio	0.194	0.246	0.043	0.167
HCM Control Delay	8.7	9.3	8	8.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.7	1	0.1	0.6

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1774	1010	44	0	96
Future Vol, veh/h	0	1774	1010	44	0	96
Conflicting Peds, #/hr	6	0	0	6	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	94	94	86	86
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	1949	1074	47	0	112

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	567
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.93
Pot Cap-1 Maneuver	0	-	-	-	0	398
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	396
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	17.6
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	396
HCM Lane V/C Ratio	-	-	-	0.282
HCM Control Delay (s)	-	-	-	17.6
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	1.1

Intersection	
Intersection Delay, s/veh	9.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	9	0	92	21	151	2	40	67	129	72	13
Future Vol, veh/h	11	9	0	92	21	151	2	40	67	129	72	13
Peak Hour Factor	0.75	0.75	0.75	0.86	0.86	0.86	0.77	0.77	0.77	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	15	12	0	107	24	176	3	52	87	140	78	14
Number of Lanes	0	1	0	0	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay	9.4	9.7	9.4	10.1
HCM LOS	A	A	A	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	55%	81%	0%	100%	0%
Vol Thru, %	0%	37%	45%	19%	0%	0%	85%
Vol Right, %	0%	63%	0%	0%	100%	0%	15%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	2	107	20	113	151	129	85
LT Vol	2	0	11	92	0	129	0
Through Vol	0	40	9	21	0	0	72
RT Vol	0	67	0	0	151	0	13
Lane Flow Rate	3	139	27	131	176	140	92
Geometry Grp	7	7	6	7	7	7	7
Degree of Util (X)	0.004	0.202	0.045	0.218	0.237	0.236	0.14
Departure Headway (Hd)	6.19	5.242	6.139	5.964	4.85	6.055	5.443
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	573	678	587	599	734	589	653
Service Time	3.978	3.029	4.139	3.733	2.619	3.835	3.222
HCM Lane V/C Ratio	0.005	0.205	0.046	0.219	0.24	0.238	0.141
HCM Control Delay	9	9.4	9.4	10.4	9.1	10.7	9.1
HCM Lane LOS	A	A	A	B	A	B	A
HCM 95th-tile Q	0	0.8	0.1	0.8	0.9	0.9	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	266	948	0	0	1521	548	450	4	910	0	0	0
Future Volume (veh/h)	266	948	0	0	1521	548	450	4	910	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	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				
Adj Sat Flow, veh/h/ln	1856	1856	0	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	286	1019	0	0	1601	520	492	0	892			
Peak Hour Factor	0.93	0.93	0.93	0.95	0.95	0.95	0.92	0.92	0.92			
Percent Heavy Veh, %	3	3	0	0	3	3	3	3	3			
Cap, veh/h	333	2817	0	0	1371	609	1106	0	984			
Arrive On Green	0.19	1.00	0.00	0.00	0.39	0.39	0.31	0.00	0.31			
Sat Flow, veh/h	3428	5233	0	0	3618	1566	3534	0	3145			
Grp Volume(v), veh/h	286	1019	0	0	1601	520	492	0	892			
Grp Sat Flow(s),veh/h/ln	1714	1689	0	0	1763	1566	1767	0	1572			
Q Serve(g_s), s	8.1	0.0	0.0	0.0	38.9	30.4	11.1	0.0	27.2			
Cycle Q Clear(g_c), s	8.1	0.0	0.0	0.0	38.9	30.4	11.1	0.0	27.2			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	333	2817	0	0	1371	609	1106	0	984			
V/C Ratio(X)	0.86	0.36	0.00	0.00	1.17	0.85	0.44	0.00	0.91			
Avail Cap(c_a), veh/h	333	2817	0	0	1371	609	1237	0	1101			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.54	0.54	0.00	0.00	0.43	0.43	1.00	0.00	1.00			
Uniform Delay (d), s/veh	39.6	0.0	0.0	0.0	30.5	27.9	27.4	0.0	33.0			
Incr Delay (d2), s/veh	11.1	0.2	0.0	0.0	79.1	6.7	0.1	0.0	9.4			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.5	0.1	0.0	0.0	30.6	11.9	4.6	0.0	11.4			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.8	0.2	0.0	0.0	109.6	34.7	27.5	0.0	42.4			
LnGrp LOS	D	A	A	A	F	C	C	A	D			
Approach Vol, veh/h		1305			2121			1384				
Approach Delay, s/veh		11.3			91.2			37.1				
Approach LOS		B			F			D				

Timer - Assigned Phs	2			5	6		8					
Phs Duration (G+Y+Rc), s	62.6			16.7	45.9		37.4					
Change Period (Y+Rc), s	7.0			7.0	* 7		6.1					
Max Green Setting (Gmax), s	51.9			7.3	* 39		35.0					
Max Q Clear Time (g_c+I1), s	2.0			10.1	40.9		29.2					
Green Ext Time (p_c), s	5.5			0.0	0.0		2.1					

Intersection Summary	
HCM 6th Ctrl Delay	54.0
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	740	289	937	1034	0	0	0	0	474	1	349
Future Volume (veh/h)	0	740	289	937	1034	0	0	0	0	474	1	349
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1856	1856	1856	1856	0				1856	1856	1856
Adj Flow Rate, veh/h	0	796	311	976	1077	0				620	0	248
Peak Hour Factor	0.93	0.93	0.93	0.96	0.96	0.96				0.94	0.94	0.94
Percent Heavy Veh, %	0	3	3	3	3	0				3	3	3
Cap, veh/h	0	857	382	1207	2345	0				721	0	321
Arrive On Green	0.00	0.24	0.24	0.70	1.00	0.00				0.20	0.00	0.20
Sat Flow, veh/h	0	3618	1571	3428	3618	0				3534	0	1572
Grp Volume(v), veh/h	0	796	311	976	1077	0				620	0	248
Grp Sat Flow(s),veh/h/ln	0	1763	1571	1714	1763	0				1767	0	1572
Q Serve(g_s), s	0.0	22.1	18.7	19.6	0.0	0.0				16.9	0.0	14.9
Cycle Q Clear(g_c), s	0.0	22.1	18.7	19.6	0.0	0.0				16.9	0.0	14.9
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	857	382	1207	2345	0				721	0	321
V/C Ratio(X)	0.00	0.93	0.81	0.81	0.46	0.00				0.86	0.00	0.77
Avail Cap(c_a), veh/h	0	864	385	1207	2345	0				1025	0	456
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.09	0.09	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	37.0	35.7	12.5	0.0	0.0				38.4	0.0	37.6
Incr Delay (d2), s/veh	0.0	17.7	17.2	0.4	0.1	0.0				4.0	0.0	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	11.3	8.8	3.9	0.0	0.0				7.6	0.0	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	54.7	52.9	12.8	0.1	0.0				42.4	0.0	40.6
LnGrp LOS	A	D	D	B	A	A				D	A	D
Approach Vol, veh/h		1107			2053						868	
Approach Delay, s/veh		54.2			6.1						41.9	
Approach LOS		D			A						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	42.2	31.3		26.5		73.5
Change Period (Y+Rc), s	7.0	* 7		6.1		7.0
Max Green Setting (Gmax), s	27.3	* 25		29.0		57.9
Max Q Clear Time (g_c+I1), s	21.6	24.1		18.9		2.0
Green Ext Time (p_c), s	1.4	0.2		1.5		6.0

Intersection Summary	
HCM 6th Ctrl Delay	27.0
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	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	817	198	151	941	0	1094	394
Future Volume (veh/h)	817	198	151	941	0	1094	394
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				0.99
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	1856	1856	1856	1856		1856	1856
Adj Flow Rate, veh/h	869	211	164	1023		1189	428
Peak Hour Factor	0.94	0.94	0.92	0.92		0.92	0.92
Percent Heavy Veh, %	3	3	3	3		3	3
Cap, veh/h	1014	465	215	3122		1900	683
Arrive On Green	0.30	0.30	0.13	1.00		0.52	0.52
Sat Flow, veh/h	3428	1572	3428	5233		3834	1318
Grp Volume(v), veh/h	869	211	164	1023		1095	522
Grp Sat Flow(s),veh/h/ln	1714	1572	1714	1689		1689	1608
Q Serve(g_s), s	29.9	13.6	5.8	0.0		28.9	29.0
Cycle Q Clear(g_c), s	29.9	13.6	5.8	0.0		28.9	29.0
Prop In Lane	1.00	1.00	1.00				0.82
Lane Grp Cap(c), veh/h	1014	465	215	3122		1750	833
V/C Ratio(X)	0.86	0.45	0.76	0.33		0.63	0.63
Avail Cap(c_a), veh/h	1237	567	318	3122		1750	833
HCM Platoon Ratio	1.00	1.00	2.00	2.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	0.93	0.93		0.57	0.57
Uniform Delay (d), s/veh	41.5	35.8	53.7	0.0		21.5	21.5
Incr Delay (d2), s/veh	5.6	0.9	2.6	0.3		1.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	18.3	12.6	2.4	0.1		11.3	11.0
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	47.2	36.7	56.4	0.3		22.4	23.5
LnGrp LOS	D	D	E	A		C	C
Approach Vol, veh/h	1080			1187		1617	
Approach Delay, s/veh	45.1			8.0		22.8	
Approach LOS	D			A		C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		82.1		42.9	12.2	69.9
Change Period (Y+Rc), s		* 5.1		5.9	4.4	5.1
Max Green Setting (Gmax), s		* 61		45.1	11.6	52.9
Max Q Clear Time (g_c+I1), s		2.0		31.9	7.8	31.0
Green Ext Time (p_c), s		24.3		5.1	0.1	17.0

Intersection Summary	
HCM 6th Ctrl Delay	24.5
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	398	1064	632	287	1159	224	642	791	282	171	427	168
Future Volume (veh/h)	398	1064	632	287	1159	224	642	791	282	171	427	168
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	433	1157	542	312	1260	158	721	889	221	192	480	113
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	458	1790	555	366	1654	508	712	1522	472	247	835	259
Arrive On Green	0.13	0.35	0.35	0.11	0.33	0.33	0.21	0.30	0.30	0.07	0.16	0.16
Sat Flow, veh/h	3428	5066	1570	3428	5066	1557	3428	5066	1571	3428	5066	1570
Grp Volume(v), veh/h	433	1157	542	312	1260	158	721	889	221	192	480	113
Grp Sat Flow(s),veh/h/ln	1714	1689	1570	1714	1689	1557	1714	1689	1571	1714	1689	1570
Q Serve(g_s), s	15.6	23.8	42.4	11.1	27.7	9.5	25.8	18.5	14.2	6.8	10.9	8.1
Cycle Q Clear(g_c), s	15.6	23.8	42.4	11.1	27.7	9.5	25.8	18.5	14.2	6.8	10.9	8.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	458	1790	555	366	1654	508	712	1522	472	247	835	259
V/C Ratio(X)	0.95	0.65	0.98	0.85	0.76	0.31	1.01	0.58	0.47	0.78	0.58	0.44
Avail Cap(c_a), veh/h	458	1790	555	428	1753	539	712	2132	661	353	1590	493
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.4	33.7	39.7	54.5	37.5	31.4	49.2	36.9	35.4	56.7	47.9	46.7
Incr Delay (d2), s/veh	28.7	1.0	32.5	12.0	2.2	0.6	37.0	0.9	1.9	3.9	1.5	2.7
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	8.5	9.9	20.9	5.4	11.7	3.6	14.5	7.7	5.7	3.1	4.7	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.1	34.7	72.1	66.5	39.7	31.9	86.2	37.8	37.3	60.6	49.4	49.4
LnGrp LOS	F	C	E	E	D	C	F	D	D	E	D	D
Approach Vol, veh/h		2132			1730			1831			785	
Approach Delay, s/veh		53.8			43.8			56.8			52.1	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.7	50.4	30.2	26.0	21.0	47.1	13.4	42.8
Change Period (Y+Rc), s	4.4	6.5	4.4	5.5	4.4	* 6.5	4.4	* 5.5
Max Green Setting (Gmax), s	15.5	43.9	25.8	39.0	16.6	* 43	12.8	* 52
Max Q Clear Time (g_c+I1), s	13.1	44.4	27.8	12.9	17.6	29.7	8.8	20.5
Green Ext Time (p_c), s	0.2	0.0	0.0	7.3	0.0	9.9	0.1	16.5

Intersection Summary	
HCM 6th Ctrl Delay	51.8
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)	900	850	140	150	790	50	230	230	120	40	90	240
Future Volume (veh/h)	900	850	140	150	790	50	230	230	120	40	90	240
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	957	904	149	160	840	53	245	245	128	43	96	234
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	1073	2186	359	213	1207	76	273	546	276	55	374	294
Arrive On Green	0.31	0.50	0.50	0.12	0.50	0.50	0.15	0.24	0.24	0.03	0.11	0.11
Sat Flow, veh/h	3428	4383	719	3428	4870	306	1767	2263	1142	1767	3526	2768
Grp Volume(v), veh/h	957	696	357	160	582	311	245	189	184	43	96	234
Grp Sat Flow(s),veh/h/ln	1714	1689	1725	1714	1689	1800	1767	1763	1642	1767	1763	1384
Q Serve(g_s), s	31.9	15.6	15.7	5.4	15.9	16.0	16.3	10.9	11.5	2.9	3.0	9.9
Cycle Q Clear(g_c), s	31.9	15.6	15.7	5.4	15.9	16.0	16.3	10.9	11.5	2.9	3.0	9.9
Prop In Lane	1.00		0.42	1.00		0.17	1.00		0.70	1.00		1.00
Lane Grp Cap(c), veh/h	1073	1685	861	213	837	446	273	425	396	55	374	294
V/C Ratio(X)	0.89	0.41	0.42	0.75	0.69	0.70	0.90	0.44	0.46	0.78	0.26	0.80
Avail Cap(c_a), veh/h	1073	1685	861	297	957	510	398	573	534	59	467	367
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.52	0.52	0.52	0.95	0.95	0.95	0.98	0.98	0.98	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.3	19.0	19.0	51.7	26.8	26.8	49.8	38.7	38.9	57.7	49.3	52.4
Incr Delay (d2), s/veh	5.2	0.4	0.8	3.6	4.5	8.4	12.9	0.3	0.3	41.6	0.6	11.3
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	13.9	6.1	6.3	2.3	5.4	6.2	8.2	4.8	4.7	1.9	1.4	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.5	19.4	19.8	55.2	31.3	35.2	62.6	38.9	39.2	99.4	49.9	63.6
LnGrp LOS	D	B	B	E	C	D	E	D	D	F	D	E
Approach Vol, veh/h		2010			1053			618			373	
Approach Delay, s/veh		31.4			36.1			48.4			64.2	
Approach LOS		C			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.3	64.9	24.3	18.5	42.6	34.6	8.1	34.7
Change Period (Y+Rc), s	4.9	5.0	5.7	* 5.8	5.0	* 4.9	4.4	5.7
Max Green Setting (Gmax), s	10.4	46.6	27.0	* 16	23.1	* 34	4.0	39.0
Max Q Clear Time (g_c+I1), s	7.4	17.7	18.3	11.9	33.9	18.0	4.9	13.5
Green Ext Time (p_c), s	0.1	19.1	0.2	0.8	0.0	11.6	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	38.2
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)	55	800	120	20	660	25	310	10	40	20	15	15
Future Volume (veh/h)	55	800	120	20	660	25	310	10	40	20	15	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	57	825	124	21	680	26	365	0	0	21	15	15
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	73	2909	435	30	3151	120	491	258	0	48	51	43
Arrive On Green	0.08	1.00	1.00	0.02	0.63	0.63	0.14	0.00	0.00	0.03	0.03	0.03
Sat Flow, veh/h	1767	4448	665	1767	5007	191	3534	1856	0	1767	1856	1572
Grp Volume(v), veh/h	57	625	324	21	458	248	365	0	0	21	15	15
Grp Sat Flow(s),veh/h/ln	1767	1689	1736	1767	1689	1821	1767	1856	0	1767	1856	1572
Q Serve(g_s), s	3.8	0.0	0.0	1.4	7.0	7.0	11.9	0.0	0.0	1.4	1.0	1.1
Cycle Q Clear(g_c), s	3.8	0.0	0.0	1.4	7.0	7.0	11.9	0.0	0.0	1.4	1.0	1.1
Prop In Lane	1.00		0.38	1.00		0.10	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	73	2208	1135	30	2125	1146	491	258	0	48	51	43
V/C Ratio(X)	0.78	0.28	0.29	0.71	0.22	0.22	0.74	0.00	0.00	0.44	0.30	0.35
Avail Cap(c_a), veh/h	200	2208	1135	127	2125	1146	1181	620	0	134	141	119
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.90	0.96	0.96	0.96	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.5	0.0	0.0	58.7	9.5	9.5	49.6	0.0	0.0	57.5	57.2	57.3
Incr Delay (d2), s/veh	6.0	0.3	0.6	10.5	0.2	0.4	0.8	0.0	0.0	2.3	1.2	1.8
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	0.1	0.2	0.7	2.5	2.8	5.3	0.0	0.0	0.7	0.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.5	0.3	0.6	69.2	9.8	10.0	50.5	0.0	0.0	59.8	58.4	59.1
LnGrp LOS	E	A	A	E	A	A	D	A	A	E	E	E
Approach Vol, veh/h		1006			727			365			51	
Approach Delay, s/veh		3.8			11.5			50.5			59.2	
Approach LOS		A			B			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	83.9		8.2	9.4	80.9		21.6
Change Period (Y+Rc), s	4.4	* 5.4		4.9	4.4	5.4		4.9
Max Green Setting (Gmax), s	8.6	* 43		9.1	13.6	37.6		40.1
Max Q Clear Time (g_c+I1), s	3.4	2.0		3.4	5.8	9.0		13.9
Green Ext Time (p_c), s	0.0	22.4		0.0	0.0	11.5		0.7

Intersection Summary	
HCM 6th Ctrl Delay	15.7
HCM 6th LOS	B

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)	10	10	30	210	20	270	40	660	130	340	440	20
Future Volume (veh/h)	10	10	30	210	20	270	40	660	130	340	440	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	12	12	35	194	93	314	47	767	151	395	512	23
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	62	65	51	403	424	357	90	1896	370	451	2745	123
Arrive On Green	0.03	0.03	0.03	0.23	0.23	0.23	0.03	0.45	0.45	0.26	1.00	1.00
Sat Flow, veh/h	1767	1856	1451	1767	1856	1564	3428	4240	827	3428	4971	222
Grp Volume(v), veh/h	12	12	35	194	93	314	47	609	309	395	347	188
Grp Sat Flow(s),veh/h/ln	1767	1856	1451	1767	1856	1564	1714	1689	1689	1714	1689	1816
Q Serve(g_s), s	0.8	0.8	2.9	11.4	4.9	23.3	1.6	14.6	14.8	13.2	0.0	0.0
Cycle Q Clear(g_c), s	0.8	0.8	2.9	11.4	4.9	23.3	1.6	14.6	14.8	13.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.49	1.00		0.12
Lane Grp Cap(c), veh/h	62	65	51	403	424	357	90	1510	755	451	1865	1003
V/C Ratio(X)	0.19	0.19	0.69	0.48	0.22	0.88	0.52	0.40	0.41	0.88	0.19	0.19
Avail Cap(c_a), veh/h	68	71	56	543	571	481	160	1510	755	674	1865	1003
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	0.82	0.82	0.82	0.97	0.97	0.97	0.96	0.96	0.96
Uniform Delay (d), s/veh	56.3	56.3	57.3	40.1	37.6	44.7	57.7	22.4	22.4	43.3	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.5	22.0	0.3	0.1	9.3	1.7	0.8	1.6	5.9	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.4	1.4	5.0	2.2	9.9	0.7	5.9	6.1	5.2	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.8	56.8	79.3	40.4	37.7	54.0	59.3	23.2	24.0	49.1	0.2	0.4
LnGrp LOS	E	E	E	D	D	D	E	C	C	D	A	A
Approach Vol, veh/h		59			601			965			930	
Approach Delay, s/veh		70.1			47.1			25.2			21.0	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	30.2	58.8		8.6	7.6	71.4		32.5
Change Period (Y+Rc), s	4.4	* 5.1		4.4	4.4	5.1		5.1
Max Green Setting (Gmax), s	23.6	* 36		4.6	5.6	53.9		36.9
Max Q Clear Time (g_c+I1), s	15.2	16.8		4.9	3.6	2.0		25.3
Green Ext Time (p_c), s	0.5	13.0		0.0	0.0	10.2		1.7

Intersection Summary	
HCM 6th Ctrl Delay	29.9
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)	60	30	130	30	30	80	170	690	90	50	640	20
Future Volume (veh/h)	60	30	130	30	30	80	170	690	90	50	640	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	69	34	149	34	34	92	195	793	103	57	736	23
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	163	172	143	166	174	143	220	2778	358	74	2675	83
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.25	1.00	1.00	0.01	0.17	0.17
Sat Flow, veh/h	1767	1856	1547	1767	1856	1525	1767	4533	585	1767	5046	157
Grp Volume(v), veh/h	69	34	149	34	34	92	195	589	307	57	492	267
Grp Sat Flow(s),veh/h/ln	1767	1856	1547	1767	1856	1525	1767	1689	1740	1767	1689	1827
Q Serve(g_s), s	4.4	2.0	11.1	2.1	2.0	7.0	12.8	0.0	0.0	3.9	15.2	15.2
Cycle Q Clear(g_c), s	4.4	2.0	11.1	2.1	2.0	7.0	12.8	0.0	0.0	3.9	15.2	15.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.34	1.00		0.09
Lane Grp Cap(c), veh/h	163	172	143	166	174	143	220	2070	1067	74	1790	968
V/C Ratio(X)	0.42	0.20	1.04	0.21	0.20	0.64	0.89	0.28	0.29	0.78	0.27	0.28
Avail Cap(c_a), veh/h	163	172	143	502	527	433	362	2070	1067	141	1790	968
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93	0.72	0.72	0.72
Uniform Delay (d), s/veh	51.4	50.3	54.5	50.2	50.2	52.4	44.3	0.0	0.0	58.6	29.5	29.5
Incr Delay (d2), s/veh	0.6	0.2	86.6	0.2	0.2	1.8	7.8	0.3	0.6	4.7	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	1.0	7.8	1.0	1.0	2.7	5.3	0.1	0.2	1.8	6.9	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.1	50.5	141.1	50.5	50.4	54.2	52.1	0.3	0.6	63.3	29.8	30.0
LnGrp LOS	D	D	F	D	D	D	D	A	A	E	C	C
Approach Vol, veh/h		252			160			1091			816	
Approach Delay, s/veh		104.5			52.6			9.7			32.2	
Approach LOS		F			D			A			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.4	78.5		16.0	19.3	68.5		16.2
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9
Max Green Setting (Gmax), s	9.6	46.1		11.1	24.6	31.1		34.1
Max Q Clear Time (g_c+I1), s	5.9	2.0		13.1	14.8	17.2		9.0
Green Ext Time (p_c), s	0.0	21.0		0.0	0.2	9.0		0.3

Intersection Summary	
HCM 6th Ctrl Delay	30.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	10	40	60	20	140	60	380	15	40	310	10
Future Volume (veh/h)	60	10	40	60	20	140	60	380	15	40	310	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	62	10	41	62	21	144	62	392	15	41	320	10
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	366	45	379	369	49	337	92	1081	41	67	1040	32
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.05	0.31	0.31	0.04	0.30	0.30
Sat Flow, veh/h	700	186	1571	1342	204	1400	1767	3462	132	1767	3490	109
Grp Volume(v), veh/h	72	0	41	62	0	165	62	199	208	41	161	169
Grp Sat Flow(s),veh/h/ln	886	0	1571	1342	0	1604	1767	1763	1831	1767	1763	1836
Q Serve(g_s), s	1.2	0.0	0.7	1.5	0.0	3.0	1.2	3.0	3.0	0.8	2.4	2.4
Cycle Q Clear(g_c), s	4.2	0.0	0.7	5.7	0.0	3.0	1.2	3.0	3.0	0.8	2.4	2.4
Prop In Lane	0.86		1.00	1.00		0.87	1.00		0.07	1.00		0.06
Lane Grp Cap(c), veh/h	411	0	379	369	0	387	92	551	572	67	525	547
V/C Ratio(X)	0.18	0.00	0.11	0.17	0.00	0.43	0.67	0.36	0.36	0.61	0.31	0.31
Avail Cap(c_a), veh/h	1226	0	1386	1214	0	1396	468	1477	1535	416	1446	1506
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.9	0.0	10.1	13.9	0.0	10.9	15.8	9.1	9.1	16.1	9.2	9.2
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.3	3.2	0.6	0.5	3.4	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.2	0.4	0.0	0.9	0.5	0.9	0.9	0.3	0.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.9	0.0	10.1	14.0	0.0	11.2	19.0	9.6	9.6	19.5	9.9	9.8
LnGrp LOS	B	A	B	B	A	B	B	A	A	B	A	A
Approach Vol, veh/h		113			227			469			371	
Approach Delay, s/veh		11.3			11.9			10.8			10.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.3	16.1		12.6	5.8	15.6		12.6
Change Period (Y+Rc), s	4.0	5.5		* 4.4	4.0	* 5.5		4.4
Max Green Setting (Gmax), s	8.0	28.5		* 30	9.0	* 28		29.6
Max Q Clear Time (g_c+I1), s	2.8	5.0		6.2	3.2	4.4		7.7
Green Ext Time (p_c), s	0.0	3.3		0.3	0.0	3.4		0.8

Intersection Summary	
HCM 6th Ctrl Delay	11.1
HCM 6th LOS	B

Notes

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

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (veh/h)	75	110	0	300	45	70	400
Future Volume (veh/h)	75	110	0	300	45	70	400
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No
Adj Sat Flow, veh/h/ln	1856	1856		1856	1856	1856	1856
Adj Flow Rate, veh/h	84	124		337	51	79	449
Peak Hour Factor	0.89	0.89		0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3		3	3	3	3
Cap, veh/h	222	197		1061	159	115	1931
Arrive On Green	0.13	0.13		0.35	0.35	0.06	0.55
Sat Flow, veh/h	1767	1572		3167	461	1767	3618
Grp Volume(v), veh/h	84	124		192	196	79	449
Grp Sat Flow(s),veh/h/ln	1767	1572		1763	1772	1767	1763
Q Serve(g_s), s	1.3	2.2		2.3	2.4	1.3	1.9
Cycle Q Clear(g_c), s	1.3	2.2		2.3	2.4	1.3	1.9
Prop In Lane	1.00	1.00			0.26	1.00	
Lane Grp Cap(c), veh/h	222	197		608	611	115	1931
V/C Ratio(X)	0.38	0.63		0.32	0.32	0.69	0.23
Avail Cap(c_a), veh/h	1702	1515		1547	1555	790	4039
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	11.7	12.1		7.0	7.0	13.3	3.4
Incr Delay (d2), s/veh	0.4	1.2		0.4	0.4	2.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.6		0.6	0.6	0.5	0.2
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	12.1	13.3		7.4	7.4	16.0	3.5
LnGrp LOS	B	B		A	A	B	A
Approach Vol, veh/h	208			388			528
Approach Delay, s/veh	12.8			7.4			5.4
Approach LOS	B			A			A

Timer - Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	5.9	15.5				21.4		7.6
Change Period (Y+Rc), s	4.0	5.5				* 5.5		4.0
Max Green Setting (Gmax), s	13.0	25.5				* 33		28.0
Max Q Clear Time (g_c+I1), s	3.3	4.4				3.9		4.2
Green Ext Time (p_c), s	0.1	3.1				5.6		0.3

Intersection Summary	
HCM 6th Ctrl Delay	7.5
HCM 6th LOS	A

Notes

User approved ignoring U-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)	5	0	5	140	5	35	5	290	25	25	460	5
Future Volume (veh/h)	5	0	5	140	5	35	5	290	25	25	460	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	5	0	5	146	5	36	5	302	26	26	479	5
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	219	43	84	448	7	215	10	1115	95	46	1286	13
Arrive On Green	0.14	0.00	0.14	0.14	0.14	0.14	0.01	0.34	0.34	0.03	0.36	0.36
Sat Flow, veh/h	300	313	612	1569	54	1569	1767	3286	281	1767	3573	37
Grp Volume(v), veh/h	10	0	0	151	0	36	5	161	167	26	236	248
Grp Sat Flow(s),veh/h/ln	1225	0	0	1623	0	1569	1767	1763	1804	1767	1763	1848
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.6	0.1	2.0	2.0	0.4	3.0	3.0
Cycle Q Clear(g_c), s	2.4	0.0	0.0	2.4	0.0	0.6	0.1	2.0	2.0	0.4	3.0	3.0
Prop In Lane	0.50		0.50	0.97		1.00	1.00		0.16	1.00		0.02
Lane Grp Cap(c), veh/h	346	0	0	456	0	215	10	598	612	46	634	665
V/C Ratio(X)	0.03	0.00	0.00	0.33	0.00	0.17	0.52	0.27	0.27	0.57	0.37	0.37
Avail Cap(c_a), veh/h	1542	0	0	1617	0	1505	268	1697	1737	385	1819	1907
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.4	0.0	0.0	12.4	0.0	11.6	15.0	7.3	7.3	14.6	7.2	7.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.1	15.2	0.3	0.3	4.0	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.7	0.0	0.2	0.1	0.5	0.5	0.2	0.8	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.4	0.0	0.0	12.5	0.0	11.7	30.3	7.6	7.6	18.6	8.0	8.0
LnGrp LOS	B	A	A	B	A	B	C	A	A	B	A	A
Approach Vol, veh/h		10			187			333			510	
Approach Delay, s/veh		11.4			12.4			8.0			8.5	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.2	16.1		9.1	4.6	16.7		9.1
Change Period (Y+Rc), s	4.4	5.8		4.9	4.4	* 5.8		4.9
Max Green Setting (Gmax), s	6.6	29.2		29.1	4.6	* 31		29.1
Max Q Clear Time (g_c+I1), s	2.4	4.0		4.4	2.1	5.0		4.4
Green Ext Time (p_c), s	0.0	2.7		0.0	0.0	5.9		0.6

Intersection Summary	
HCM 6th Ctrl Delay	9.1
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

* 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	1080	1270	0	2350	210	620	30	470	0	0	0
Future Volume (veh/h)	0	1080	1270	0	2350	210	620	30	470	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	0	1113	1309	0	2423	216	661	0	485			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	0	3	3	0	3	3	3	3	3			
Cap, veh/h	0	3513	2477	0	2445	1077	712	0	634			
Arrive On Green	0.00	1.00	1.00	0.00	0.69	0.69	0.20	0.00	0.20			
Sat Flow, veh/h	0	5233	2768	0	3618	1553	3534	0	3145			
Grp Volume(v), veh/h	0	1113	1309	0	2423	216	661	0	485			
Grp Sat Flow(s),veh/h/ln	0	1689	1384	0	1763	1553	1767	0	1572			
Q Serve(g_s), s	0.0	0.0	0.0	0.0	80.9	5.9	22.0	0.0	17.5			
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	80.9	5.9	22.0	0.0	17.5			
Prop In Lane	0.00		1.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	3513	2477	0	2445	1077	712	0	634			
V/C Ratio(X)	0.00	0.32	0.53	0.00	0.99	0.20	0.93	0.00	0.76			
Avail Cap(c_a), veh/h	0	3513	2477	0	2445	1077	716	0	637			
HCM Platoon Ratio	1.00	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	0.78	0.78	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	18.0	6.6	47.0	0.0	45.2			
Incr Delay (d2), s/veh	0.0	0.2	0.6	0.0	16.2	0.4	18.3	0.0	5.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.2	0.0	31.3	1.8	11.5	0.0	7.3			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.2	0.6	0.0	34.3	7.0	65.3	0.0	50.7			
LnGrp LOS	A	A	A	A	C	A	E	A	D			
Approach Vol, veh/h		2422			2639			1146				
Approach Delay, s/veh		0.4			32.0			59.1				
Approach LOS		A			C			E				

Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		90.7				90.7		29.3				
Change Period (Y+Rc), s		7.5				7.5		5.1				
Max Green Setting (Gmax), s		83.1				83.1		24.3				
Max Q Clear Time (g_c+I1), s		2.0				82.9		24.0				
Green Ext Time (p_c), s		26.2				0.2		0.2				

Intersection Summary	
HCM 6th Ctrl Delay	24.7
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2120	770	0	1810	1160	0	0	0	230	60	0
Future Volume (veh/h)	0	2120	770	0	1810	1160	0	0	0	230	60	0
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856				1856	1856	0
Adj Flow Rate, veh/h	0	2232	811	0	1905	0				152	188	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	3	3	0	3	3				3	3	0
Cap, veh/h	0	4017	1247	0	2796					180	189	0
Arrive On Green	0.00	0.79	0.79	0.00	1.00	0.00				0.10	0.10	0.00
Sat Flow, veh/h	0	5233	1572	0	3618	1572				1767	1856	0
Grp Volume(v), veh/h	0	2232	811	0	1905	0				152	188	0
Grp Sat Flow(s),veh/h/ln	0	1689	1572	0	1763	1572				1767	1856	0
Q Serve(g_s), s	0.0	19.6	26.4	0.0	0.0	0.0				10.1	12.1	0.0
Cycle Q Clear(g_c), s	0.0	19.6	26.4	0.0	0.0	0.0				10.1	12.1	0.0
Prop In Lane	0.00		1.00	0.00		1.00				1.00		0.00
Lane Grp Cap(c), veh/h	0	4017	1247	0	2796					180	189	0
V/C Ratio(X)	0.00	0.56	0.65	0.00	0.68					0.84	0.99	0.00
Avail Cap(c_a), veh/h	0	4017	1247	0	2796					293	308	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.33	1.33				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.10	0.00				1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	4.6	5.3	0.0	0.0	0.0				52.9	53.8	0.0
Incr Delay (d2), s/veh	0.0	0.6	2.6	0.0	0.1	0.0				11.4	39.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.7	6.5	0.0	0.1	0.0				5.1	7.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	5.2	7.9	0.0	0.1	0.0				64.3	93.2	0.0
LnGrp LOS	A	A	A	A	A					E	F	A
Approach Vol, veh/h		3043			1905	A					340	
Approach Delay, s/veh		5.9			0.1						80.3	
Approach LOS		A			A						F	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	102.7	17.3	102.7
Change Period (Y+Rc), s	7.5	5.1	7.5
Max Green Setting (Gmax), s	87.5	19.9	87.5
Max Q Clear Time (g_c+I1), s	28.4	12.1	2.0
Green Ext Time (p_c), s	40.8	0.1	28.5

Intersection Summary	
HCM 6th Ctrl Delay	8.6
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	180	5	50	330	360	0	0	280	380
Future Volume (veh/h)	0	0	0	180	5	50	330	360	0	0	280	380
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1856	1856	1856	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				189	5	53	347	379	0	0	295	400
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				3	3	3	3	3	0	0	3	3
Cap, veh/h				236	6	212	443	2484	0	0	1835	1406
Arrive On Green				0.14	0.14	0.14	0.13	0.70	0.00	0.00	0.52	0.52
Sat Flow, veh/h				1724	46	1551	3428	3618	0	0	3618	2701
Grp Volume(v), veh/h				194	0	53	347	379	0	0	295	400
Grp Sat Flow(s),veh/h/ln				1769	0	1551	1714	1763	0	0	1763	1351
Q Serve(g_s), s				8.5	0.0	2.4	7.8	2.8	0.0	0.0	3.5	6.7
Cycle Q Clear(g_c), s				8.5	0.0	2.4	7.8	2.8	0.0	0.0	3.5	6.7
Prop In Lane				0.97		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				242	0	212	443	2484	0	0	1835	1406
V/C Ratio(X)				0.80	0.00	0.25	0.78	0.15	0.00	0.00	0.16	0.28
Avail Cap(c_a), veh/h				442	0	388	883	2484	0	0	1835	1406
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.98	0.98	0.00	0.00	0.97	0.97
Uniform Delay (d), s/veh				33.5	0.0	30.9	33.8	3.9	0.0	0.0	10.0	10.8
Incr Delay (d2), s/veh				2.4	0.0	0.2	1.1	0.1	0.0	0.0	0.2	0.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.6	0.0	0.9	3.1	0.7	0.0	0.0	1.2	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				35.8	0.0	31.1	34.9	4.0	0.0	0.0	10.2	11.3
LnGrp LOS				D	A	C	C	A	A	A	B	B
Approach Vol, veh/h					247			726			695	
Approach Delay, s/veh					34.8			18.8			10.8	
Approach LOS					C			B			B	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		62.1			14.7	47.3		17.9				
Change Period (Y+Rc), s		* 5.7			4.4	5.7		7.0				
Max Green Setting (Gmax), s		* 48			20.6	22.3		20.0				
Max Q Clear Time (g_c+I1), s		4.8			9.8	8.7		10.5				
Green Ext Time (p_c), s		1.7			0.5	3.7		0.5				

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

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	10	450	0	0	0	0	490	120	20	330	0
Future Volume (veh/h)	180	10	450	0	0	0	0	490	120	20	330	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	1856	1856	1856				0	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	223	0	536				0	583	143	24	393	0
Peak Hour Factor	0.84	0.84	0.84				0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	3	3	3				0	3	3	3	3	0
Cap, veh/h	779	0	693				0	2961	690	37	2282	0
Arrive On Green	0.22	0.00	0.22				0.00	0.57	0.57	0.04	1.00	0.00
Sat Flow, veh/h	3534	0	3145				0	5441	1208	1767	3618	0
Grp Volume(v), veh/h	223	0	536				0	536	190	24	393	0
Grp Sat Flow(s),veh/h/ln	1767	0	1572				0	1596	1602	1767	1763	0
Q Serve(g_s), s	4.2	0.0	12.8				0.0	4.3	4.6	1.1	0.0	0.0
Cycle Q Clear(g_c), s	4.2	0.0	12.8				0.0	4.3	4.6	1.1	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.75	1.00		0.00
Lane Grp Cap(c), veh/h	779	0	693				0	2736	915	37	2282	0
V/C Ratio(X)	0.29	0.00	0.77				0.00	0.20	0.21	0.66	0.17	0.00
Avail Cap(c_a), veh/h	1330	0	1183				0	2736	915	345	2282	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.99	0.99	0.00
Uniform Delay (d), s/veh	26.0	0.0	29.3				0.0	8.3	8.3	38.1	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	1.9				0.0	0.2	0.5	7.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	4.8				0.0	1.2	1.4	0.5	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.2	0.0	31.2				0.0	8.4	8.8	45.2	0.2	0.0
LnGrp LOS	C	A	C				A	A	A	D	A	A
Approach Vol, veh/h		759						726			417	
Approach Delay, s/veh		29.7						8.5			2.8	
Approach LOS		C						A			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.1	51.4		22.5		57.5
Change Period (Y+Rc), s	4.4	* 5.7		4.9		5.7
Max Green Setting (Gmax), s	15.6	* 19		30.1		39.3
Max Q Clear Time (g_c+I1), s	3.1	6.6		14.8		2.0
Green Ext Time (p_c), s	0.0	4.8		2.8		1.7

Intersection Summary	
HCM 6th Ctrl Delay	15.7
HCM 6th LOS	B

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)	50	790	90	200	1710	100	160	100	85	70	140	85
Future Volume (veh/h)	50	790	90	200	1710	100	160	100	85	70	140	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	54	849	97	215	1839	108	172	108	91	75	151	91
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	69	1523	173	248	2111	124	201	106	89	350	212	128
Arrive On Green	0.04	0.33	0.33	0.14	0.43	0.43	0.11	0.11	0.11	0.20	0.20	0.20
Sat Flow, veh/h	1767	4614	525	1767	4892	287	1767	929	783	1767	1070	645
Grp Volume(v), veh/h	54	620	326	215	1268	679	172	0	199	75	0	242
Grp Sat Flow(s),veh/h/ln	1767	1689	1761	1767	1689	1801	1767	0	1712	1767	0	1715
Q Serve(g_s), s	3.0	14.7	14.8	11.6	33.3	33.5	9.3	0.0	11.1	3.5	0.0	12.8
Cycle Q Clear(g_c), s	3.0	14.7	14.8	11.6	33.3	33.5	9.3	0.0	11.1	3.5	0.0	12.8
Prop In Lane	1.00		0.30	1.00		0.16	1.00		0.46	1.00		0.38
Lane Grp Cap(c), veh/h	69	1115	581	248	1457	777	201	0	195	350	0	339
V/C Ratio(X)	0.78	0.56	0.56	0.87	0.87	0.87	0.85	0.00	1.02	0.21	0.00	0.71
Avail Cap(c_a), veh/h	93	1115	581	345	1491	795	201	0	195	726	0	704
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	46.4	26.8	26.8	41.0	25.2	25.3	42.4	0.0	43.2	32.7	0.0	36.5
Incr Delay (d2), s/veh	18.5	0.8	1.5	12.0	6.0	10.7	27.1	0.0	69.7	0.1	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	1.6	5.5	5.9	5.5	12.7	14.7	5.5	0.0	8.4	1.5	0.0	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.9	27.6	28.4	53.0	31.2	36.0	69.5	0.0	112.9	32.8	0.0	37.5
LnGrp LOS	E	C	C	D	C	D	E	A	F	C	A	D
Approach Vol, veh/h		1000			2162			371			317	
Approach Delay, s/veh		29.8			34.8			92.8			36.4	
Approach LOS		C			C			F			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.1	39.1		24.2	8.2	49.0		16.0
Change Period (Y+Rc), s	4.4	7.0		4.9	4.4	* 7		4.9
Max Green Setting (Gmax), s	19.6	28.7		40.0	5.1	* 43		11.1
Max Q Clear Time (g_c+I1), s	13.6	16.8		14.8	5.0	35.5		13.1
Green Ext Time (p_c), s	0.1	5.6		1.0	0.0	6.6		0.0

Intersection Summary	
HCM 6th Ctrl Delay	39.3
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)	220	880	10	30	1410	200	125	30	30	230	20	240
Future Volume (veh/h)	220	880	10	30	1410	200	125	30	30	230	20	240
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	224	898	10	31	1439	204	128	31	31	249	0	245
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	312	2449	27	44	1825	259	232	110	110	388	0	170
Arrive On Green	0.09	0.47	0.47	0.02	0.41	0.41	0.13	0.13	0.13	0.11	0.00	0.11
Sat Flow, veh/h	3428	5163	57	1767	4473	634	1767	839	839	3534	0	1547
Grp Volume(v), veh/h	224	587	321	31	1086	557	128	0	62	249	0	245
Grp Sat Flow(s),veh/h/ln	1714	1689	1844	1767	1689	1730	1767	0	1677	1767	0	1547
Q Serve(g_s), s	5.2	9.1	9.1	1.4	23.0	23.0	5.6	0.0	2.7	5.5	0.0	9.0
Cycle Q Clear(g_c), s	5.2	9.1	9.1	1.4	23.0	23.0	5.6	0.0	2.7	5.5	0.0	9.0
Prop In Lane	1.00		0.03	1.00		0.37	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	312	1602	874	44	1378	706	232	0	220	388	0	170
V/C Ratio(X)	0.72	0.37	0.37	0.71	0.79	0.79	0.55	0.00	0.28	0.64	0.00	1.44
Avail Cap(c_a), veh/h	820	1991	1087	138	1447	741	755	0	716	388	0	170
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	36.2	13.7	13.7	39.7	21.2	21.2	33.3	0.0	32.1	34.9	0.0	36.5
Incr Delay (d2), s/veh	1.2	0.4	0.7	7.6	3.3	6.3	2.9	0.0	1.0	4.1	0.0	228.7
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	2.0	2.9	3.2	0.7	8.2	9.0	2.5	0.0	1.1	2.5	0.0	14.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.4	14.1	14.4	47.3	24.5	27.5	36.2	0.0	33.1	39.0	0.0	265.2
LnGrp LOS	D	B	B	D	C	C	D	A	C	D	A	F
Approach Vol, veh/h		1132			1674			190			494	
Approach Delay, s/veh		18.8			25.9			35.2			151.2	
Approach LOS		B			C			D			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	44.9		15.0	11.8	39.4		15.6
Change Period (Y+Rc), s	4.4	6.0		6.0	4.4	6.0		4.9
Max Green Setting (Gmax), s	6.4	48.3		9.0	19.6	35.1		35.0
Max Q Clear Time (g_c+I1), s	3.4	11.1		11.0	7.2	25.0		7.6
Green Ext Time (p_c), s	0.0	13.5		0.0	0.3	8.4		1.6

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

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	440	360	400	100	580	20	380	730	50	10	770	480
Future Volume (veh/h)	440	360	400	100	580	20	380	730	50	10	770	480
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	506	414	421	115	667	23	437	839	57	11	885	505
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	553	1016	447	137	997	34	484	1603	109	17	1205	526
Arrive On Green	0.16	0.29	0.29	0.08	0.20	0.20	0.14	0.48	0.48	0.01	0.34	0.34
Sat Flow, veh/h	3428	3526	1551	1767	5028	173	3428	3345	227	1767	3526	1539
Grp Volume(v), veh/h	506	414	421	115	447	243	437	442	454	11	885	505
Grp Sat Flow(s),veh/h/ln	1714	1763	1551	1767	1689	1824	1714	1763	1810	1767	1763	1539
Q Serve(g_s), s	20.9	13.6	38.2	9.2	17.6	17.7	18.1	25.1	25.1	0.9	31.8	46.3
Cycle Q Clear(g_c), s	20.9	13.6	38.2	9.2	17.6	17.7	18.1	25.1	25.1	0.9	31.8	46.3
Prop In Lane	1.00		1.00	1.00		0.09	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	553	1016	447	137	670	362	484	845	867	17	1205	526
V/C Ratio(X)	0.92	0.41	0.94	0.84	0.67	0.67	0.90	0.52	0.52	0.63	0.73	0.96
Avail Cap(c_a), veh/h	607	1055	464	171	750	405	536	845	867	49	1212	529
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.4	41.3	50.1	65.5	53.4	53.4	60.9	26.1	26.1	71.0	41.7	46.4
Incr Delay (d2), s/veh	16.9	0.3	27.4	21.3	2.1	4.0	16.6	0.7	0.7	13.0	2.4	29.2
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	10.1	5.8	17.8	4.9	7.5	8.4	8.8	10.4	10.6	0.5	13.9	21.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.3	41.6	77.4	86.8	55.5	57.4	77.5	26.8	26.7	84.1	44.1	75.7
LnGrp LOS	E	D	E	F	E	E	E	C	C	F	D	E
Approach Vol, veh/h		1341			805			1333			1401	
Approach Delay, s/veh		66.0			60.6			43.4			55.8	
Approach LOS		E			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.0	75.6	14.8	48.6	24.8	55.8	27.7	35.7
Change Period (Y+Rc), s	3.6	6.6	3.6	7.1	4.5	* 6.6	4.5	* 7.1
Max Green Setting (Gmax), s	4.0	68.1	13.9	43.1	22.5	* 50	25.5	* 32
Max Q Clear Time (g_c+I1), s	2.9	27.1	11.2	40.2	20.1	48.3	22.9	19.7
Green Ext Time (p_c), s	0.0	7.5	0.0	1.3	0.3	0.9	0.3	3.7

Intersection Summary	
HCM 6th Ctrl Delay	56.0
HCM 6th LOS	E

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)	100	10	30	100	30	70	20	300	70	100	290	40
Future Volume (veh/h)	100	10	30	100	30	70	20	300	70	100	290	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.98	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	132	13	39	132	39	92	26	395	92	132	382	53
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	376	49	75	293	82	134	66	792	182	197	1104	152
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.04	0.28	0.28	0.11	0.36	0.36
Sat Flow, veh/h	965	203	314	694	345	559	1767	2820	649	1767	3111	428
Grp Volume(v), veh/h	184	0	0	263	0	0	26	245	242	132	215	220
Grp Sat Flow(s),veh/h/ln	1482	0	0	1598	0	0	1767	1763	1706	1767	1763	1776
Q Serve(g_s), s	0.0	0.0	0.0	1.8	0.0	0.0	0.6	4.9	5.1	3.1	3.8	3.9
Cycle Q Clear(g_c), s	4.2	0.0	0.0	6.0	0.0	0.0	0.6	4.9	5.1	3.1	3.8	3.9
Prop In Lane	0.72		0.21	0.50		0.35	1.00		0.38	1.00		0.24
Lane Grp Cap(c), veh/h	500	0	0	509	0	0	66	495	479	197	626	631
V/C Ratio(X)	0.37	0.00	0.00	0.52	0.00	0.00	0.39	0.49	0.50	0.67	0.34	0.35
Avail Cap(c_a), veh/h	1257	0	0	1367	0	0	274	1010	977	647	1378	1389
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.9	0.0	0.0	14.5	0.0	0.0	20.0	12.8	12.8	18.2	10.1	10.1
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.3	0.0	0.0	1.4	1.5	1.6	1.5	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0	2.0	0.0	0.0	0.2	1.7	1.7	1.1	1.1	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.1	0.0	0.0	14.8	0.0	0.0	21.5	14.3	14.4	19.7	10.6	10.7
LnGrp LOS	B	A	A	B	A	A	C	B	B	B	B	B
Approach Vol, veh/h		184			263			513			567	
Approach Delay, s/veh		14.1			14.8			14.7			12.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.1	17.7		15.8	6.0	20.8		15.8
Change Period (Y+Rc), s	4.4	* 5.7		* 5.6	4.4	5.7		5.6
Max Green Setting (Gmax), s	15.6	* 24		* 35	6.6	33.3		34.4
Max Q Clear Time (g_c+I1), s	5.1	7.1		8.0	2.6	5.9		6.2
Green Ext Time (p_c), s	0.1	4.4		1.2	0.0	4.1		0.8

Intersection Summary	
HCM 6th Ctrl Delay	13.9
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)	310	250	20	10	410	60	30	10	10	110	5	350
Future Volume (veh/h)	310	250	20	10	410	60	30	10	10	110	5	350
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.74	1.00		0.96	0.97		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	378	305	24	12	500	73	37	12	12	134	6	427
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	412	1505	118	20	684	99	209	67	53	167	19	429
Arrive On Green	0.23	0.45	0.45	0.01	0.23	0.23	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1767	3311	259	1767	2941	423	393	177	140	320	50	1128
Grp Volume(v), veh/h	378	162	167	12	297	276	61	0	0	567	0	0
Grp Sat Flow(s),veh/h/ln	1767	1763	1807	1767	1763	1602	710	0	0	1498	0	0
Q Serve(g_s), s	20.4	5.4	5.4	0.7	15.2	15.6	0.0	0.0	0.0	33.1	0.0	0.0
Cycle Q Clear(g_c), s	20.4	5.4	5.4	0.7	15.2	15.6	3.7	0.0	0.0	36.8	0.0	0.0
Prop In Lane	1.00		0.14	1.00		0.26	0.61		0.20	0.24		0.75
Lane Grp Cap(c), veh/h	412	801	821	20	410	373	329	0	0	616	0	0
V/C Ratio(X)	0.92	0.20	0.20	0.60	0.72	0.74	0.19	0.00	0.00	0.92	0.00	0.00
Avail Cap(c_a), veh/h	464	801	821	96	410	373	329	0	0	616	0	0
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	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	36.5	16.0	16.0	48.0	34.5	34.7	19.6	0.0	0.0	30.0	0.0	0.0
Incr Delay (d2), s/veh	21.7	0.6	0.6	25.1	10.6	12.5	1.2	0.0	0.0	21.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.9	2.2	2.2	0.4	7.4	7.1	1.0	0.0	0.0	16.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.2	16.5	16.6	73.1	45.1	47.2	20.8	0.0	0.0	51.3	0.0	0.0
LnGrp LOS	E	B	B	E	D	D	C	A	A	D	A	A
Approach Vol, veh/h		707			585			61			567	
Approach Delay, s/veh		38.8			46.7			20.8			51.3	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	27.2	28.4		42.0	5.5	50.0		42.0
Change Period (Y+Rc), s	4.4	* 5.7		4.9	4.4	5.7		4.9
Max Green Setting (Gmax), s	25.6	* 23		37.1	5.3	42.6		37.1
Max Q Clear Time (g_c+I1), s	22.4	17.6		38.8	2.7	7.4		5.7
Green Ext Time (p_c), s	0.4	1.5		0.0	0.0	1.9		0.4

Intersection Summary	
HCM 6th Ctrl Delay	44.3
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)	50	300	20	110	420	290	30	120	110	180	100	20
Future Volume (veh/h)	50	300	20	110	420	290	30	120	110	180	100	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.96	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	58	349	23	128	488	337	35	140	128	209	116	23
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	74	1247	82	161	832	573	46	330	274	250	880	170
Arrive On Green	0.04	0.37	0.37	0.09	0.42	0.42	0.03	0.18	0.18	0.14	0.30	0.30
Sat Flow, veh/h	1767	3357	220	1767	1977	1361	1767	1795	1488	1767	2940	568
Grp Volume(v), veh/h	58	183	189	128	435	390	35	137	131	209	68	71
Grp Sat Flow(s),veh/h/ln	1767	1763	1814	1767	1763	1575	1767	1763	1521	1767	1763	1745
Q Serve(g_s), s	2.9	6.5	6.6	6.4	17.0	17.1	1.8	6.2	6.9	10.3	2.5	2.7
Cycle Q Clear(g_c), s	2.9	6.5	6.6	6.4	17.0	17.1	1.8	6.2	6.9	10.3	2.5	2.7
Prop In Lane	1.00		0.12	1.00		0.86	1.00		0.98	1.00		0.33
Lane Grp Cap(c), veh/h	74	655	674	161	742	663	46	324	280	250	527	522
V/C Ratio(X)	0.78	0.28	0.28	0.79	0.59	0.59	0.76	0.42	0.47	0.84	0.13	0.14
Avail Cap(c_a), veh/h	170	655	674	323	742	663	132	632	545	446	944	935
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.5	19.7	19.8	39.9	20.0	20.0	43.4	32.4	32.6	37.5	22.9	22.9
Incr Delay (d2), s/veh	15.9	1.1	1.0	8.5	3.4	3.8	22.5	0.9	1.2	7.3	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	2.7	2.8	3.0	7.1	6.4	1.0	2.6	2.6	4.8	1.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.4	20.8	20.8	48.4	23.3	23.8	65.9	33.2	33.9	44.8	23.0	23.1
LnGrp LOS	E	C	C	D	C	C	E	C	C	D	C	C
Approach Vol, veh/h		430			953			303			348	
Approach Delay, s/veh		25.9			26.9			37.3			36.1	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	38.6	6.7	31.7	8.2	43.0	17.1	21.4
Change Period (Y+Rc), s	4.4	5.3	4.4	4.9	4.4	5.3	4.4	4.9
Max Green Setting (Gmax), s	16.4	29.9	6.7	48.0	8.6	37.7	22.6	32.1
Max Q Clear Time (g_c+I1), s	19.4	8.6	3.8	4.7	4.9	19.1	12.3	8.9
Green Ext Time (p_c), s	0.2	1.9	0.0	0.8	0.0	5.0	0.4	1.5

Intersection Summary	
HCM 6th Ctrl Delay	29.8
HCM 6th LOS	C

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	50	30	50	30	20	50
Future Vol, veh/h	50	30	50	30	20	50
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	57	34	57	34	23	57
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Righ	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	7.7	7.5	7.7
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	62%	29%
Vol Thru, %	62%	0%	71%
Vol Right, %	38%	38%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	80	80	70
LT Vol	0	50	20
Through Vol	50	0	50
RT Vol	30	30	0
Lane Flow Rate	91	91	80
Geometry Grp	1	1	1
Degree of Util (X)	0.1	0.105	0.094
Departure Headway (Hd)	3.947	4.144	4.238
Convergence, Y/N	Yes	Yes	Yes
Cap	898	854	838
Service Time	2.015	2.223	2.303
HCM Lane V/C Ratio	0.101	0.107	0.095
HCM Control Delay	7.5	7.7	7.7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.3	0.4	0.3

Intersection	
Int Delay, s/veh	2.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	30	40	15	10	80
Future Vol, veh/h	20	30	40	15	10	80
Conflicting Peds, #/hr	0	3	0	7	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	24	36	48	18	12	96

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	184	67	0	0	73	0
Stage 1	64	-	-	-	-	-
Stage 2	120	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	803	994	-	-	1520	-
Stage 1	956	-	-	-	-	-
Stage 2	903	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	791	985	-	-	1510	-
Mov Cap-2 Maneuver	791	-	-	-	-	-
Stage 1	949	-	-	-	-	-
Stage 2	896	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	0.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	897	1510	-
HCM Lane V/C Ratio	-	-	0.067	0.008	-
HCM Control Delay (s)	-	-	9.3	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	5	25	80	5	15	15	130	45	5	155	10
Future Vol, veh/h	10	5	25	80	5	15	15	130	45	5	155	10
Conflicting Peds, #/hr	0	0	3	0	0	15	0	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	70	70	70	70	70	70	70	70	70
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	14	7	36	114	7	21	21	186	64	7	221	14

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	533	536	233	527	511	233	237	0	0	250	0	0
Stage 1	244	244	-	260	260	-	-	-	-	-	-	-
Stage 2	289	292	-	267	251	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	456	450	804	460	465	804	1324	-	-	1310	-	-
Stage 1	757	702	-	743	691	-	-	-	-	-	-	-
Stage 2	716	669	-	736	697	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	423	438	800	425	452	793	1321	-	-	1310	-	-
Mov Cap-2 Maneuver	423	438	-	425	452	-	-	-	-	-	-	-
Stage 1	741	696	-	729	678	-	-	-	-	-	-	-
Stage 2	667	656	-	690	691	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.6	16.4	0.6	0.2
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1321	-	-	603	458	1310	-	-
HCM Lane V/C Ratio	0.016	-	-	0.095	0.312	0.005	-	-
HCM Control Delay (s)	7.8	0	-	11.6	16.4	7.8	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	1.3	0	-	-

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	20	10	70	20	15	10	20	15	5	90	20
Future Vol, veh/h	10	20	10	70	20	15	10	20	15	5	90	20
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	11	23	11	80	23	17	11	23	17	6	103	23
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.7	8.3	7.6	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	22%	25%	67%	4%
Vol Thru, %	44%	50%	19%	78%
Vol Right, %	33%	25%	14%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	45	40	105	115
LT Vol	10	10	70	5
Through Vol	20	20	20	90
RT Vol	15	10	15	20
Lane Flow Rate	52	46	121	132
Geometry Grp	1	1	1	1
Degree of Util (X)	0.062	0.056	0.15	0.158
Departure Headway (Hd)	4.324	4.4	4.463	4.297
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	830	816	806	837
Service Time	2.34	2.416	2.476	2.311
HCM Lane V/C Ratio	0.063	0.056	0.15	0.158
HCM Control Delay	7.6	7.7	8.3	8.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.2	0.5	0.6

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1130	1650	15	0	170
Future Vol, veh/h	0	1130	1650	15	0	170
Conflicting Peds, #/hr	6	0	0	6	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	1177	1719	16	0	177

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	874
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.93
Pot Cap-1 Maneuver	0	-	-	-	0	250
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	249
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	48.5
HCM LOS			E

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	249
HCM Lane V/C Ratio	-	-	-	0.711
HCM Control Delay (s)	-	-	-	48.5
HCM Lane LOS	-	-	-	E
HCM 95th %tile Q(veh)	-	-	-	4.8

Intersection	
Intersection Delay, s/veh	9.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	20	5	30	10	110	5	90	80	110	20	10
Future Vol, veh/h	30	20	5	30	10	110	5	90	80	110	20	10
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	37	24	6	37	12	134	6	110	98	134	24	12
Number of Lanes	0	1	0	0	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay	9.7	8.9	9.9	9.9
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	55%	75%	0%	100%	0%
Vol Thru, %	0%	53%	36%	25%	0%	0%	67%
Vol Right, %	0%	47%	9%	0%	100%	0%	33%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	5	170	55	40	110	110	30
LT Vol	5	0	30	30	0	110	0
Through Vol	0	90	20	10	0	0	20
RT Vol	0	80	5	0	110	0	10
Lane Flow Rate	6	207	67	49	134	134	37
Geometry Grp	7	7	6	7	7	7	7
Degree of Util (X)	0.01	0.292	0.109	0.081	0.183	0.221	0.053
Departure Headway (Hd)	5.903	5.067	5.844	6	4.917	5.92	5.181
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	603	705	608	594	724	604	686
Service Time	3.668	2.832	3.93	3.772	2.688	3.69	2.95
HCM Lane V/C Ratio	0.01	0.294	0.11	0.082	0.185	0.222	0.054
HCM Control Delay	8.7	9.9	9.7	9.3	8.8	10.4	8.2
HCM Lane LOS	A	A	A	A	A	B	A
HCM 95th-tile Q	0	1.2	0.4	0.3	0.7	0.8	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	370	700	0	0	860	370	210	5	1200	0	0	0
Future Volume (veh/h)	370	700	0	0	860	370	210	5	1200	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1856	1856	0	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	394	745	0	0	915	394	227	0	1277			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94			
Percent Heavy Veh, %	3	3	0	0	3	3	3	3	3			
Cap, veh/h	708	2840	0	0	974	432	1374	0	1221			
Arrive On Green	0.41	1.00	0.00	0.00	0.28	0.28	0.39	0.00	0.39			
Sat Flow, veh/h	3428	5233	0	0	3618	1562	3534	0	3140			
Grp Volume(v), veh/h	394	745	0	0	915	394	227	0	1277			
Grp Sat Flow(s),veh/h/ln	1714	1689	0	0	1763	1562	1767	0	1570			
Q Serve(g_s), s	7.9	0.0	0.0	0.0	22.8	22.0	3.8	0.0	35.0			
Cycle Q Clear(g_c), s	7.9	0.0	0.0	0.0	22.8	22.0	3.8	0.0	35.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	708	2840	0	0	974	432	1374	0	1221			
V/C Ratio(X)	0.56	0.26	0.00	0.00	0.94	0.91	0.17	0.00	1.05			
Avail Cap(c_a), veh/h	708	2840	0	0	975	432	1374	0	1221			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.70	0.70	0.00	0.00	0.78	0.78	1.00	0.00	1.00			
Uniform Delay (d), s/veh	23.3	0.0	0.0	0.0	31.8	31.5	18.0	0.0	27.5			
Incr Delay (d2), s/veh	0.4	0.2	0.0	0.0	14.5	21.8	0.0	0.0	38.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.7	0.0	0.0	0.0	11.2	10.5	1.5	0.0	18.9			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.7	0.2	0.0	0.0	46.3	53.3	18.0	0.0	66.1			
LnGrp LOS	C	A	A	A	D	D	B	A	F			
Approach Vol, veh/h		1139			1309			1504				
Approach Delay, s/veh		8.3			48.5			58.8				
Approach LOS		A			D			E				

Timer - Assigned Phs	2			5	6		8					
Phs Duration (G+Y+Rc), s	57.5			25.6	31.9		41.1					
Change Period (Y+Rc), s	7.0			7.0	* 7		6.1					
Max Green Setting (Gmax), s	41.9			11.3	* 25		35.0					
Max Q Clear Time (g_c+I1), s	2.0			9.9	24.8		37.0					
Green Ext Time (p_c), s	3.7			0.1	0.0		0.0					

Intersection Summary	
HCM 6th Ctrl Delay	40.8
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	790	660	590	490	0	0	0	0	290	5	260
Future Volume (veh/h)	0	790	660	590	490	0	0	0	0	290	5	260
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1856	1856	1856	1856	0				1856	1856	1856
Adj Flow Rate, veh/h	0	840	639	628	521	0				397	0	186
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	3	3	3	3	0				3	3	3
Cap, veh/h	0	1546	689	670	2459	0				555	0	247
Arrive On Green	0.00	0.44	0.44	0.33	1.00	0.00				0.16	0.00	0.16
Sat Flow, veh/h	0	3618	1571	3428	3618	0				3534	0	1572
Grp Volume(v), veh/h	0	840	639	628	521	0				397	0	186
Grp Sat Flow(s),veh/h/ln	0	1763	1571	1714	1763	0				1767	0	1572
Q Serve(g_s), s	0.0	15.8	34.6	16.0	0.0	0.0				9.6	0.0	10.2
Cycle Q Clear(g_c), s	0.0	15.8	34.6	16.0	0.0	0.0				9.6	0.0	10.2
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1546	689	670	2459	0				555	0	247
V/C Ratio(X)	0.00	0.54	0.93	0.94	0.21	0.00				0.72	0.00	0.75
Avail Cap(c_a), veh/h	0	1546	689	670	2459	0				1139	0	507
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.39	0.39	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	18.6	23.9	29.8	0.0	0.0				36.0	0.0	36.3
Incr Delay (d2), s/veh	0.0	1.4	20.5	10.3	0.1	0.0				1.7	0.0	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.3	15.7	6.2	0.0	0.0				4.2	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	20.0	44.4	40.0	0.1	0.0				37.8	0.0	40.9
LnGrp LOS	A	B	D	D	A	A				D	A	D
Approach Vol, veh/h		1479			1149						583	
Approach Delay, s/veh		30.5			21.9						38.8	
Approach LOS		C			C						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	23.3	46.5		20.2		69.8
Change Period (Y+Rc), s *	5.7	7.0		6.1		7.0
Max Green Setting (Gmax), s *	18.0	24.6		29.0		47.9
Max Q Clear Time (g_c+I1), s	19.0	36.6		12.2		2.0
Green Ext Time (p_c), s	0.0	0.0		1.9		3.8

Intersection Summary	
HCM 6th Ctrl Delay	28.9
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	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	240	40	210	630	0	860	930
Future Volume (veh/h)	240	40	210	630	0	860	930
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856		1856	1856
Adj Flow Rate, veh/h	261	43	228	685		935	1011
Peak Hour Factor	0.92	0.92	0.92	0.92		0.92	0.92
Percent Heavy Veh, %	3	3	3	3		3	3
Cap, veh/h	353	162	280	4079		2319	1076
Arrive On Green	0.10	0.10	0.16	1.00		0.69	0.69
Sat Flow, veh/h	3428	1572	3428	5233		3544	1567
Grp Volume(v), veh/h	261	43	228	685		935	1011
Grp Sat Flow(s),veh/h/ln	1714	1572	1714	1689		1689	1567
Q Serve(g_s), s	8.9	3.0	7.7	0.0		14.4	68.4
Cycle Q Clear(g_c), s	8.9	3.0	7.7	0.0		14.4	68.4
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	353	162	280	4079		2319	1076
V/C Ratio(X)	0.74	0.27	0.81	0.17		0.40	0.94
Avail Cap(c_a), veh/h	980	449	360	4079		2319	1076
HCM Platoon Ratio	1.00	1.00	2.00	2.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	0.96	0.96		0.49	0.49
Uniform Delay (d), s/veh	52.2	49.6	49.3	0.0		8.1	16.6
Incr Delay (d2), s/veh	4.0	1.2	8.0	0.1		0.3	9.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	2.8	3.3	0.0		4.8	23.7
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	56.3	50.8	57.3	0.1		8.4	26.1
LnGrp LOS	E	D	E	A		A	C
Approach Vol, veh/h	304			913		1946	
Approach Delay, s/veh	55.5			14.4		17.6	
Approach LOS	E			B		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		101.7		18.3	14.2	87.5
Change Period (Y+Rc), s		* 5.1		5.9	4.4	5.1
Max Green Setting (Gmax), s		* 67		34.3	12.6	57.7
Max Q Clear Time (g_c+I1), s		2.0		10.9	9.7	70.4
Green Ext Time (p_c), s		14.4		1.5	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	20.3
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	1140	680	310	1380	290	350	440	80	350	640	450
Future Volume (veh/h)	310	1140	680	310	1380	290	350	440	80	350	640	450
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	337	1239	665	337	1500	283	380	478	78	380	696	440
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	384	1834	568	359	1797	553	411	1387	426	397	1366	418
Arrive On Green	0.11	0.36	0.36	0.10	0.35	0.35	0.12	0.27	0.27	0.12	0.27	0.27
Sat Flow, veh/h	3428	5066	1570	3428	5066	1559	3428	5066	1557	3428	5066	1550
Grp Volume(v), veh/h	337	1239	665	337	1500	283	380	478	78	380	696	440
Grp Sat Flow(s),veh/h/ln	1714	1689	1570	1714	1689	1559	1714	1689	1557	1714	1689	1550
Q Serve(g_s), s	14.0	30.0	52.5	14.2	39.4	20.7	15.9	11.0	5.6	16.0	16.9	39.1
Cycle Q Clear(g_c), s	14.0	30.0	52.5	14.2	39.4	20.7	15.9	11.0	5.6	16.0	16.9	39.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	384	1834	568	359	1797	553	411	1387	426	397	1366	418
V/C Ratio(X)	0.88	0.68	1.17	0.94	0.83	0.51	0.92	0.34	0.18	0.96	0.51	1.05
Avail Cap(c_a), veh/h	418	1834	568	359	1797	553	411	1397	430	397	1366	418
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.4	39.1	46.3	64.4	42.9	36.9	63.1	42.2	40.3	63.7	44.8	53.0
Incr Delay (d2), s/veh	17.6	1.2	94.2	31.5	3.8	1.3	25.9	0.4	0.5	33.7	0.7	58.6
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	7.1	12.7	35.0	7.8	17.1	8.1	8.4	4.6	2.2	8.8	7.2	21.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	81.0	40.3	140.4	95.9	46.7	38.2	89.1	42.6	40.8	97.5	45.5	111.6
LnGrp LOS	F	D	F	F	D	D	F	D	D	F	D	F
Approach Vol, veh/h		2241			2120			936			1516	
Approach Delay, s/veh		76.1			53.4			61.3			77.7	
Approach LOS		E			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.6	59.0	21.8	44.6	20.7	57.9	21.2	45.2
Change Period (Y+Rc), s	4.4	6.5	4.4	5.5	4.4	* 6.5	4.4	* 5.5
Max Green Setting (Gmax), s	15.2	52.5	17.4	39.1	17.7	* 51	16.8	* 40
Max Q Clear Time (g_c+I1), s	16.2	54.5	17.9	41.1	16.0	41.4	18.0	13.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.2	8.6	0.0	7.4

Intersection Summary	
HCM 6th Ctrl Delay	67.4
HCM 6th LOS	E

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)	520	1270	190	350	1150	90	170	290	280	150	400	1090
Future Volume (veh/h)	520	1270	190	350	1150	90	170	290	280	150	400	1090
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	565	1380	207	380	1250	98	185	315	304	163	435	1088
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	551	1528	229	403	1440	113	195	549	487	164	1035	813
Arrive On Green	0.05	0.11	0.11	0.04	0.10	0.10	0.11	0.31	0.31	0.09	0.29	0.29
Sat Flow, veh/h	3428	4444	666	3428	4788	375	1767	1763	1565	1767	3526	2768
Grp Volume(v), veh/h	565	1049	538	380	882	466	185	315	304	163	435	1088
Grp Sat Flow(s),veh/h/ln	1714	1689	1733	1714	1689	1787	1767	1763	1565	1767	1763	1384
Q Serve(g_s), s	20.1	38.3	38.4	13.8	32.2	32.2	13.0	18.7	20.8	11.5	12.4	36.7
Cycle Q Clear(g_c), s	20.1	38.3	38.4	13.8	32.2	32.2	13.0	18.7	20.8	11.5	12.4	36.7
Prop In Lane	1.00		0.38	1.00		0.21	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	551	1162	596	403	1016	537	195	549	487	164	1035	813
V/C Ratio(X)	1.02	0.90	0.90	0.94	0.87	0.87	0.95	0.57	0.62	0.99	0.42	1.34
Avail Cap(c_a), veh/h	551	1162	596	403	1016	537	195	550	488	164	1035	813
HCM Platoon Ratio	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.54	0.54	0.54	0.76	0.76	0.76	0.90	0.90	0.90	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.2	53.3	53.4	59.7	53.8	53.9	55.2	36.1	36.8	56.7	35.6	44.2
Incr Delay (d2), s/veh	34.7	6.7	11.9	25.2	7.8	13.6	46.2	0.8	1.7	68.3	0.4	160.8
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	11.9	18.5	19.8	7.8	15.7	17.5	8.3	8.2	8.2	8.2	5.4	30.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	93.8	60.1	65.3	84.9	61.7	67.5	101.4	37.0	38.5	125.0	36.0	205.0
LnGrp LOS	F	E	E	F	E	E	F	D	D	F	D	F
Approach Vol, veh/h		2152			1728			804			1686	
Approach Delay, s/veh		70.2			68.3			52.4			153.7	
Approach LOS		E			E			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.6	48.1	18.2	42.5	25.0	42.7	16.0	44.7
Change Period (Y+Rc), s	4.9	5.0	4.4	5.8	4.9	* 5	4.4	* 5.8
Max Green Setting (Gmax), s	14.7	39.7	13.8	36.7	20.1	* 34	11.6	* 39
Max Q Clear Time (g_c+I1), s	15.8	40.4	15.0	38.7	22.1	34.2	13.5	22.8
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.2	0.0	1.0

Intersection Summary	
HCM 6th Ctrl Delay	89.5
HCM 6th LOS	F

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)	220	1160	300	50	910	90	400	50	30	120	85	140
Future Volume (veh/h)	220	1160	300	50	910	90	400	50	30	120	85	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	244	1289	333	56	1011	100	515	0	0	133	94	156
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	266	2063	532	83	1925	190	617	324	0	201	211	179
Arrive On Green	0.30	1.00	1.00	0.09	0.82	0.82	0.17	0.00	0.00	0.11	0.11	0.11
Sat Flow, veh/h	1781	4039	1042	1781	4722	466	3563	1870	0	1781	1870	1585
Grp Volume(v), veh/h	244	1086	536	56	728	383	515	0	0	133	94	156
Grp Sat Flow(s),veh/h/ln	1781	1702	1677	1781	1702	1784	1781	1870	0	1781	1870	1585
Q Serve(g_s), s	16.5	0.0	0.0	3.8	8.6	8.7	17.5	0.0	0.0	8.9	5.9	12.1
Cycle Q Clear(g_c), s	16.5	0.0	0.0	3.8	8.6	8.7	17.5	0.0	0.0	8.9	5.9	12.1
Prop In Lane	1.00		0.62	1.00		0.26	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	1739	856	83	1388	727	617	324	0	201	211	179
V/C Ratio(X)	0.92	0.62	0.63	0.68	0.52	0.53	0.83	0.00	0.00	0.66	0.45	0.87
Avail Cap(c_a), veh/h	336	1739	856	108	1388	727	943	495	0	201	211	179
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.92	0.92	0.92	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.0	0.0	0.0	55.8	7.6	7.6	49.9	0.0	0.0	53.2	51.8	54.6
Incr Delay (d2), s/veh	3.0	0.2	0.3	4.5	1.3	2.5	2.4	0.0	0.0	6.4	0.5	33.4
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	6.3	0.0	0.1	1.8	2.4	2.7	8.0	0.0	0.0	4.4	2.8	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.1	0.2	0.3	60.3	8.9	10.1	52.3	0.0	0.0	59.5	52.3	87.9
LnGrp LOS	D	A	A	E	A	B	D	A	A	E	D	F
Approach Vol, veh/h		1866			1167			515			383	
Approach Delay, s/veh		6.2			11.8			52.3			69.3	
Approach LOS		A			B			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.2	69.2		19.0	23.1	56.4		26.5
Change Period (Y+Rc), s	4.4	* 5.4		4.9	4.4	5.4		4.9
Max Green Setting (Gmax), s	7.6	* 51		14.1	23.6	34.6		33.1
Max Q Clear Time (g_c+I1), s	5.8	2.0		14.1	18.5	10.7		19.5
Green Ext Time (p_c), s	0.0	41.6		0.0	0.2	16.1		0.9

Intersection Summary	
HCM 6th Ctrl Delay	20.1
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)	100	90	90	260	20	220	170	930	160	410	720	130
Future Volume (veh/h)	100	90	90	260	20	220	170	930	160	410	720	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	104	94	94	298	-17	229	177	969	167	427	750	135
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	137	144	120	603	0	283	231	2000	344	477	2302	411
Arrive On Green	0.08	0.08	0.08	0.17	0.00	0.17	0.07	0.46	0.46	0.28	1.00	1.00
Sat Flow, veh/h	1767	1856	1554	3534	-123	1659	3428	4340	746	3428	4323	771
Grp Volume(v), veh/h	104	94	94	298	0	212	177	753	383	427	584	301
Grp Sat Flow(s),veh/h/ln	1767	1856	1554	1767	0	1536	1714	1689	1708	1714	1689	1717
Q Serve(g_s), s	7.2	6.2	7.4	9.5	0.0	16.5	6.3	19.4	19.5	15.0	0.0	0.0
Cycle Q Clear(g_c), s	7.2	6.2	7.4	9.5	0.0	16.5	6.3	19.4	19.5	15.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.08	1.00		0.44	1.00		0.45
Lane Grp Cap(c), veh/h	137	144	120	603	0	262	231	1556	787	477	1798	914
V/C Ratio(X)	0.76	0.65	0.78	0.49	0.00	0.81	0.77	0.48	0.49	0.90	0.32	0.33
Avail Cap(c_a), veh/h	192	202	169	964	0	419	318	1556	787	592	1798	914
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	0.90	0.00	0.90	0.71	0.71	0.71	0.86	0.86	0.86
Uniform Delay (d), s/veh	56.5	56.0	56.6	47.0	0.0	49.0	57.3	23.4	23.4	44.2	0.0	0.0
Incr Delay (d2), s/veh	6.1	1.9	8.9	0.2	0.0	2.3	3.2	0.8	1.5	11.0	0.4	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	3.0	3.2	4.2	0.0	6.4	2.8	7.7	8.0	6.1	0.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.6	57.9	65.5	47.2	0.0	51.4	60.6	24.2	24.9	55.2	0.4	0.8
LnGrp LOS	E	E	E	D	A	D	E	C	C	E	A	A
Approach Vol, veh/h		292			510			1313			1312	
Approach Delay, s/veh		62.0			48.9			29.3			18.3	
Approach LOS		E			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	21.8	62.7		14.1	12.8	71.7		26.4
Change Period (Y+Rc), s	4.4	* 5.1		4.4	4.4	5.1		5.1
Max Green Setting (Gmax), s	21.6	* 37		13.6	11.6	46.7		34.1
Max Q Clear Time (g_c+I1), s	17.0	21.5		9.4	8.3	2.0		18.5
Green Ext Time (p_c), s	0.4	12.5		0.3	0.1	18.5		1.4

Intersection Summary	
HCM 6th Ctrl Delay	30.8
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)	140	50	160	60	60	110	240	840	20	160	970	40
Future Volume (veh/h)	140	50	160	60	60	110	240	840	20	160	970	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	124	88	170	64	64	117	255	894	21	170	1032	43
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	213	224	188	192	202	166	281	2585	61	194	2286	95
Arrive On Green	0.12	0.12	0.12	0.11	0.11	0.11	0.16	0.51	0.51	0.22	0.92	0.92
Sat Flow, veh/h	1767	1856	1553	1767	1856	1529	1767	5089	119	1767	4987	208
Grp Volume(v), veh/h	124	88	170	64	64	117	255	593	322	170	699	376
Grp Sat Flow(s),veh/h/ln	1767	1856	1553	1767	1856	1529	1767	1689	1832	1767	1689	1817
Q Serve(g_s), s	8.3	5.5	13.5	4.2	4.0	9.2	17.7	13.1	13.1	11.6	3.7	3.7
Cycle Q Clear(g_c), s	8.3	5.5	13.5	4.2	4.0	9.2	17.7	13.1	13.1	11.6	3.7	3.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.07	1.00		0.11
Lane Grp Cap(c), veh/h	213	224	188	192	202	166	281	1715	930	194	1548	833
V/C Ratio(X)	0.58	0.39	0.91	0.33	0.32	0.70	0.91	0.35	0.35	0.88	0.45	0.45
Avail Cap(c_a), veh/h	213	224	188	481	505	416	348	1715	930	297	1548	833
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.83	0.83	0.83	0.61	0.61	0.61
Uniform Delay (d), s/veh	52.0	50.7	54.3	51.5	51.4	53.8	51.6	18.4	18.4	48.0	3.0	3.0
Incr Delay (d2), s/veh	2.6	0.4	39.6	0.4	0.3	2.0	18.3	0.5	0.8	7.6	0.6	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	3.8	2.6	7.3	1.9	1.9	3.6	9.2	5.1	5.7	4.9	1.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.6	51.1	93.8	51.9	51.7	55.8	69.9	18.8	19.2	55.6	3.5	4.0
LnGrp LOS	D	D	F	D	D	E	E	B	B	E	A	A
Approach Vol, veh/h		382			245			1170			1245	
Approach Delay, s/veh		71.3			53.7			30.1			10.8	
Approach LOS		E			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.1	68.4		20.0	24.3	62.2		18.5
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9
Max Green Setting (Gmax), s	21.6	35.8		15.1	24.6	32.2		34.0
Max Q Clear Time (g_c+I1), s	13.6	15.1		15.5	19.7	5.7		11.2
Green Ext Time (p_c), s	0.1	13.3		0.0	0.2	19.4		0.5

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

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	40	70	40	20	70	30	600	65	120	690	20
Future Volume (veh/h)	40	40	70	40	20	70	30	600	65	120	690	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	43	43	74	43	21	74	32	638	69	128	734	21
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	221	150	240	316	55	194	53	1224	132	165	1557	45
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.03	0.38	0.38	0.09	0.44	0.44
Sat Flow, veh/h	499	981	1566	1262	359	1266	1767	3206	346	1767	3500	100
Grp Volume(v), veh/h	86	0	74	43	0	95	32	350	357	128	370	385
Grp Sat Flow(s),veh/h/ln	1480	0	1566	1262	0	1625	1767	1763	1790	1767	1763	1837
Q Serve(g_s), s	0.1	0.0	1.6	1.2	0.0	2.0	0.7	5.7	5.8	2.6	5.5	5.5
Cycle Q Clear(g_c), s	2.1	0.0	1.6	3.2	0.0	2.0	0.7	5.7	5.8	2.6	5.5	5.5
Prop In Lane	0.50		1.00	1.00		0.78	1.00		0.19	1.00		0.05
Lane Grp Cap(c), veh/h	371	0	240	316	0	249	53	673	684	165	784	817
V/C Ratio(X)	0.23	0.00	0.31	0.14	0.00	0.38	0.60	0.52	0.52	0.78	0.47	0.47
Avail Cap(c_a), veh/h	1277	0	1173	1054	0	1200	284	1202	1221	615	1551	1617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.1	0.0	14.1	15.7	0.0	14.2	17.9	8.9	8.9	16.6	7.3	7.3
Incr Delay (d2), s/veh	0.1	0.0	0.3	0.1	0.0	0.4	3.9	0.9	0.9	3.0	0.9	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	0.5	0.0	0.5	0.3	0.0	0.6	0.3	1.7	1.7	1.0	1.5	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.2	0.0	14.3	15.8	0.0	14.6	21.8	9.8	9.8	19.5	8.1	8.1
LnGrp LOS	B	A	B	B	A	B	C	A	A	B	A	A
Approach Vol, veh/h		160			138			739			883	
Approach Delay, s/veh		14.3			15.0			10.3			9.8	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.5	19.8		10.1	5.1	22.1		10.1
Change Period (Y+Rc), s	4.0	5.5		* 4.4	4.0	* 5.5		4.4
Max Green Setting (Gmax), s	13.0	25.5		* 28	6.0	* 33		27.6
Max Q Clear Time (g_c+I1), s	4.1	7.8		4.1	2.7	7.5		5.2
Green Ext Time (p_c), s	0.1	5.6		0.4	0.0	9.0		0.4

Intersection Summary	
HCM 6th Ctrl Delay	10.7
HCM 6th LOS	B

Notes

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

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (veh/h)	40	80	0	680	55	90	700
Future Volume (veh/h)	40	80	0	680	55	90	700
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No
Adj Sat Flow, veh/h/ln	1856	1856		1856	1856	1856	1856
Adj Flow Rate, veh/h	47	94		800	65	106	824
Peak Hour Factor	0.85	0.85		0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3		3	3	3	3
Cap, veh/h	159	141		1499	122	134	2266
Arrive On Green	0.09	0.09		0.45	0.45	0.08	0.64
Sat Flow, veh/h	1767	1572		3394	268	1767	3618
Grp Volume(v), veh/h	47	94		427	438	106	824
Grp Sat Flow(s),veh/h/ln	1767	1572		1763	1807	1767	1763
Q Serve(g_s), s	0.9	2.1		6.2	6.2	2.1	3.9
Cycle Q Clear(g_c), s	0.9	2.1		6.2	6.2	2.1	3.9
Prop In Lane	1.00	1.00			0.15	1.00	
Lane Grp Cap(c), veh/h	159	141		800	821	134	2266
V/C Ratio(X)	0.30	0.66		0.53	0.53	0.79	0.36
Avail Cap(c_a), veh/h	1293	1151		1464	1501	547	3503
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	15.1	15.6		7.0	7.0	16.1	3.0
Incr Delay (d2), s/veh	0.4	2.0		0.8	0.8	3.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.7		1.6	1.6	0.8	0.4
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	15.5	17.6		7.8	7.8	20.0	3.2
LnGrp LOS	B	B		A	A	C	A
Approach Vol, veh/h	141			865			930
Approach Delay, s/veh	16.9			7.8			5.1
Approach LOS	B			A			A

Timer - Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	6.7	21.6				28.3		7.2
Change Period (Y+Rc), s	4.0	5.5				* 5.5		4.0
Max Green Setting (Gmax), s	11.0	29.5				* 35		26.0
Max Q Clear Time (g_c+I1), s	4.1	8.2				5.9		4.1
Green Ext Time (p_c), s	0.1	7.9				11.4		0.2

Intersection Summary	
HCM 6th Ctrl Delay	7.1
HCM 6th LOS	A

Notes

User approved ignoring U-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)	15	5	25	60	5	30	20	710	70	50	680	20
Future Volume (veh/h)	15	5	25	60	5	30	20	710	70	50	680	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		1.00	1.00		0.96	1.00		0.99	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	17	6	28	67	6	33	22	789	78	56	756	22
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	162	56	121	352	24	211	38	1426	141	82	1625	47
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.02	0.44	0.44	0.05	0.46	0.46
Sat Flow, veh/h	308	401	863	1295	175	1508	1767	3237	320	1767	3495	102
Grp Volume(v), veh/h	51	0	0	73	0	33	22	430	437	56	381	397
Grp Sat Flow(s),veh/h/ln	1573	0	0	1470	0	1508	1767	1763	1794	1767	1763	1834
Q Serve(g_s), s	0.0	0.0	0.0	0.5	0.0	0.8	0.5	7.3	7.3	1.3	6.0	6.0
Cycle Q Clear(g_c), s	1.1	0.0	0.0	1.6	0.0	0.8	0.5	7.3	7.3	1.3	6.0	6.0
Prop In Lane	0.33		0.55	0.92		1.00	1.00		0.18	1.00		0.06
Lane Grp Cap(c), veh/h	339	0	0	376	0	211	38	776	790	82	820	853
V/C Ratio(X)	0.15	0.00	0.00	0.19	0.00	0.16	0.57	0.55	0.55	0.69	0.47	0.47
Avail Cap(c_a), veh/h	1098	0	0	1081	0	974	184	1391	1416	302	1513	1574
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.4	0.0	0.0	15.6	0.0	15.3	19.6	8.4	8.4	19.0	7.4	7.4
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.1	5.0	0.9	0.9	3.8	0.9	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	0.4	0.0	0.0	0.5	0.0	0.2	0.2	2.1	2.2	0.5	1.7	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.5	0.0	0.0	15.7	0.0	15.4	24.6	9.2	9.2	22.8	8.3	8.3
LnGrp LOS	B	A	A	B	A	B	C	A	A	C	A	A
Approach Vol, veh/h		51			106			889			834	
Approach Delay, s/veh		15.5			15.6			9.6			9.3	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.3	23.6		10.6	5.3	24.6		10.6
Change Period (Y+Rc), s	4.4	5.8		4.9	4.4	* 5.8		4.9
Max Green Setting (Gmax), s	6.9	31.9		26.1	4.2	* 35		26.1
Max Q Clear Time (g_c+I1), s	3.3	9.3		3.1	2.5	8.0		3.6
Green Ext Time (p_c), s	0.0	8.2		0.1	0.0	10.3		0.3

Intersection Summary	
HCM 6th Ctrl Delay	10.0
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

* 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	1570	1420	0	1690	200	900	140	1040	0	0	0
Future Volume (veh/h)	0	1570	1420	0	1690	200	900	140	1040	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	0	1602	1449	0	1724	204	1020	0	1061			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98			
Percent Heavy Veh, %	0	3	3	0	3	3	3	3	3			
Cap, veh/h	0	2610	2451	0	1817	800	1308	0	1164			
Arrive On Green	0.00	1.00	1.00	0.00	0.52	0.52	0.37	0.00	0.37			
Sat Flow, veh/h	0	5233	2768	0	3618	1552	3534	0	3145			
Grp Volume(v), veh/h	0	1602	1449	0	1724	204	1020	0	1061			
Grp Sat Flow(s),veh/h/ln	0	1689	1384	0	1763	1552	1767	0	1572			
Q Serve(g_s), s	0.0	0.0	56.7	0.0	51.0	8.1	28.1	0.0	35.3			
Cycle Q Clear(g_c), s	0.0	0.0	56.7	0.0	51.0	8.1	28.1	0.0	35.3			
Prop In Lane	0.00		1.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	2610	2451	0	1817	800	1308	0	1164			
V/C Ratio(X)	0.00	0.61	0.59	0.00	0.95	0.26	0.78	0.00	0.91			
Avail Cap(c_a), veh/h	0	2610	2451	0	1817	800	1346	0	1198			
HCM Platoon Ratio	1.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	0.61	0.61	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	25.3	14.9	30.7	0.0	32.9			
Incr Delay (d2), s/veh	0.0	0.7	0.6	0.0	12.1	0.8	2.9	0.0	10.4			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.2	0.0	22.1	2.8	12.2	0.0	14.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.7	0.6	0.0	37.4	15.6	33.6	0.0	43.3			
LnGrp LOS	A	A	A	A	D	B	C	A	D			
Approach Vol, veh/h		3051			1928			2081				
Approach Delay, s/veh		0.7			35.1			38.5				
Approach LOS		A			D			D				

Timer - Assigned Phs	2	6	8
Phs Duration (G+Y+Rc), s	64.2	64.2	45.8
Change Period (Y+Rc), s	7.5	7.5	5.1
Max Green Setting (Gmax), s	55.5	55.5	41.9
Max Q Clear Time (g_c+I1), s	58.7	53.0	37.3
Green Ext Time (p_c), s	0.0	2.2	3.4

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

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2760	650	0	1890	700	0	0	0	230	10	0
Future Volume (veh/h)	0	2760	650	0	1890	700	0	0	0	230	10	0
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856				1856	1856	0
Adj Flow Rate, veh/h	0	2816	663	0	1929	0				242	0	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	3	3	0	3	3				3	3	0
Cap, veh/h	0	4031	1251	0	2805					317	167	0
Arrive On Green	0.00	0.80	0.80	0.00	1.00	0.00				0.09	0.00	0.00
Sat Flow, veh/h	0	5233	1572	0	3618	1572				3534	1856	0
Grp Volume(v), veh/h	0	2816	663	0	1929	0				242	0	0
Grp Sat Flow(s),veh/h/ln	0	1689	1572	0	1763	1572				1767	1856	0
Q Serve(g_s), s	0.0	28.1	16.4	0.0	0.0	0.0				7.4	0.0	0.0
Cycle Q Clear(g_c), s	0.0	28.1	16.4	0.0	0.0	0.0				7.4	0.0	0.0
Prop In Lane	0.00		1.00	0.00		1.00				1.00		0.00
Lane Grp Cap(c), veh/h	0	4031	1251	0	2805					317	167	0
V/C Ratio(X)	0.00	0.70	0.53	0.00	0.69					0.76	0.00	0.00
Avail Cap(c_a), veh/h	0	4031	1251	0	2805					575	302	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.23	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	5.2	4.0	0.0	0.0	0.0				48.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.0	1.6	0.0	0.3	0.0				3.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.0	3.6	0.0	0.1	0.0				3.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	6.2	5.6	0.0	0.3	0.0				52.7	0.0	0.0
LnGrp LOS	A	A	A	A	A					D	A	A
Approach Vol, veh/h		3479			1929	A					242	
Approach Delay, s/veh		6.1			0.3						52.7	
Approach LOS		A			A						D	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	95.0	15.0	95.0
Change Period (Y+Rc), s	7.5	5.1	7.5
Max Green Setting (Gmax), s	79.5	17.9	79.5
Max Q Clear Time (g_c+I1), s	30.1	9.4	2.0
Green Ext Time (p_c), s	42.7	0.5	28.7

Intersection Summary	
HCM 6th Ctrl Delay	6.1
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	120	10	70	460	800	0	0	370	470
Future Volume (veh/h)	0	0	0	120	10	70	460	800	0	0	370	470
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1856	1856	1856	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				128	11	74	489	851	0	0	394	500
Peak Hour Factor				0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %				3	3	3	3	3	0	0	3	3
Cap, veh/h				202	17	192	586	2529	0	0	1733	1327
Arrive On Green				0.12	0.12	0.12	0.17	0.72	0.00	0.00	0.49	0.49
Sat Flow, veh/h				1633	140	1551	3428	3618	0	0	3618	2700
Grp Volume(v), veh/h				139	0	74	489	851	0	0	394	500
Grp Sat Flow(s),veh/h/ln				1774	0	1551	1714	1763	0	0	1763	1350
Q Serve(g_s), s				6.0	0.0	3.5	11.0	7.2	0.0	0.0	5.1	9.2
Cycle Q Clear(g_c), s				6.0	0.0	3.5	11.0	7.2	0.0	0.0	5.1	9.2
Prop In Lane				0.92		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				220	0	192	586	2529	0	0	1733	1327
V/C Ratio(X)				0.63	0.00	0.39	0.83	0.34	0.00	0.00	0.23	0.38
Avail Cap(c_a), veh/h				443	0	388	883	2529	0	0	1733	1327
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.95	0.95	0.00	0.00	0.96	0.96
Uniform Delay (d), s/veh				33.3	0.0	32.2	32.1	4.2	0.0	0.0	11.6	12.7
Incr Delay (d2), s/veh				1.1	0.0	0.5	2.6	0.3	0.0	0.0	0.3	0.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.5	0.0	1.3	4.4	1.7	0.0	0.0	1.8	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				34.4	0.0	32.7	34.6	4.6	0.0	0.0	11.9	13.5
LnGrp LOS				C	A	C	C	A	A	A	B	B
Approach Vol, veh/h					213			1340			894	
Approach Delay, s/veh					33.8			15.5			12.8	
Approach LOS					C			B			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	63.1		18.1	45.0		16.9
Change Period (Y+Rc), s	* 5.7		4.4	5.7		7.0
Max Green Setting (Gmax), s	* 48		20.6	22.3		20.0
Max Q Clear Time (g_c+I1), s	9.2		13.0	11.2		8.0
Green Ext Time (p_c), s	4.5		0.6	4.3		0.4

Intersection Summary	
HCM 6th Ctrl Delay	16.1
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)	380	0	300	0	0	0	0	660	160	30	280	0
Future Volume (veh/h)	380	0	300	0	0	0	0	660	160	30	280	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	1856	1856	1856				0	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	458	0	361				0	795	193	36	337	0
Peak Hour Factor	0.83	0.83	0.83				0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	3	3	3				0	3	3	3	3	0
Cap, veh/h	651	0	579				0	3107	731	49	2409	0
Arrive On Green	0.18	0.00	0.18				0.00	0.60	0.60	0.06	1.00	0.00
Sat Flow, veh/h	3534	0	3145				0	5431	1217	1767	3618	0
Grp Volume(v), veh/h	458	0	361				0	734	254	36	337	0
Grp Sat Flow(s),veh/h/ln	1767	0	1572				0	1596	1600	1767	1763	0
Q Serve(g_s), s	9.7	0.0	8.5				0.0	5.8	6.0	1.6	0.0	0.0
Cycle Q Clear(g_c), s	9.7	0.0	8.5				0.0	5.8	6.0	1.6	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.76	1.00		0.00
Lane Grp Cap(c), veh/h	651	0	579				0	2877	962	49	2409	0
V/C Ratio(X)	0.70	0.00	0.62				0.00	0.26	0.26	0.74	0.14	0.00
Avail Cap(c_a), veh/h	1241	0	1105				0	2877	962	389	2409	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.98	0.98	0.00
Uniform Delay (d), s/veh	30.6	0.0	30.1				0.0	7.5	7.6	37.5	0.0	0.0
Incr Delay (d2), s/veh	1.4	0.0	1.1				0.0	0.2	0.7	7.8	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	3.2				0.0	1.6	1.8	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.0	0.0	31.2				0.0	7.7	8.2	45.3	0.1	0.0
LnGrp LOS	C	A	C				A	A	A	D	A	A
Approach Vol, veh/h		819						988			373	
Approach Delay, s/veh		31.6						7.9			4.5	
Approach LOS		C						A			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.6	53.8		19.6		60.4
Change Period (Y+Rc), s	4.4	* 5.7		4.9		5.7
Max Green Setting (Gmax), s	7.6	* 19		28.1		41.3
Max Q Clear Time (g_c+I1), s	3.6	8.0		11.7		2.0
Green Ext Time (p_c), s	0.0	5.9		3.0		1.5

Intersection Summary	
HCM 6th Ctrl Delay	16.2
HCM 6th LOS	B

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)	240	1930	80	130	980	80	50	50	40	70	40	50
Future Volume (veh/h)	240	1930	80	130	980	80	50	50	40	70	40	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	247	1990	82	134	1010	82	52	52	41	72	41	52
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	284	2398	99	165	1972	160	106	57	45	224	92	116
Arrive On Green	0.16	0.48	0.48	0.09	0.41	0.41	0.06	0.06	0.06	0.13	0.13	0.13
Sat Flow, veh/h	1767	4991	205	1767	4772	387	1767	959	756	1767	725	919
Grp Volume(v), veh/h	247	1345	727	134	714	378	52	0	93	72	0	93
Grp Sat Flow(s),veh/h/ln	1767	1689	1819	1767	1689	1782	1767	0	1715	1767	0	1644
Q Serve(g_s), s	12.1	30.4	30.6	6.6	13.9	14.0	2.5	0.0	4.8	3.3	0.0	4.6
Cycle Q Clear(g_c), s	12.1	30.4	30.6	6.6	13.9	14.0	2.5	0.0	4.8	3.3	0.0	4.6
Prop In Lane	1.00		0.11	1.00		0.22	1.00		0.44	1.00		0.56
Lane Grp Cap(c), veh/h	284	1623	874	165	1395	736	106	0	103	224	0	208
V/C Ratio(X)	0.87	0.83	0.83	0.81	0.51	0.51	0.49	0.00	0.91	0.32	0.00	0.45
Avail Cap(c_a), veh/h	431	1682	906	188	1395	736	106	0	103	798	0	743
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	36.2	19.9	19.9	39.4	19.3	19.3	40.3	0.0	41.4	35.2	0.0	35.8
Incr Delay (d2), s/veh	8.0	3.7	6.8	18.2	0.4	0.8	1.3	0.0	58.6	0.3	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	5.4	10.6	12.3	3.5	4.8	5.2	1.1	0.0	3.7	1.4	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.2	23.6	26.7	57.6	19.8	20.2	41.6	0.0	99.9	35.5	0.0	36.3
LnGrp LOS	D	C	C	E	B	C	D	A	F	D	A	D
Approach Vol, veh/h		2319			1226			145			165	
Approach Delay, s/veh		26.7			24.0			79.0			36.0	
Approach LOS		C			C			E			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.7	49.5		16.1	18.6	43.6		10.2
Change Period (Y+Rc), s	4.4	7.0		4.9	4.4	* 7		4.9
Max Green Setting (Gmax), s	9.4	44.1		40.0	21.6	* 32		5.3
Max Q Clear Time (g_c+I1), s	8.6	32.6		6.6	14.1	16.0		6.8
Green Ext Time (p_c), s	0.0	9.9		0.4	0.2	7.8		0.0

Intersection Summary	
HCM 6th Ctrl Delay	28.2
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)	410	1620	25	50	890	330	30	30	25	320	30	240
Future Volume (veh/h)	410	1620	25	50	890	330	30	30	25	320	30	240
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	432	1705	26	53	937	347	32	32	26	360	0	253
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	523	2676	41	67	1474	545	91	92	75	384	0	168
Arrive On Green	0.15	0.52	0.52	0.04	0.41	0.41	0.08	0.08	0.08	0.11	0.00	0.11
Sat Flow, veh/h	3428	5138	78	1767	3626	1340	1209	1218	997	3534	0	1547
Grp Volume(v), veh/h	432	1121	610	53	872	412	48	0	42	360	0	253
Grp Sat Flow(s),veh/h/ln	1714	1689	1839	1767	1689	1589	1795	0	1629	1767	0	1547
Q Serve(g_s), s	10.1	19.7	19.7	2.5	17.1	17.2	2.1	0.0	2.1	8.4	0.0	9.0
Cycle Q Clear(g_c), s	10.1	19.7	19.7	2.5	17.1	17.2	2.1	0.0	2.1	8.4	0.0	9.0
Prop In Lane	1.00		0.04	1.00		0.84	0.67		0.61	1.00		1.00
Lane Grp Cap(c), veh/h	523	1759	958	67	1372	646	135	0	123	384	0	168
V/C Ratio(X)	0.83	0.64	0.64	0.79	0.64	0.64	0.35	0.00	0.35	0.94	0.00	1.51
Avail Cap(c_a), veh/h	811	1968	1072	136	1430	673	758	0	688	384	0	168
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	34.0	14.2	14.2	39.5	19.7	19.7	36.4	0.0	36.4	36.7	0.0	36.9
Incr Delay (d2), s/veh	2.2	1.1	2.0	7.4	1.2	2.6	2.2	0.0	2.4	30.8	0.0	256.0
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	4.0	6.2	7.0	1.1	5.9	5.8	1.0	0.0	0.9	5.1	0.0	15.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.3	15.4	16.3	47.0	20.9	22.3	38.6	0.0	38.7	67.5	0.0	292.9
LnGrp LOS	D	B	B	D	C	C	D	A	D	E	A	F
Approach Vol, veh/h		2163			1337			90			613	
Approach Delay, s/veh		19.8			22.4			38.6			160.5	
Approach LOS		B			C			D			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	49.2		15.0	17.0	39.7		11.2
Change Period (Y+Rc), s	4.4	6.0		6.0	4.4	6.0		4.9
Max Green Setting (Gmax), s	6.4	48.3		9.0	19.6	35.1		35.0
Max Q Clear Time (g_c+I1), s	4.5	21.7		11.0	12.1	19.2		4.1
Green Ext Time (p_c), s	0.0	21.4		0.0	0.5	10.5		0.7

Intersection Summary	
HCM 6th Ctrl Delay	41.5
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	600	860	430	230	410	20	410	950	70	15	730	390
Future Volume (veh/h)	600	860	430	230	410	20	410	950	70	15	730	390
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		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	652	935	428	250	446	22	446	1033	76	16	793	388
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	700	1018	447	271	1148	56	488	1341	99	23	946	412
Arrive On Green	0.20	0.29	0.29	0.15	0.23	0.23	0.14	0.40	0.40	0.01	0.27	0.27
Sat Flow, veh/h	3428	3526	1546	1767	4946	242	3428	3324	244	1767	3526	1536
Grp Volume(v), veh/h	652	935	428	250	303	165	446	548	561	16	793	388
Grp Sat Flow(s),veh/h/ln	1714	1763	1546	1767	1689	1811	1714	1763	1805	1767	1763	1536
Q Serve(g_s), s	27.7	38.0	40.3	20.7	11.2	11.4	19.0	39.8	39.8	1.3	31.4	36.6
Cycle Q Clear(g_c), s	27.7	38.0	40.3	20.7	11.2	11.4	19.0	39.8	39.8	1.3	31.4	36.6
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	700	1018	447	271	784	420	488	711	729	23	946	412
V/C Ratio(X)	0.93	0.92	0.96	0.92	0.39	0.39	0.91	0.77	0.77	0.70	0.84	0.94
Avail Cap(c_a), veh/h	766	1022	448	291	792	424	498	711	729	49	957	417
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.9	51.0	51.8	61.8	48.0	48.0	62.6	38.2	38.2	72.8	51.1	53.0
Incr Delay (d2), s/veh	16.6	12.9	32.0	30.8	0.4	0.7	20.8	5.3	5.2	13.1	6.7	29.7
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	18.2	17.9	19.2	11.4	4.7	5.1	9.5	17.7	18.1	0.7	14.6	17.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.5	63.8	83.8	92.6	48.3	48.7	83.4	43.5	43.4	85.8	57.9	82.8
LnGrp LOS	E	E	F	F	D	D	F	D	D	F	E	F
Approach Vol, veh/h		2015			718			1555			1197	
Approach Delay, s/veh		71.5			63.9			54.9			66.3	
Approach LOS		E			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.5	66.3	26.3	49.9	25.6	46.3	34.7	41.5
Change Period (Y+Rc), s	3.6	6.6	3.6	7.1	4.5	* 6.6	4.5	* 7.1
Max Green Setting (Gmax), s	4.1	57.7	24.4	42.9	21.5	* 40	33.1	* 35
Max Q Clear Time (g_c+I1), s	13.3	41.8	22.7	42.3	21.0	38.6	29.7	13.4
Green Ext Time (p_c), s	0.0	7.1	0.1	0.5	0.1	1.1	0.5	3.1

Intersection Summary	
HCM 6th Ctrl Delay	64.7
HCM 6th LOS	E

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)	70	5	20	25	10	25	50	600	50	50	540	90
Future Volume (veh/h)	70	5	20	25	10	25	50	600	50	50	540	90
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	0.99		0.98	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	73	5	21	26	10	26	52	625	52	52	562	94
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	292	21	41	194	58	86	118	1306	108	118	1201	200
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.07	0.40	0.40	0.07	0.40	0.40
Sat Flow, veh/h	1018	168	319	480	455	675	1767	3285	273	1767	3022	504
Grp Volume(v), veh/h	99	0	0	62	0	0	52	335	342	52	327	329
Grp Sat Flow(s),veh/h/ln	1505	0	0	1610	0	0	1767	1763	1795	1767	1763	1763
Q Serve(g_s), s	0.9	0.0	0.0	0.0	0.0	0.0	1.1	5.4	5.4	1.1	5.3	5.3
Cycle Q Clear(g_c), s	2.2	0.0	0.0	1.3	0.0	0.0	1.1	5.4	5.4	1.1	5.3	5.3
Prop In Lane	0.74		0.21	0.42		0.42	1.00		0.15	1.00		0.29
Lane Grp Cap(c), veh/h	354	0	0	338	0	0	118	701	714	118	701	701
V/C Ratio(X)	0.28	0.00	0.00	0.18	0.00	0.00	0.44	0.48	0.48	0.44	0.47	0.47
Avail Cap(c_a), veh/h	1363	0	0	1439	0	0	396	1533	1560	396	1528	1528
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.5	0.0	0.0	15.2	0.0	0.0	17.2	8.6	8.6	17.2	8.6	8.6
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.1	0.0	0.0	1.0	1.0	1.0	1.0	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	0.4	0.0	0.0	0.4	1.5	1.5	0.4	1.4	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.7	0.0	0.0	15.3	0.0	0.0	18.2	9.6	9.6	18.2	9.4	9.4
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		99			62			729			708	
Approach Delay, s/veh		15.7			15.3			10.2			10.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.0	21.0		10.5	7.0	21.0		10.5
Change Period (Y+Rc), s	4.4	* 5.7		* 5.6	4.4	5.7		5.6
Max Green Setting (Gmax), s	8.6	* 33		* 33	8.6	33.3		32.4
Max Q Clear Time (g_c+I1), s	3.1	7.4		3.3	3.1	7.3		4.2
Green Ext Time (p_c), s	0.0	7.6		0.2	0.0	6.5		0.4

Intersection Summary	
HCM 6th Ctrl Delay	10.7
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)	150	590	10	20	590	80	5	5	10	40	5	140
Future Volume (veh/h)	150	590	10	20	590	80	5	5	10	40	5	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.84	0.99		0.95	0.97		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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	165	648	11	22	648	88	5	5	11	44	5	154
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	200	1706	29	33	1174	159	147	153	279	133	38	396
Arrive On Green	0.11	0.48	0.48	0.02	0.39	0.39	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1767	3547	60	1767	3041	412	293	443	809	254	112	1149
Grp Volume(v), veh/h	165	322	337	22	375	361	21	0	0	203	0	0
Grp Sat Flow(s),veh/h/ln	1767	1763	1844	1767	1763	1690	1545	0	0	1514	0	0
Q Serve(g_s), s	8.8	11.1	11.2	1.2	15.9	16.0	0.0	0.0	0.0	2.2	0.0	0.0
Cycle Q Clear(g_c), s	8.8	11.1	11.2	1.2	15.9	16.0	0.8	0.0	0.0	9.3	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.24	0.24		0.52	0.22		0.76
Lane Grp Cap(c), veh/h	200	848	887	33	681	653	579	0	0	567	0	0
V/C Ratio(X)	0.82	0.38	0.38	0.67	0.55	0.55	0.04	0.00	0.00	0.36	0.00	0.00
Avail Cap(c_a), veh/h	342	848	887	105	681	653	579	0	0	567	0	0
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	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	41.7	15.8	15.8	46.9	23.0	23.0	20.9	0.0	0.0	23.7	0.0	0.0
Incr Delay (d2), s/veh	8.3	1.3	1.2	21.4	3.2	3.4	0.1	0.0	0.0	1.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	4.4	4.6	0.7	6.8	6.6	0.3	0.0	0.0	3.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.9	17.1	17.1	68.3	26.2	26.4	21.0	0.0	0.0	25.4	0.0	0.0
LnGrp LOS	D	B	B	E	C	C	C	A	A	C	A	A
Approach Vol, veh/h		824			758			21			203	
Approach Delay, s/veh		23.7			27.5			21.0			25.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.3	42.8		38.0	6.2	51.9		38.0
Change Period (Y+Rc), s	4.4	* 5.7		4.9	4.4	5.7		4.9
Max Green Setting (Gmax), s	18.6	* 34		33.1	5.7	46.2		33.1
Max Q Clear Time (g_c+I1), s	10.8	18.0		11.3	3.2	13.2		2.8
Green Ext Time (p_c), s	0.2	3.9		1.3	0.0	4.1		0.1

Intersection Summary	
HCM 6th Ctrl Delay	25.4
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)	190	340	40	200	270	210	40	190	180	210	240	60
Future Volume (veh/h)	190	340	40	200	270	210	40	190	180	210	240	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	196	351	41	206	278	216	41	196	186	216	247	62
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	234	966	112	244	588	440	52	370	319	254	908	223
Arrive On Green	0.13	0.30	0.30	0.14	0.31	0.31	0.03	0.21	0.21	0.14	0.32	0.32
Sat Flow, veh/h	1767	3179	369	1767	1898	1421	1767	1763	1520	1767	2798	688
Grp Volume(v), veh/h	196	193	199	206	257	237	41	196	186	216	154	155
Grp Sat Flow(s),veh/h/ln	1767	1763	1785	1767	1763	1557	1767	1763	1520	1767	1763	1723
Q Serve(g_s), s	10.1	8.0	8.1	10.6	11.0	11.5	2.1	9.2	10.2	11.1	6.0	6.2
Cycle Q Clear(g_c), s	10.1	8.0	8.1	10.6	11.0	11.5	2.1	9.2	10.2	11.1	6.0	6.2
Prop In Lane	1.00		0.21	1.00		0.91	1.00		1.00	1.00		0.40
Lane Grp Cap(c), veh/h	234	535	542	244	546	482	52	370	319	254	572	559
V/C Ratio(X)	0.84	0.36	0.37	0.84	0.47	0.49	0.79	0.53	0.58	0.85	0.27	0.28
Avail Cap(c_a), veh/h	372	535	542	391	546	482	135	607	523	391	862	843
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.4	25.3	25.4	39.1	25.9	26.1	44.9	32.7	33.1	38.8	23.2	23.3
Incr Delay (d2), s/veh	9.2	1.9	1.9	9.1	2.9	3.5	23.3	1.2	1.7	10.3	0.2	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	4.8	3.5	3.6	5.0	4.8	4.5	1.3	3.9	3.8	5.4	2.5	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.6	27.2	27.3	48.2	28.9	29.7	68.2	33.8	34.8	49.1	23.5	23.6
LnGrp LOS	D	C	C	D	C	C	E	C	C	D	C	C
Approach Vol, veh/h		588			700			423			525	
Approach Delay, s/veh		34.4			34.8			37.6			34.1	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.2	33.5	7.1	35.1	16.7	34.1	17.8	24.4
Change Period (Y+Rc), s	4.4	5.3	4.4	4.9	4.4	5.3	4.4	4.9
Max Green Setting (Gmax), s	20.6	27.8	7.1	45.5	19.6	28.8	20.6	32.0
Max Q Clear Time (g_c+I1), s	12.6	10.1	4.1	8.2	12.1	13.5	13.1	12.2
Green Ext Time (p_c), s	0.3	1.9	0.0	1.9	0.3	2.5	0.3	2.2

Intersection Summary	
HCM 6th Ctrl Delay	35.0
HCM 6th LOS	D

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	50	45	50	50	50	50
Future Vol, veh/h	50	45	50	50	50	50
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	59	53	59	59	59	59
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Righ	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	8	7.7	8.2
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	53%	50%
Vol Thru, %	50%	0%	50%
Vol Right, %	50%	47%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	100	95	100
LT Vol	0	50	50
Through Vol	50	0	50
RT Vol	50	45	0
Lane Flow Rate	118	112	118
Geometry Grp	1	1	1
Degree of Util (X)	0.132	0.133	0.142
Departure Headway (Hd)	4.039	4.288	4.339
Convergence, Y/N	Yes	Yes	Yes
Cap	893	840	814
Service Time	2.039	2.294	2.431
HCM Lane V/C Ratio	0.132	0.133	0.145
HCM Control Delay	7.7	8	8.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.5	0.5	0.5

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	15	90	50	50	60
Future Vol, veh/h	15	15	90	50	50	60
Conflicting Peds, #/hr	4	3	0	7	7	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	79	79	79	79	79	79
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	19	19	114	63	63	76

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	359	156	0	0	184	0
Stage 1	153	-	-	-	-	-
Stage 2	206	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	638	887	-	-	1385	-
Stage 1	873	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	601	879	-	-	1376	-
Mov Cap-2 Maneuver	601	-	-	-	-	-
Stage 1	867	-	-	-	-	-
Stage 2	783	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.3	0	3.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	714	1376	-
HCM Lane V/C Ratio	-	-	0.053	0.046	-
HCM Control Delay (s)	-	-	10.3	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	5	15	50	15	15	20	140	120	20	100	15
Future Vol, veh/h	10	5	15	50	15	15	20	140	120	20	100	15
Conflicting Peds, #/hr	15	0	3	3	0	15	2	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	11	5	16	54	16	16	22	152	130	22	109	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	455	489	122	436	432	232	127	0	0	282	0	0
Stage 1	163	163	-	261	261	-	-	-	-	-	-	-
Stage 2	292	326	-	175	171	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	514	478	926	529	515	805	1453	-	-	1275	-	-
Stage 1	837	761	-	742	690	-	-	-	-	-	-	-
Stage 2	714	647	-	824	755	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	469	459	922	499	495	794	1450	-	-	1275	-	-
Mov Cap-2 Maneuver	469	459	-	499	495	-	-	-	-	-	-	-
Stage 1	820	745	-	729	678	-	-	-	-	-	-	-
Stage 2	661	635	-	786	739	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.1	13	0.5	1.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1450	-	-	619	535	1275	-	-
HCM Lane V/C Ratio	0.015	-	-	0.053	0.163	0.017	-	-
HCM Control Delay (s)	7.5	0	-	11.1	13	7.9	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.6	0.1	-	-

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	30	10	15	10	10	10	25	25	10	50	10
Future Vol, veh/h	20	30	10	15	10	10	10	25	25	10	50	10
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	24	37	12	18	12	12	12	30	30	12	61	12
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.7	7.5	7.4	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	17%	33%	43%	14%
Vol Thru, %	42%	50%	29%	71%
Vol Right, %	42%	17%	29%	14%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	60	60	35	70
LT Vol	10	20	15	10
Through Vol	25	30	10	50
RT Vol	25	10	10	10
Lane Flow Rate	73	73	43	85
Geometry Grp	1	1	1	1
Degree of Util (X)	0.081	0.086	0.05	0.098
Departure Headway (Hd)	4.001	4.225	4.197	4.151
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	882	836	840	852
Service Time	2.085	2.309	2.289	2.23
HCM Lane V/C Ratio	0.083	0.087	0.051	0.1
HCM Control Delay	7.4	7.7	7.5	7.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.3	0.2	0.3

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1920	1070	20	0	50
Future Vol, veh/h	0	1920	1070	20	0	50
Conflicting Peds, #/hr	6	0	0	6	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	2000	1115	21	0	52

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	574
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.93
Pot Cap-1 Maneuver	0	-	-	-	0	394
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	392
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	15.6
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	392
HCM Lane V/C Ratio	-	-	-	0.133
HCM Control Delay (s)	-	-	-	15.6
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.5

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	10	0	110	30	180	5	50	80	150	80	20
Future Vol, veh/h	15	10	0	110	30	180	5	50	80	150	80	20
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
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	16	10	0	115	31	188	5	52	83	156	83	21
Number of Lanes	0	1	0	0	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay	9.6	10	9.6	10.4
HCM LOS	A	A	A	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	60%	79%	0%	100%	0%
Vol Thru, %	0%	38%	40%	21%	0%	0%	80%
Vol Right, %	0%	62%	0%	0%	100%	0%	20%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	5	130	25	140	180	150	100
LT Vol	5	0	15	110	0	150	0
Through Vol	0	50	10	30	0	0	80
RT Vol	0	80	0	0	180	0	20
Lane Flow Rate	5	135	26	146	188	156	104
Geometry Grp	7	7	6	7	7	7	7
Degree of Util (X)	0.009	0.205	0.045	0.244	0.256	0.266	0.159
Departure Headway (Hd)	6.401	5.458	6.28	6.023	4.923	6.126	5.48
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	562	662	573	592	722	581	648
Service Time	4.101	3.158	4.286	3.81	2.71	3.92	3.274
HCM Lane V/C Ratio	0.009	0.204	0.045	0.247	0.26	0.269	0.16
HCM Control Delay	9.2	9.6	9.6	10.8	9.4	11.2	9.3
HCM Lane LOS	A	A	A	B	A	B	A
HCM 95th-tile Q	0	0.8	0.1	1	1	1.1	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	1000	0	0	1660	610	460	5	1050	0	0	0
Future Volume (veh/h)	280	1000	0	0	1660	610	460	5	1050	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	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				
Adj Sat Flow, veh/h/ln	1856	1856	0	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	292	1042	0	0	1729	635	483	0	1094			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	3	3	0	0	3	3	3	3	3			
Cap, veh/h	657	3682	0	0	1689	751	990	0	881			
Arrive On Green	0.38	1.00	0.00	0.00	0.96	0.96	0.28	0.00	0.28			
Sat Flow, veh/h	3428	5233	0	0	3618	1568	3534	0	3145			
Grp Volume(v), veh/h	292	1042	0	0	1729	635	483	0	1094			
Grp Sat Flow(s),veh/h/ln	1714	1689	0	0	1763	1568	1767	0	1572			
Q Serve(g_s), s	7.9	0.0	0.0	0.0	59.9	11.1	14.2	0.0	35.0			
Cycle Q Clear(g_c), s	7.9	0.0	0.0	0.0	59.9	11.1	14.2	0.0	35.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	657	3682	0	0	1689	751	990	0	881			
V/C Ratio(X)	0.44	0.28	0.00	0.00	1.02	0.85	0.49	0.00	1.24			
Avail Cap(c_a), veh/h	657	3682	0	0	1689	751	990	0	881			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.55	0.55	0.00	0.00	0.11	0.11	1.00	0.00	1.00			
Uniform Delay (d), s/veh	33.6	0.0	0.0	0.0	2.6	1.6	37.5	0.0	45.0			
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.0	14.3	1.4	0.1	0.0	118.7			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.0	0.0	0.0	0.0	4.4	1.1	6.2	0.0	28.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.7	0.1	0.0	0.0	16.9	3.0	37.7	0.0	163.7			
LnGrp LOS	C	A	A	A	F	A	D	A	F			
Approach Vol, veh/h		1334			2364			1577				
Approach Delay, s/veh		7.5			13.2			125.1				
Approach LOS		A			B			F				

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		97.9			31.0	66.9		41.1				
Change Period (Y+Rc), s		7.0			7.0	* 7		6.1				
Max Green Setting (Gmax), s		76.9			11.3	* 60		35.0				
Max Q Clear Time (g_c+I1), s		2.0			9.9	61.9		37.0				
Green Ext Time (p_c), s		5.7			0.1	0.0		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	45.2
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	780	300	990	1130	0	0	0	0	500	5	360
Future Volume (veh/h)	0	780	300	990	1130	0	0	0	0	500	5	360
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1856	1856	1856	1856	0				1856	1856	1856
Adj Flow Rate, veh/h	0	804	309	1021	1165	0				632	0	249
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97				0.97	0.97	0.97
Percent Heavy Veh, %	0	3	3	3	3	0				3	3	3
Cap, veh/h	0	894	398	1325	2454	0				704	0	313
Arrive On Green	0.00	0.25	0.25	0.77	1.00	0.00				0.20	0.00	0.20
Sat Flow, veh/h	0	3618	1571	3428	3618	0				3534	0	1572
Grp Volume(v), veh/h	0	804	309	1021	1165	0				632	0	249
Grp Sat Flow(s),veh/h/ln	0	1763	1571	1714	1763	0				1767	0	1572
Q Serve(g_s), s	0.0	27.6	22.8	20.9	0.0	0.0				21.8	0.0	18.8
Cycle Q Clear(g_c), s	0.0	27.6	22.8	20.9	0.0	0.0				21.8	0.0	18.8
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	894	398	1325	2454	0				704	0	313
V/C Ratio(X)	0.00	0.90	0.78	0.77	0.47	0.00				0.90	0.00	0.80
Avail Cap(c_a), veh/h	0	982	437	1325	2454	0				823	0	366
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.17	0.17	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	45.1	43.3	11.1	0.0	0.0				48.8	0.0	47.6
Incr Delay (d2), s/veh	0.0	13.7	13.7	0.4	0.1	0.0				10.5	0.0	8.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	13.6	10.3	4.0	0.0	0.0				10.6	0.0	8.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	58.8	57.1	11.5	0.1	0.0				59.3	0.0	56.1
LnGrp LOS	A	E	E	B	A	A				E	A	E
Approach Vol, veh/h		1113			2186						881	
Approach Delay, s/veh		58.3			5.4						58.4	
Approach LOS		E			A						E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	55.3	38.7		31.0		94.0
Change Period (Y+Rc), s	7.0	* 7		6.1		7.0
Max Green Setting (Gmax), s	42.3	* 35		29.1		82.8
Max Q Clear Time (g_c+I1), s	22.9	29.6		23.8		2.0
Green Ext Time (p_c), s	2.1	2.2		1.1		6.8

Intersection Summary	
HCM 6th Ctrl Delay	30.7
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	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	1020	240	190	1040	0	1200	490
Future Volume (veh/h)	1020	240	190	1040	0	1200	490
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				0.99
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	1856	1856	1856	1856		1856	1856
Adj Flow Rate, veh/h	1030	242	192	1051		1212	495
Peak Hour Factor	0.99	0.99	0.99	0.99		0.99	0.99
Percent Heavy Veh, %	3	3	3	3		3	3
Cap, veh/h	1156	530	242	2912		1655	673
Arrive On Green	0.34	0.34	0.14	1.00		0.47	0.47
Sat Flow, veh/h	3428	1572	3428	5233		3694	1435
Grp Volume(v), veh/h	1030	242	192	1051		1160	547
Grp Sat Flow(s),veh/h/ln	1714	1572	1714	1689		1689	1585
Q Serve(g_s), s	35.6	15.1	6.8	0.0		34.7	35.0
Cycle Q Clear(g_c), s	35.6	15.1	6.8	0.0		34.7	35.0
Prop In Lane	1.00	1.00	1.00				0.91
Lane Grp Cap(c), veh/h	1156	530	242	2912		1584	743
V/C Ratio(X)	0.89	0.46	0.79	0.36		0.73	0.74
Avail Cap(c_a), veh/h	1264	580	291	2912		1584	743
HCM Platoon Ratio	1.00	1.00	2.00	2.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	0.91	0.91		0.46	0.46
Uniform Delay (d), s/veh	39.3	32.5	52.8	0.0		26.8	26.9
Incr Delay (d2), s/veh	8.1	0.8	8.9	0.3		1.4	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	16.1	14.1	3.0	0.1		13.8	13.4
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	47.3	33.3	61.7	0.3		28.2	29.9
LnGrp LOS	D	C	E	A		C	C
Approach Vol, veh/h	1272			1243		1707	
Approach Delay, s/veh	44.7			9.8		28.8	
Approach LOS	D			A		C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		77.0		48.0	13.2	63.7
Change Period (Y+Rc), s		* 5.1		5.9	4.4	5.1
Max Green Setting (Gmax), s		* 60		46.1	10.6	52.9
Max Q Clear Time (g_c+I1), s		2.0		37.6	8.8	37.0
Green Ext Time (p_c), s		25.0		4.5	0.1	13.4

Intersection Summary	
HCM 6th Ctrl Delay	28.0
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	450	1330	750	350	1440	250	780	880	350	190	450	190
Future Volume (veh/h)	450	1330	750	350	1440	250	780	880	350	190	450	190
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	459	1357	632	357	1469	179	796	898	274	194	459	121
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	437	1657	513	447	1679	516	778	1576	489	247	791	245
Arrive On Green	0.13	0.33	0.33	0.13	0.33	0.33	0.23	0.31	0.31	0.07	0.16	0.16
Sat Flow, veh/h	3428	5066	1570	3428	5066	1557	3428	5066	1571	3428	5066	1569
Grp Volume(v), veh/h	459	1357	632	357	1469	179	796	898	274	194	459	121
Grp Sat Flow(s),veh/h/ln	1714	1689	1570	1714	1689	1557	1714	1689	1571	1714	1689	1569
Q Serve(g_s), s	16.6	32.1	23.0	13.2	35.6	8.7	29.6	19.4	13.3	7.3	11.0	7.0
Cycle Q Clear(g_c), s	16.6	32.1	23.0	13.2	35.6	8.7	29.6	19.4	13.3	7.3	11.0	7.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	437	1657	513	447	1679	516	778	1576	489	247	791	245
V/C Ratio(X)	1.05	0.82	1.23	0.80	0.87	0.35	1.02	0.57	0.56	0.78	0.58	0.49
Avail Cap(c_a), veh/h	437	1702	527	447	1717	528	778	2122	658	376	1515	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.9	40.3	12.7	55.0	41.0	19.5	50.4	37.6	18.4	59.5	51.0	29.0
Incr Delay (d2), s/veh	57.2	3.5	120.2	9.2	5.6	0.7	38.1	0.9	2.6	2.8	1.6	3.6
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	10.4	13.3	24.8	6.1	14.9	3.2	16.6	8.1	5.1	3.2	4.7	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	114.1	43.9	133.0	64.3	46.6	20.2	88.5	38.5	21.0	62.3	52.6	32.6
LnGrp LOS	F	D	F	E	D	C	F	D	C	E	D	C
Approach Vol, veh/h		2448			2005			1968			774	
Approach Delay, s/veh		80.0			47.4			56.3			51.9	
Approach LOS		F			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.4	49.1	34.0	25.9	21.0	49.5	13.8	46.1
Change Period (Y+Rc), s	4.4	6.5	4.4	5.5	4.4	6.3	4.4	* 5.5
Max Green Setting (Gmax), s	16.8	43.8	29.6	39.0	16.6	44.2	14.3	* 55
Max Q Clear Time (g_c+I1), s	15.2	34.1	31.6	13.0	18.6	37.6	9.3	21.4
Green Ext Time (p_c), s	0.1	8.5	0.0	7.0	0.0	5.6	0.2	17.7

Intersection Summary	
HCM 6th Ctrl Delay	61.4
HCM 6th LOS	E

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)	900	858	148	159	821	51	260	240	158	41	92	240
Future Volume (veh/h)	900	858	148	159	821	51	260	240	158	41	92	240
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	957	913	157	169	873	54	277	255	168	44	98	234
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	998	2082	357	222	1229	76	305	533	339	56	374	294
Arrive On Green	0.29	0.48	0.48	0.13	0.50	0.50	0.17	0.26	0.26	0.03	0.11	0.11
Sat Flow, veh/h	3428	4352	745	3428	4877	301	1767	2063	1310	1767	3526	2768
Grp Volume(v), veh/h	957	708	362	169	604	323	277	216	207	44	98	234
Grp Sat Flow(s),veh/h/ln	1714	1689	1720	1714	1689	1801	1767	1763	1611	1767	1763	1384
Q Serve(g_s), s	32.9	16.6	16.7	5.7	16.6	16.7	18.5	12.5	13.1	3.0	3.1	9.9
Cycle Q Clear(g_c), s	32.9	16.6	16.7	5.7	16.6	16.7	18.5	12.5	13.1	3.0	3.1	9.9
Prop In Lane	1.00		0.43	1.00		0.17	1.00		0.81	1.00		1.00
Lane Grp Cap(c), veh/h	998	1616	823	222	851	454	305	456	416	56	374	294
V/C Ratio(X)	0.96	0.44	0.44	0.76	0.71	0.71	0.91	0.48	0.50	0.78	0.26	0.80
Avail Cap(c_a), veh/h	998	1616	823	297	957	510	398	573	523	59	467	367
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.51	0.51	0.51	0.95	0.95	0.95	0.96	0.96	0.96	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.8	20.7	20.7	51.4	26.4	26.4	48.7	37.6	37.8	57.7	49.3	52.4
Incr Delay (d2), s/veh	12.1	0.4	0.9	4.9	4.7	8.7	17.5	0.3	0.3	42.7	0.6	11.2
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	15.3	6.5	6.8	2.5	5.5	6.4	9.6	5.4	5.2	2.0	1.4	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.9	21.1	21.6	56.2	31.1	35.1	66.2	37.9	38.2	100.4	49.9	63.6
LnGrp LOS	D	C	C	E	C	D	E	D	D	F	D	E
Approach Vol, veh/h		2027			1096			700			376	
Approach Delay, s/veh		36.7			36.1			49.2			64.3	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	62.4	26.4	18.5	39.9	35.2	8.2	36.7
Change Period (Y+Rc), s	4.9	5.0	5.7	* 5.8	5.0	* 4.9	4.4	5.7
Max Green Setting (Gmax), s	10.4	46.6	27.0	* 16	23.1	* 34	4.0	39.0
Max Q Clear Time (g_c+I1), s	7.7	18.7	20.5	11.9	34.9	18.7	5.0	15.1
Green Ext Time (p_c), s	0.1	18.9	0.2	0.8	0.0	11.5	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	41.1
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)	58	838	125	20	699	31	312	11	40	23	15	15
Future Volume (veh/h)	58	838	125	20	699	31	312	11	40	23	15	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	60	864	129	21	721	32	368	0	0	24	15	15
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	77	2905	432	30	3112	138	493	259	0	49	52	44
Arrive On Green	0.09	1.00	1.00	0.02	0.63	0.63	0.14	0.00	0.00	0.03	0.03	0.03
Sat Flow, veh/h	1767	4452	661	1767	4972	220	3534	1856	0	1767	1856	1572
Grp Volume(v), veh/h	60	654	339	21	489	264	368	0	0	24	15	15
Grp Sat Flow(s),veh/h/ln	1767	1689	1736	1767	1689	1815	1767	1856	0	1767	1856	1572
Q Serve(g_s), s	4.0	0.0	0.0	1.4	7.6	7.6	12.0	0.0	0.0	1.6	1.0	1.1
Cycle Q Clear(g_c), s	4.0	0.0	0.0	1.4	7.6	7.6	12.0	0.0	0.0	1.6	1.0	1.1
Prop In Lane	1.00		0.38	1.00		0.12	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	77	2204	1133	30	2114	1136	493	259	0	49	52	44
V/C Ratio(X)	0.78	0.30	0.30	0.71	0.23	0.23	0.75	0.00	0.00	0.49	0.29	0.34
Avail Cap(c_a), veh/h	200	2204	1133	127	2114	1136	1181	620	0	134	141	119
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	0.94	0.94	0.94	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.2	0.0	0.0	58.7	9.8	9.8	49.6	0.0	0.0	57.5	57.2	57.3
Incr Delay (d2), s/veh	5.6	0.3	0.6	10.3	0.2	0.5	0.9	0.0	0.0	2.8	1.1	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.1	0.2	0.7	2.7	3.0	5.4	0.0	0.0	0.8	0.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.9	0.3	0.6	69.0	10.1	10.3	50.4	0.0	0.0	60.3	58.3	59.0
LnGrp LOS	E	A	A	E	B	B	D	A	A	E	E	E
Approach Vol, veh/h		1053			774			368			54	
Approach Delay, s/veh		3.8			11.7			50.4			59.4	
Approach LOS		A			B			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	83.7		8.2	9.6	80.5		21.6
Change Period (Y+Rc), s	4.4	* 5.4		4.9	4.4	5.4		4.9
Max Green Setting (Gmax), s	8.6	* 43		9.1	13.6	37.6		40.1
Max Q Clear Time (g_c+I1), s	3.4	2.0		3.6	6.0	9.6		14.0
Green Ext Time (p_c), s	0.0	23.5		0.0	0.0	12.2		0.7

Intersection Summary	
HCM 6th Ctrl Delay	15.5
HCM 6th LOS	B

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)	10	12	30	249	30	309	42	683	148	351	447	20
Future Volume (veh/h)	10	12	30	249	30	309	42	683	148	351	447	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	12	14	35	228	122	359	49	794	172	408	520	23
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	62	65	51	450	473	399	92	1733	372	463	2611	115
Arrive On Green	0.04	0.04	0.04	0.25	0.25	0.25	0.03	0.42	0.42	0.27	1.00	1.00
Sat Flow, veh/h	1767	1856	1452	1767	1856	1565	3428	4160	893	3428	4974	219
Grp Volume(v), veh/h	12	14	35	228	122	359	49	643	323	408	352	191
Grp Sat Flow(s),veh/h/ln	1767	1856	1452	1767	1856	1565	1714	1689	1675	1714	1689	1816
Q Serve(g_s), s	0.8	0.9	2.9	13.2	6.3	26.6	1.7	16.5	16.7	13.7	0.0	0.0
Cycle Q Clear(g_c), s	0.8	0.9	2.9	13.2	6.3	26.6	1.7	16.5	16.7	13.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.53	1.00		0.12
Lane Grp Cap(c), veh/h	62	65	51	450	473	399	92	1407	698	463	1773	953
V/C Ratio(X)	0.19	0.21	0.68	0.51	0.26	0.90	0.53	0.46	0.46	0.88	0.20	0.20
Avail Cap(c_a), veh/h	68	71	56	543	571	481	160	1407	698	674	1773	953
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	0.74	0.74	0.74	0.96	0.96	0.96	0.96	0.96	0.96
Uniform Delay (d), s/veh	56.2	56.3	57.2	38.3	35.7	43.2	57.6	25.2	25.3	42.9	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.6	21.1	0.2	0.1	12.6	1.7	1.0	2.1	6.7	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.4	1.3	5.8	2.9	11.6	0.8	6.7	6.9	5.4	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.8	56.9	78.4	38.5	35.7	55.8	59.4	26.3	27.4	49.5	0.2	0.5
LnGrp LOS	E	E	E	D	D	E	E	C	C	D	A	A
Approach Vol, veh/h		61			709			1015			951	
Approach Delay, s/veh		69.2			46.8			28.2			21.4	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	30.6	55.1		8.6	7.6	68.1		35.7
Change Period (Y+Rc), s	4.4	* 5.1		4.4	4.4	5.1		5.1
Max Green Setting (Gmax), s	23.6	* 36		4.6	5.6	53.9		36.9
Max Q Clear Time (g_c+I1), s	15.7	18.7		4.9	3.7	2.0		28.6
Green Ext Time (p_c), s	0.5	12.4		0.0	0.0	10.4		1.7

Intersection Summary	
HCM 6th Ctrl Delay	31.6
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)	60	30	130	30	30	80	172	748	91	50	656	20
Future Volume (veh/h)	60	30	130	30	30	80	172	748	91	50	656	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	69	34	149	34	34	92	198	860	105	57	754	23
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	163	172	143	166	174	143	223	2800	340	74	2669	81
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.25	1.00	1.00	0.01	0.17	0.17
Sat Flow, veh/h	1767	1856	1547	1767	1856	1525	1767	4568	555	1767	5051	154
Grp Volume(v), veh/h	69	34	149	34	34	92	198	635	330	57	504	273
Grp Sat Flow(s),veh/h/ln	1767	1856	1547	1767	1856	1525	1767	1689	1746	1767	1689	1827
Q Serve(g_s), s	4.4	2.0	11.1	2.1	2.0	7.0	13.0	0.0	0.0	3.9	15.5	15.6
Cycle Q Clear(g_c), s	4.4	2.0	11.1	2.1	2.0	7.0	13.0	0.0	0.0	3.9	15.5	15.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.32	1.00		0.08
Lane Grp Cap(c), veh/h	163	172	143	166	174	143	223	2070	1070	74	1785	966
V/C Ratio(X)	0.42	0.20	1.04	0.21	0.20	0.64	0.89	0.31	0.31	0.78	0.28	0.28
Avail Cap(c_a), veh/h	163	172	143	502	527	433	362	2070	1070	141	1785	966
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	0.71	0.71	0.71
Uniform Delay (d), s/veh	51.4	50.3	54.5	50.2	50.2	52.4	44.1	0.0	0.0	58.6	29.8	29.8
Incr Delay (d2), s/veh	0.6	0.2	86.6	0.2	0.2	1.8	8.4	0.3	0.7	4.6	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	1.0	7.8	1.0	1.0	2.7	5.4	0.1	0.2	1.8	7.1	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.1	50.5	141.1	50.5	50.4	54.2	52.4	0.3	0.7	63.2	30.1	30.3
LnGrp LOS	D	D	F	D	D	D	D	A	A	E	C	C
Approach Vol, veh/h		252			160			1163			834	
Approach Delay, s/veh		104.5			52.6			9.3			32.4	
Approach LOS		F			D			A			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.4	78.5		16.0	19.5	68.3		16.2
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9
Max Green Setting (Gmax), s	9.6	46.1		11.1	24.6	31.1		34.1
Max Q Clear Time (g_c+I1), s	5.9	2.0		13.1	15.0	17.6		9.0
Green Ext Time (p_c), s	0.0	22.9		0.0	0.2	9.0		0.3

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

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	10	40	60	20	167	60	431	15	47	322	10
Future Volume (veh/h)	60	10	40	60	20	167	60	431	15	47	322	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	62	10	41	62	21	172	62	444	15	48	332	10
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	362	45	409	369	45	371	91	1041	35	75	1014	30
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.05	0.30	0.30	0.04	0.29	0.29
Sat Flow, veh/h	654	171	1571	1342	174	1425	1767	3479	117	1767	3494	105
Grp Volume(v), veh/h	72	0	41	62	0	193	62	225	234	48	167	175
Grp Sat Flow(s),veh/h/ln	825	0	1571	1342	0	1599	1767	1763	1834	1767	1763	1836
Q Serve(g_s), s	1.3	0.0	0.7	1.5	0.0	3.5	1.2	3.6	3.6	0.9	2.6	2.6
Cycle Q Clear(g_c), s	4.8	0.0	0.7	6.3	0.0	3.5	1.2	3.6	3.6	0.9	2.6	2.6
Prop In Lane	0.86		1.00	1.00		0.89	1.00		0.06	1.00		0.06
Lane Grp Cap(c), veh/h	406	0	409	369	0	416	91	528	549	75	511	533
V/C Ratio(X)	0.18	0.00	0.10	0.17	0.00	0.46	0.68	0.43	0.43	0.64	0.33	0.33
Avail Cap(c_a), veh/h	1150	0	1349	1156	0	1355	455	1438	1496	405	1407	1466
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.9	0.0	9.8	14.1	0.0	10.9	16.3	9.8	9.8	16.5	9.7	9.7
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.3	3.2	0.8	0.7	3.3	0.7	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	0.4	0.0	0.2	0.4	0.0	1.0	0.5	1.1	1.2	0.4	0.8	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.0	0.0	9.9	14.2	0.0	11.2	19.5	10.6	10.6	19.8	10.4	10.4
LnGrp LOS	B	A	A	B	A	B	B	B	B	B	B	B
Approach Vol, veh/h		113			255			521			390	
Approach Delay, s/veh		11.2			11.9			11.6			11.6	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	16.0		13.5	5.8	15.6		13.5
Change Period (Y+Rc), s	4.0	5.5		* 4.4	4.0	* 5.5		4.4
Max Green Setting (Gmax), s	8.0	28.5		* 30	9.0	* 28		29.6
Max Q Clear Time (g_c+I1), s	2.9	5.6		6.8	3.2	4.6		8.3
Green Ext Time (p_c), s	0.0	3.8		0.3	0.0	3.5		0.9

Intersection Summary	
HCM 6th Ctrl Delay	11.6
HCM 6th LOS	B

Notes

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

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (veh/h)	104	135	0	326	59	76	406
Future Volume (veh/h)	104	135	0	326	59	76	406
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No
Adj Sat Flow, veh/h/ln	1856	1856		1856	1856	1856	1856
Adj Flow Rate, veh/h	117	152		366	66	85	456
Peak Hour Factor	0.89	0.89		0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3		3	3	3	3
Cap, veh/h	270	240		993	177	119	1877
Arrive On Green	0.15	0.15		0.33	0.33	0.07	0.53
Sat Flow, veh/h	1767	1572		3080	534	1767	3618
Grp Volume(v), veh/h	117	152		214	218	85	456
Grp Sat Flow(s),veh/h/ln	1767	1572		1763	1759	1767	1763
Q Serve(g_s), s	1.8	2.7		2.8	2.8	1.4	2.1
Cycle Q Clear(g_c), s	1.8	2.7		2.8	2.8	1.4	2.1
Prop In Lane	1.00	1.00			0.30	1.00	
Lane Grp Cap(c), veh/h	270	240		586	585	119	1877
V/C Ratio(X)	0.43	0.63		0.37	0.37	0.71	0.24
Avail Cap(c_a), veh/h	1640	1459		1490	1486	761	3891
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	11.6	12.0		7.7	7.7	13.8	3.8
Incr Delay (d2), s/veh	0.4	1.0		0.5	0.6	2.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.8		0.8	0.8	0.5	0.3
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	12.0	13.0		8.2	8.2	16.7	3.9
LnGrp LOS	B	B		A	A	B	A
Approach Vol, veh/h	269			432			541
Approach Delay, s/veh	12.6			8.2			5.9
Approach LOS	B			A			A

Timer - Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	6.0	15.5				21.6		8.6
Change Period (Y+Rc), s	4.0	5.5				* 5.5		4.0
Max Green Setting (Gmax), s	13.0	25.5				* 33		28.0
Max Q Clear Time (g_c+I1), s	3.4	4.8				4.1		4.7
Green Ext Time (p_c), s	0.1	3.5				5.7		0.4

Intersection Summary	
HCM 6th Ctrl Delay	8.2
HCM 6th LOS	A

Notes

User approved ignoring U-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)	5	0	5	140	5	35	5	307	25	43	529	8
Future Volume (veh/h)	5	0	5	140	5	35	5	307	25	43	529	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	5	0	5	146	5	36	5	320	26	45	551	8
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	208	41	82	434	7	213	10	1166	94	73	1382	20
Arrive On Green	0.14	0.00	0.14	0.14	0.14	0.14	0.01	0.35	0.35	0.04	0.39	0.39
Sat Flow, veh/h	296	304	600	1571	54	1569	1767	3303	267	1767	3556	52
Grp Volume(v), veh/h	10	0	0	151	0	36	5	170	176	45	273	286
Grp Sat Flow(s),veh/h/ln	1200	0	0	1625	0	1569	1767	1763	1807	1767	1763	1845
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.7	0.1	2.2	2.2	0.8	3.6	3.6
Cycle Q Clear(g_c), s	2.6	0.0	0.0	2.6	0.0	0.7	0.1	2.2	2.2	0.8	3.6	3.6
Prop In Lane	0.50		0.50	0.97		1.00	1.00		0.15	1.00		0.03
Lane Grp Cap(c), veh/h	331	0	0	441	0	213	10	622	638	73	685	717
V/C Ratio(X)	0.03	0.00	0.00	0.34	0.00	0.17	0.52	0.27	0.28	0.62	0.40	0.40
Avail Cap(c_a), veh/h	1451	0	0	1528	0	1421	253	1602	1642	363	1717	1797
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.1	0.0	0.0	13.1	0.0	12.3	15.9	7.4	7.5	15.2	7.1	7.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.1	15.3	0.3	0.3	3.2	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.8	0.0	0.2	0.1	0.6	0.6	0.3	1.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.1	0.0	0.0	13.3	0.0	12.4	31.2	7.8	7.8	18.3	7.9	7.9
LnGrp LOS	B	A	A	B	A	B	C	A	A	B	A	A
Approach Vol, veh/h		10			187			351			604	
Approach Delay, s/veh		12.1			13.1			8.1			8.7	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.7	17.1		9.3	4.6	18.3		9.3
Change Period (Y+Rc), s	4.4	5.8		4.9	4.4	* 5.8		4.9
Max Green Setting (Gmax), s	6.6	29.2		29.1	4.6	* 31		29.1
Max Q Clear Time (g_c+I1), s	2.8	4.2		4.6	2.1	5.6		4.6
Green Ext Time (p_c), s	0.0	2.9		0.0	0.0	6.9		0.6

Intersection Summary	
HCM 6th Ctrl Delay	9.3
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

* 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	1106	1271	0	2514	236	620	30	493	0	0	0
Future Volume (veh/h)	0	1106	1271	0	2514	236	620	30	493	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	0	1140	1310	0	2592	243	661	0	508			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	0	3	3	0	3	3	3	3	3			
Cap, veh/h	0	3512	2477	0	2445	1077	713	0	634			
Arrive On Green	0.00	1.00	1.00	0.00	0.69	0.69	0.20	0.00	0.20			
Sat Flow, veh/h	0	5233	2768	0	3618	1553	3534	0	3145			
Grp Volume(v), veh/h	0	1140	1310	0	2592	243	661	0	508			
Grp Sat Flow(s),veh/h/ln	0	1689	1384	0	1763	1553	1767	0	1572			
Q Serve(g_s), s	0.0	0.0	0.0	0.0	83.2	6.8	22.0	0.0	18.5			
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	83.2	6.8	22.0	0.0	18.5			
Prop In Lane	0.00		1.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	3512	2477	0	2445	1077	713	0	634			
V/C Ratio(X)	0.00	0.32	0.53	0.00	1.06	0.23	0.93	0.00	0.80			
Avail Cap(c_a), veh/h	0	3512	2477	0	2445	1077	716	0	637			
HCM Platoon Ratio	1.00	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	0.77	0.77	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	18.4	6.7	47.0	0.0	45.6			
Incr Delay (d2), s/veh	0.0	0.2	0.6	0.0	36.7	0.5	18.3	0.0	7.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.2	0.0	39.0	2.1	11.5	0.0	7.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.2	0.6	0.0	55.1	7.2	65.3	0.0	52.8			
LnGrp LOS	A	A	A	A	F	A	E	A	D			
Approach Vol, veh/h		2450			2835			1169				
Approach Delay, s/veh		0.4			51.0			59.9				
Approach LOS		A			D			E				

Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		90.7				90.7		29.3				
Change Period (Y+Rc), s		7.5				7.5		5.1				
Max Green Setting (Gmax), s		83.1				83.1		24.3				
Max Q Clear Time (g_c+I1), s		2.0				85.2		24.0				
Green Ext Time (p_c), s		26.9				0.0		0.2				

Intersection Summary	
HCM 6th Ctrl Delay	33.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2140	770	0	1883	1251	0	0	0	237	60	0
Future Volume (veh/h)	0	2140	770	0	1883	1251	0	0	0	237	60	0
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856				1856	1856	0
Adj Flow Rate, veh/h	0	2253	811	0	1982	0				156	193	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	3	3	0	3	3				3	3	0
Cap, veh/h	0	4006	1244	0	2788					184	193	0
Arrive On Green	0.00	0.79	0.79	0.00	1.00	0.00				0.10	0.10	0.00
Sat Flow, veh/h	0	5233	1572	0	3618	1572				1767	1856	0
Grp Volume(v), veh/h	0	2253	811	0	1982	0				156	193	0
Grp Sat Flow(s),veh/h/ln	0	1689	1572	0	1763	1572				1767	1856	0
Q Serve(g_s), s	0.0	20.1	26.7	0.0	0.0	0.0				10.4	12.5	0.0
Cycle Q Clear(g_c), s	0.0	20.1	26.7	0.0	0.0	0.0				10.4	12.5	0.0
Prop In Lane	0.00		1.00	0.00		1.00				1.00		0.00
Lane Grp Cap(c), veh/h	0	4006	1244	0	2788					184	193	0
V/C Ratio(X)	0.00	0.56	0.65	0.00	0.71					0.85	1.00	0.00
Avail Cap(c_a), veh/h	0	4006	1244	0	2788					293	308	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.33	1.33				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.09	0.00				1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	4.7	5.4	0.0	0.0	0.0				52.8	53.7	0.0
Incr Delay (d2), s/veh	0.0	0.6	2.7	0.0	0.1	0.0				12.3	41.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.8	6.7	0.0	0.1	0.0				5.2	8.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	5.3	8.1	0.0	0.1	0.0				65.1	95.0	0.0
LnGrp LOS	A	A	A	A	A					E	F	A
Approach Vol, veh/h		3064			1982	A					349	
Approach Delay, s/veh		6.0			0.1						81.6	
Approach LOS		A			A						F	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	102.4	17.6	102.4
Change Period (Y+Rc), s	7.5	5.1	7.5
Max Green Setting (Gmax), s	87.5	19.9	87.5
Max Q Clear Time (g_c+I1), s	28.7	12.4	2.0
Green Ext Time (p_c), s	41.1	0.1	31.4

Intersection Summary	
HCM 6th Ctrl Delay	8.8
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	200	5	52	330	375	0	0	293	436
Future Volume (veh/h)	0	0	0	200	5	52	330	375	0	0	293	436
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1856	1856	1856	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				211	5	55	347	395	0	0	308	459
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				3	3	3	3	3	0	0	3	3
Cap, veh/h				258	6	232	443	2440	0	0	1791	1372
Arrive On Green				0.15	0.15	0.15	0.13	0.69	0.00	0.00	0.51	0.51
Sat Flow, veh/h				1728	41	1551	3428	3618	0	0	3618	2701
Grp Volume(v), veh/h				216	0	55	347	395	0	0	308	459
Grp Sat Flow(s),veh/h/ln				1769	0	1551	1714	1763	0	0	1763	1350
Q Serve(g_s), s				9.5	0.0	2.5	7.8	3.1	0.0	0.0	3.8	8.1
Cycle Q Clear(g_c), s				9.5	0.0	2.5	7.8	3.1	0.0	0.0	3.8	8.1
Prop In Lane				0.98		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				264	0	232	443	2440	0	0	1791	1372
V/C Ratio(X)				0.82	0.00	0.24	0.78	0.16	0.00	0.00	0.17	0.33
Avail Cap(c_a), veh/h				442	0	388	883	2440	0	0	1791	1372
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.98	0.98	0.00	0.00	0.96	0.96
Uniform Delay (d), s/veh				33.0	0.0	30.0	33.8	4.3	0.0	0.0	10.6	11.7
Incr Delay (d2), s/veh				2.4	0.0	0.2	1.1	0.1	0.0	0.0	0.2	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
%ile BackOfQ(50%),veh/ln				3.9	0.0	0.9	3.1	0.8	0.0	0.0	1.3	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				35.4	0.0	30.2	34.9	4.4	0.0	0.0	10.8	12.3
LnGrp LOS				D	A	C	C	A	A	A	B	B
Approach Vol, veh/h					271			742			767	
Approach Delay, s/veh					34.3			18.7			11.7	
Approach LOS					C			B			B	

Timer - Assigned Phs	2	5	6	8
Phs Duration (G+Y+Rc), s	61.1	14.7	46.3	18.9
Change Period (Y+Rc), s	* 5.7	4.4	5.7	7.0
Max Green Setting (Gmax), s	* 48	20.6	22.3	20.0
Max Q Clear Time (g_c+I1), s	5.1	9.8	10.1	11.5
Green Ext Time (p_c), s	1.8	0.5	3.8	0.5

Intersection Summary	
HCM 6th Ctrl Delay	18.1
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)	193	10	450	0	0	0	0	492	124	27	356	0
Future Volume (veh/h)	193	10	450	0	0	0	0	492	124	27	356	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	1856	1856	1856				0	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	239	0	536				0	586	148	32	424	0
Peak Hour Factor	0.84	0.84	0.84				0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	3	3	3				0	3	3	3	3	0
Cap, veh/h	781	0	695				0	2915	699	45	2280	0
Arrive On Green	0.22	0.00	0.22				0.00	0.57	0.57	0.05	1.00	0.00
Sat Flow, veh/h	3534	0	3145				0	5408	1235	1767	3618	0
Grp Volume(v), veh/h	239	0	536				0	543	191	32	424	0
Grp Sat Flow(s),veh/h/ln	1767	0	1572				0	1596	1596	1767	1763	0
Q Serve(g_s), s	4.5	0.0	12.8				0.0	4.4	4.7	1.4	0.0	0.0
Cycle Q Clear(g_c), s	4.5	0.0	12.8				0.0	4.4	4.7	1.4	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.77	1.00		0.00
Lane Grp Cap(c), veh/h	781	0	695				0	2710	904	45	2280	0
V/C Ratio(X)	0.31	0.00	0.77				0.00	0.20	0.21	0.71	0.19	0.00
Avail Cap(c_a), veh/h	1330	0	1183				0	2710	904	345	2280	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.99	0.99	0.00
Uniform Delay (d), s/veh	26.0	0.0	29.3				0.0	8.5	8.6	37.7	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	1.9				0.0	0.2	0.5	7.4	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	4.8				0.0	1.3	1.5	0.7	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.3	0.0	31.1				0.0	8.7	9.1	45.1	0.2	0.0
LnGrp LOS	C	A	C				A	A	A	D	A	A
Approach Vol, veh/h		775						734			456	
Approach Delay, s/veh		29.6						8.8			3.3	
Approach LOS		C						A			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.4	51.0		22.6		57.4
Change Period (Y+Rc), s	4.4	* 5.7		4.9		5.7
Max Green Setting (Gmax), s	15.6	* 19		30.1		39.3
Max Q Clear Time (g_c+I1), s	3.4	6.7		14.8		2.0
Green Ext Time (p_c), s	0.0	4.8		2.9		1.9

Intersection Summary	
HCM 6th Ctrl Delay	15.7
HCM 6th LOS	B

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)	84	803	90	203	1837	106	160	100	85	101	140	114
Future Volume (veh/h)	84	803	90	203	1837	106	160	100	85	101	140	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	90	863	97	218	1975	114	172	108	91	109	151	123
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	88	1520	170	250	2058	118	192	101	85	378	200	163
Arrive On Green	0.05	0.33	0.33	0.14	0.42	0.42	0.11	0.11	0.11	0.21	0.21	0.21
Sat Flow, veh/h	1767	4622	517	1767	4897	282	1767	929	783	1767	932	760
Grp Volume(v), veh/h	90	630	330	218	1360	729	172	0	199	109	0	274
Grp Sat Flow(s),veh/h/ln	1767	1689	1762	1767	1689	1802	1767	0	1712	1767	0	1692
Q Serve(g_s), s	5.1	15.7	15.8	12.4	40.0	40.3	9.8	0.0	11.1	5.3	0.0	15.5
Cycle Q Clear(g_c), s	5.1	15.7	15.8	12.4	40.0	40.3	9.8	0.0	11.1	5.3	0.0	15.5
Prop In Lane	1.00		0.29	1.00		0.16	1.00		0.46	1.00		0.45
Lane Grp Cap(c), veh/h	88	1110	579	250	1419	757	192	0	186	378	0	362
V/C Ratio(X)	1.02	0.57	0.57	0.87	0.96	0.96	0.90	0.00	1.07	0.29	0.00	0.76
Avail Cap(c_a), veh/h	88	1110	579	328	1420	758	192	0	186	691	0	662
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	48.6	28.3	28.4	43.0	28.8	28.9	45.0	0.0	45.6	33.7	0.0	37.7
Incr Delay (d2), s/veh	101.7	0.8	1.7	15.0	15.1	24.1	36.8	0.0	86.1	0.2	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	6.0	6.4	6.1	17.1	20.3	6.2	0.0	9.1	2.3	0.0	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	150.3	29.2	30.0	58.0	43.9	52.9	81.8	0.0	131.6	33.8	0.0	38.9
LnGrp LOS	F	C	C	E	D	D	F	A	F	C	A	D
Approach Vol, veh/h		1050			2307			371			383	
Approach Delay, s/veh		39.8			48.1			108.5			37.5	
Approach LOS		D			D			F			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.8	40.6		26.8	9.5	50.0		16.0
Change Period (Y+Rc), s	4.4	7.0		4.9	4.4	* 7		4.9
Max Green Setting (Gmax), s	19.6	28.7		40.0	5.1	* 43		11.1
Max Q Clear Time (g_c+I1), s	14.4	17.8		17.5	7.1	42.3		13.1
Green Ext Time (p_c), s	0.1	5.3		1.2	0.0	0.7		0.0

Intersection Summary	
HCM 6th Ctrl Delay	50.4
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)	230	916	10	30	1424	209	125	32	30	286	21	262
Future Volume (veh/h)	230	916	10	30	1424	209	125	32	30	286	21	262
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	235	935	10	31	1453	213	128	33	31	307	0	267
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	323	2465	26	44	1815	266	232	114	107	385	0	169
Arrive On Green	0.09	0.48	0.48	0.02	0.41	0.41	0.13	0.13	0.13	0.11	0.00	0.11
Sat Flow, veh/h	3428	5166	55	1767	4451	652	1767	867	815	3534	0	1547
Grp Volume(v), veh/h	235	611	334	31	1102	564	128	0	64	307	0	267
Grp Sat Flow(s),veh/h/ln	1714	1689	1844	1767	1689	1726	1767	0	1682	1767	0	1547
Q Serve(g_s), s	5.5	9.5	9.5	1.4	23.7	23.7	5.6	0.0	2.8	7.0	0.0	9.0
Cycle Q Clear(g_c), s	5.5	9.5	9.5	1.4	23.7	23.7	5.6	0.0	2.8	7.0	0.0	9.0
Prop In Lane	1.00		0.03	1.00		0.38	1.00		0.48	1.00		1.00
Lane Grp Cap(c), veh/h	323	1612	880	44	1377	704	232	0	221	385	0	169
V/C Ratio(X)	0.73	0.38	0.38	0.71	0.80	0.80	0.55	0.00	0.29	0.80	0.00	1.58
Avail Cap(c_a), veh/h	814	1976	1079	137	1436	734	749	0	713	385	0	169
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	36.4	13.8	13.8	40.0	21.5	21.5	33.6	0.0	32.4	35.9	0.0	36.8
Incr Delay (d2), s/veh	1.2	0.4	0.7	7.7	3.6	6.9	2.9	0.0	1.0	11.7	0.0	288.7
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	2.2	3.1	3.4	0.7	8.5	9.4	2.5	0.0	1.2	3.5	0.0	16.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.6	14.2	14.5	47.7	25.1	28.4	36.5	0.0	33.4	47.6	0.0	325.5
LnGrp LOS	D	B	B	D	C	C	D	A	C	D	A	F
Approach Vol, veh/h		1180			1697			192			574	
Approach Delay, s/veh		18.9			26.6			35.5			176.8	
Approach LOS		B			C			D			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	45.4		15.0	12.2	39.7		15.7
Change Period (Y+Rc), s	4.4	6.0		6.0	4.4	6.0		4.9
Max Green Setting (Gmax), s	6.4	48.3		9.0	19.6	35.1		35.0
Max Q Clear Time (g_c+I1), s	3.4	11.5		11.0	7.5	25.7		7.6
Green Ext Time (p_c), s	0.0	14.1		0.0	0.3	7.9		1.6

Intersection Summary	
HCM 6th Ctrl Delay	48.3
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	468	391	433	100	588	20	391	730	50	10	770	484
Future Volume (veh/h)	468	391	433	100	588	20	391	730	50	10	770	484
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	538	449	459	115	676	23	449	839	57	11	885	509
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	580	1034	455	137	984	33	493	1596	108	17	1188	519
Arrive On Green	0.17	0.29	0.29	0.08	0.20	0.20	0.14	0.48	0.48	0.01	0.34	0.34
Sat Flow, veh/h	3428	3526	1551	1767	5030	171	3428	3345	227	1767	3526	1539
Grp Volume(v), veh/h	538	449	459	115	453	246	449	442	454	11	885	509
Grp Sat Flow(s),veh/h/ln	1714	1763	1551	1767	1689	1824	1714	1763	1810	1767	1763	1539
Q Serve(g_s), s	22.7	15.1	43.1	9.4	18.3	18.4	19.0	25.7	25.7	0.9	32.6	48.1
Cycle Q Clear(g_c), s	22.7	15.1	43.1	9.4	18.3	18.4	19.0	25.7	25.7	0.9	32.6	48.1
Prop In Lane	1.00		1.00	1.00		0.09	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	580	1034	455	137	660	357	493	841	863	17	1188	519
V/C Ratio(X)	0.93	0.43	1.01	0.84	0.69	0.69	0.91	0.53	0.53	0.63	0.74	0.98
Avail Cap(c_a), veh/h	595	1034	455	167	736	397	525	841	863	48	1188	519
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.1	42.0	51.9	66.9	54.9	54.9	61.9	26.8	26.8	72.5	43.1	48.2
Incr Delay (d2), s/veh	20.3	0.3	44.3	22.6	2.5	4.7	18.6	0.7	0.7	13.2	2.7	34.6
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	11.2	6.4	21.9	5.1	7.9	8.8	9.4	10.7	10.9	0.5	14.3	22.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.4	42.4	96.2	89.5	57.4	59.7	80.5	27.5	27.5	85.7	45.8	82.9
LnGrp LOS	F	D	F	F	E	E	F	C	C	F	D	F
Approach Vol, veh/h		1446			814			1345			1405	
Approach Delay, s/veh		73.6			62.6			45.2			59.5	
Approach LOS		E			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.0	76.7	15.0	50.2	25.6	56.1	29.3	35.8
Change Period (Y+Rc), s	3.6	6.6	3.6	7.1	4.5	* 6.6	4.5	* 7.1
Max Green Setting (Gmax), s	4.0	68.1	13.9	43.1	22.5	* 50	25.5	* 32
Max Q Clear Time (g_c+I1), s	2.9	27.7	11.4	45.1	21.0	50.1	24.7	20.4
Green Ext Time (p_c), s	0.0	7.5	0.0	0.0	0.2	0.0	0.1	3.7

Intersection Summary	
HCM 6th Ctrl Delay	60.3
HCM 6th LOS	E

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)	156	10	69	100	30	71	25	316	70	108	330	56
Future Volume (veh/h)	156	10	69	100	30	71	25	316	70	108	330	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	205	13	91	132	39	93	33	416	92	142	434	74
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	380	34	120	300	101	156	79	783	171	191	1018	172
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.04	0.27	0.27	0.11	0.34	0.34
Sat Flow, veh/h	892	121	423	653	359	550	1767	2850	623	1767	3013	510
Grp Volume(v), veh/h	309	0	0	264	0	0	33	255	253	142	253	255
Grp Sat Flow(s),veh/h/ln	1436	0	0	1562	0	0	1767	1763	1711	1767	1763	1761
Q Serve(g_s), s	2.4	0.0	0.0	0.0	0.0	0.0	0.9	5.8	5.9	3.7	5.2	5.3
Cycle Q Clear(g_c), s	8.8	0.0	0.0	6.5	0.0	0.0	0.9	5.8	5.9	3.7	5.2	5.3
Prop In Lane	0.66		0.29	0.50		0.35	1.00		0.36	1.00		0.29
Lane Grp Cap(c), veh/h	534	0	0	557	0	0	79	484	470	191	595	595
V/C Ratio(X)	0.58	0.00	0.00	0.47	0.00	0.00	0.42	0.53	0.54	0.75	0.42	0.43
Avail Cap(c_a), veh/h	1138	0	0	1223	0	0	249	917	890	588	1251	1250
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.1	0.0	0.0	14.3	0.0	0.0	21.8	14.4	14.5	20.3	12.0	12.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.2	0.0	0.0	1.3	1.7	1.9	2.2	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	0.0	2.1	0.0	0.0	0.3	2.1	2.1	1.4	1.7	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.5	0.0	0.0	14.6	0.0	0.0	23.1	16.2	16.3	22.5	12.8	12.8
LnGrp LOS	B	A	A	B	A	A	C	B	B	C	B	B
Approach Vol, veh/h		309			264			541			650	
Approach Delay, s/veh		15.5			14.6			16.7			14.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	18.6		18.9	6.5	21.5		18.9
Change Period (Y+Rc), s	4.4	* 5.7		* 5.6	4.4	5.7		5.6
Max Green Setting (Gmax), s	15.6	* 24		* 35	6.6	33.3		34.4
Max Q Clear Time (g_c+I1), s	5.7	7.9		8.5	2.9	7.3		10.8
Green Ext Time (p_c), s	0.1	4.5		1.2	0.0	4.8		1.5

Intersection Summary	
HCM 6th Ctrl Delay	15.5
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)	313	270	34	40	485	68	60	12	33	112	6	350
Future Volume (veh/h)	313	270	34	40	485	68	60	12	33	112	6	350
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.74	1.00		0.96	0.98		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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	382	329	41	49	591	83	73	15	40	137	7	427
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	415	1369	169	62	693	97	204	48	89	171	19	431
Arrive On Green	0.24	0.43	0.43	0.04	0.23	0.23	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1767	3155	390	1767	2960	413	388	128	234	333	52	1140
Grp Volume(v), veh/h	382	183	187	49	350	324	128	0	0	571	0	0
Grp Sat Flow(s),veh/h/ln	1767	1763	1782	1767	1763	1610	750	0	0	1524	0	0
Q Serve(g_s), s	20.7	6.4	6.5	2.7	18.6	18.9	0.0	0.0	0.0	25.6	0.0	0.0
Cycle Q Clear(g_c), s	20.7	6.4	6.5	2.7	18.6	18.9	10.9	0.0	0.0	36.6	0.0	0.0
Prop In Lane	1.00		0.22	1.00		0.26	0.57		0.31	0.24		0.75
Lane Grp Cap(c), veh/h	415	765	773	62	413	377	341	0	0	621	0	0
V/C Ratio(X)	0.92	0.24	0.24	0.78	0.85	0.86	0.38	0.00	0.00	0.92	0.00	0.00
Avail Cap(c_a), veh/h	461	765	773	95	413	377	341	0	0	621	0	0
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	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	36.6	17.5	17.6	47.0	35.9	36.0	21.8	0.0	0.0	30.0	0.0	0.0
Incr Delay (d2), s/veh	22.4	0.7	0.7	20.6	19.0	21.7	3.1	0.0	0.0	20.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	2.6	2.7	1.5	9.8	9.4	2.4	0.0	0.0	16.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.0	18.3	18.3	67.6	55.0	57.7	24.9	0.0	0.0	50.8	0.0	0.0
LnGrp LOS	E	B	B	E	D	E	C	A	A	D	A	A
Approach Vol, veh/h		752			723			128			571	
Approach Delay, s/veh		39.0			57.0			24.9			50.8	
Approach LOS		D			E			C			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	27.5	28.7		42.0	7.9	48.3		42.0
Change Period (Y+Rc), s	4.4	* 5.7		4.9	4.4	5.7		4.9
Max Green Setting (Gmax), s	25.6	* 23		37.1	5.3	42.6		37.1
Max Q Clear Time (g_c+I1), s	22.7	20.9		38.6	4.7	8.5		12.9
Green Ext Time (p_c), s	0.4	0.7		0.0	0.0	2.1		0.9

Intersection Summary	
HCM 6th Ctrl Delay	47.3
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)	52	328	20	119	508	299	30	121	114	185	100	20
Future Volume (veh/h)	52	328	20	119	508	299	30	121	114	185	100	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.96	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	60	381	23	138	591	348	35	141	133	215	116	23
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	77	1226	74	172	882	519	46	327	279	255	892	172
Arrive On Green	0.04	0.36	0.36	0.10	0.42	0.42	0.03	0.18	0.18	0.14	0.30	0.30
Sat Flow, veh/h	1767	3377	203	1767	2116	1246	1767	1768	1511	1767	2940	568
Grp Volume(v), veh/h	60	198	206	138	492	447	35	141	133	215	68	71
Grp Sat Flow(s),veh/h/ln	1767	1763	1817	1767	1763	1599	1767	1763	1516	1767	1763	1745
Q Serve(g_s), s	3.0	7.3	7.4	6.9	20.4	20.4	1.8	6.4	7.1	10.7	2.5	2.7
Cycle Q Clear(g_c), s	3.0	7.3	7.4	6.9	20.4	20.4	1.8	6.4	7.1	10.7	2.5	2.7
Prop In Lane	1.00		0.11	1.00		0.78	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	77	640	660	172	735	667	46	326	280	255	535	530
V/C Ratio(X)	0.78	0.31	0.31	0.80	0.67	0.67	0.77	0.43	0.48	0.84	0.13	0.13
Avail Cap(c_a), veh/h	168	640	660	320	735	667	131	626	538	442	936	926
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.8	20.7	20.7	40.0	21.3	21.3	43.8	32.6	32.9	37.7	22.8	22.9
Incr Delay (d2), s/veh	15.4	1.3	1.2	8.3	4.8	5.3	22.8	0.9	1.3	7.4	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	3.0	3.2	3.3	8.7	8.0	1.1	2.7	2.6	5.0	1.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.2	21.9	21.9	48.3	26.1	26.6	66.6	33.5	34.2	45.0	22.9	23.0
LnGrp LOS	E	C	C	D	C	C	E	C	C	D	C	C
Approach Vol, veh/h		464			1077			309			354	
Approach Delay, s/veh		26.6			29.2			37.6			36.4	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	38.1	6.7	32.3	8.3	43.0	17.5	21.6
Change Period (Y+Rc), s	4.4	5.3	4.4	4.9	4.4	5.3	4.4	4.9
Max Green Setting (Gmax), s	16.4	29.9	6.7	48.0	8.6	37.7	22.6	32.1
Max Q Clear Time (g_c+I1), s	8.9	9.4	3.8	4.7	5.0	22.4	12.7	9.1
Green Ext Time (p_c), s	0.2	2.1	0.0	0.8	0.0	5.3	0.4	1.6

Intersection Summary	
HCM 6th Ctrl Delay	31.0
HCM 6th LOS	C

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	51	30	77	34	20	57
Future Vol, veh/h	51	30	77	34	20	57
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	58	34	88	39	23	65
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Righ	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	7.9	7.7	7.8
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	63%	26%
Vol Thru, %	69%	0%	74%
Vol Right, %	31%	37%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	111	81	77
LT Vol	0	51	20
Through Vol	77	0	57
RT Vol	34	30	0
Lane Flow Rate	126	92	88
Geometry Grp	1	1	1
Degree of Util (X)	0.14	0.11	0.104
Departure Headway (Hd)	3.996	4.321	4.262
Convergence, Y/N	Yes	Yes	Yes
Cap	885	835	830
Service Time	2.075	2.321	2.343
HCM Lane V/C Ratio	0.142	0.11	0.106
HCM Control Delay	7.7	7.9	7.8
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.5	0.4	0.3

Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	22	46	43	31	14	98
Future Vol, veh/h	22	46	43	31	14	98
Conflicting Peds, #/hr	0	3	0	7	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	27	55	52	37	17	118

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	230	81	0	0	96	0
Stage 1	78	-	-	-	-	-
Stage 2	152	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	756	976	-	-	1491	-
Stage 1	943	-	-	-	-	-
Stage 2	874	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	742	967	-	-	1481	-
Mov Cap-2 Maneuver	742	-	-	-	-	-
Stage 1	936	-	-	-	-	-
Stage 2	864	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	0.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	881	1481	-
HCM Lane V/C Ratio	-	-	0.093	0.011	-
HCM Control Delay (s)	-	-	9.5	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	5	25	98	5	17	15	166	64	5	185	10
Future Vol, veh/h	10	5	25	98	5	17	15	166	64	5	185	10
Conflicting Peds, #/hr	0	0	3	0	0	15	0	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	70	70	70	70	70	70	70	70	70
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	14	7	36	140	7	24	21	237	91	7	264	14

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	642	657	276	635	619	298	280	0	0	328	0	0
Stage 1	287	287	-	325	325	-	-	-	-	-	-	-
Stage 2	355	370	-	310	294	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	386	383	760	390	403	739	1277	-	-	1226	-	-
Stage 1	718	673	-	685	647	-	-	-	-	-	-	-
Stage 2	660	618	-	698	668	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	355	372	756	358	391	728	1275	-	-	1226	-	-
Mov Cap-2 Maneuver	355	372	-	358	391	-	-	-	-	-	-	-
Stage 1	702	667	-	671	634	-	-	-	-	-	-	-
Stage 2	609	606	-	651	662	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.5	21.5	0.5	0.2
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1275	-	-	536	387	1226	-	-
HCM Lane V/C Ratio	0.017	-	-	0.107	0.443	0.006	-	-
HCM Control Delay (s)	7.9	0	-	12.5	21.5	8	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	2.2	0	-	-

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	20	10	70	20	15	11	35	15	5	196	37
Future Vol, veh/h	30	20	10	70	20	15	11	35	15	5	196	37
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	34	23	11	80	23	17	13	40	17	6	225	43
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.4	8.9	8.1	9.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	18%	50%	67%	2%
Vol Thru, %	57%	33%	19%	82%
Vol Right, %	25%	17%	14%	16%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	61	60	105	238
LT Vol	11	30	70	5
Through Vol	35	20	20	196
RT Vol	15	10	15	37
Lane Flow Rate	70	69	121	274
Geometry Grp	1	1	1	1
Degree of Util (X)	0.09	0.094	0.163	0.335
Departure Headway (Hd)	4.616	4.892	4.87	4.413
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	775	730	735	815
Service Time	2.654	2.934	2.91	2.441
HCM Lane V/C Ratio	0.09	0.095	0.165	0.336
HCM Control Delay	8.1	8.4	8.9	9.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.3	0.6	1.5

Intersection	
Int Delay, s/veh	14.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑↳			↱
Traffic Vol, veh/h	0	1174	1680	21	0	276
Future Vol, veh/h	0	1174	1680	21	0	276
Conflicting Peds, #/hr	6	0	0	6	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	1223	1750	22	0	288

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	892
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.93
Pot Cap-1 Maneuver	0	-	-	-	0	~ 243
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	~ 242
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	160.9
HCM LOS			F

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	242
HCM Lane V/C Ratio	-	-	-	1.188
HCM Control Delay (s)	-	-	-	160.9
HCM Lane LOS	-	-	-	F
HCM 95th %tile Q(veh)	-	-	-	13.6

Notes

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

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	20	5	31	10	110	5	91	83	110	20	10
Future Vol, veh/h	30	20	5	31	10	110	5	91	83	110	20	10
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	37	24	6	38	12	134	6	111	101	134	24	12
Number of Lanes	0	1	0	0	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay	9.7	8.9	10	10
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	55%	76%	0%	100%	0%
Vol Thru, %	0%	52%	36%	24%	0%	0%	67%
Vol Right, %	0%	48%	9%	0%	100%	0%	33%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	5	174	55	41	110	110	30
LT Vol	5	0	30	31	0	110	0
Through Vol	0	91	20	10	0	0	20
RT Vol	0	83	5	0	110	0	10
Lane Flow Rate	6	212	67	50	134	134	37
Geometry Grp	7	7	6	7	7	7	7
Degree of Util (X)	0.01	0.299	0.109	0.084	0.184	0.221	0.053
Departure Headway (Hd)	5.907	5.067	5.861	6.017	4.932	5.93	5.19
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	602	704	606	592	722	602	685
Service Time	3.676	2.835	3.947	3.787	2.701	3.703	2.963
HCM Lane V/C Ratio	0.01	0.301	0.111	0.084	0.186	0.223	0.054
HCM Control Delay	8.7	10	9.7	9.3	8.8	10.4	8.3
HCM Lane LOS	A	A	A	A	A	B	A
HCM 95th-tile Q	0	1.3	0.4	0.3	0.7	0.8	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	370	710	0	0	895	396	210	5	1206	0	0	0
Future Volume (veh/h)	370	710	0	0	895	396	210	5	1206	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1856	1856	0	1856	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	394	755	0	0	952	421	227	0	1283			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94			
Percent Heavy Veh, %	3	3	0	3	3	3	3	3	3			
Cap, veh/h	712	2847	0	80	975	432	1374	0	1221			
Arrive On Green	0.42	1.00	0.00	0.00	0.28	0.28	0.39	0.00	0.39			
Sat Flow, veh/h	3428	5233	0	703	3526	1562	3534	0	3140			
Grp Volume(v), veh/h	394	755	0	0	952	421	227	0	1283			
Grp Sat Flow(s),veh/h/ln	1714	1689	0	703	1763	1562	1767	0	1570			
Q Serve(g_s), s	7.9	0.0	0.0	0.0	24.1	24.0	3.8	0.0	35.0			
Cycle Q Clear(g_c), s	7.9	0.0	0.0	0.0	24.1	24.0	3.8	0.0	35.0			
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	712	2847	0	80	975	432	1374	0	1221			
V/C Ratio(X)	0.55	0.27	0.00	0.00	0.98	0.97	0.17	0.00	1.05			
Avail Cap(c_a), veh/h	712	2847	0	80	975	432	1374	0	1221			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.67	0.67	0.00	0.00	0.75	0.75	1.00	0.00	1.00			
Uniform Delay (d), s/veh	23.1	0.0	0.0	0.0	32.3	32.2	18.0	0.0	27.5			
Incr Delay (d2), s/veh	0.4	0.2	0.0	0.0	19.8	31.6	0.0	0.0	40.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.7	0.0	0.0	0.0	12.4	12.4	1.5	0.0	19.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.5	0.2	0.0	0.0	52.1	63.8	18.0	0.0	67.6			
LnGrp LOS	C	A	A	A	D	E	B	A	F			
Approach Vol, veh/h		1149			1373			1510				
Approach Delay, s/veh		8.2			55.7			60.2				
Approach LOS		A			E			E				

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	57.6		25.7	31.9		41.1
Change Period (Y+Rc), s	7.0		7.0	* 7		6.1
Max Green Setting (Gmax), s	41.9		11.3	* 25		35.0
Max Q Clear Time (g_c+I1), s	2.0		9.9	26.1		37.0
Green Ext Time (p_c), s	3.7		0.1	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	43.8
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	793	660	611	504	0	0	0	0	297	5	260
Future Volume (veh/h)	0	793	660	611	504	0	0	0	0	297	5	260
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1856	1856	1856	1856	0				1856	1856	1856
Adj Flow Rate, veh/h	0	844	639	650	536	0				404	0	186
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	3	3	3	3	0				3	3	3
Cap, veh/h	0	1545	689	670	2458	0				556	0	247
Arrive On Green	0.00	0.44	0.44	0.33	1.00	0.00				0.16	0.00	0.16
Sat Flow, veh/h	0	3618	1571	3428	3618	0				3534	0	1572
Grp Volume(v), veh/h	0	844	639	650	536	0				404	0	186
Grp Sat Flow(s),veh/h/ln	0	1763	1571	1714	1763	0				1767	0	1572
Q Serve(g_s), s	0.0	15.9	34.6	16.8	0.0	0.0				9.8	0.0	10.2
Cycle Q Clear(g_c), s	0.0	15.9	34.6	16.8	0.0	0.0				9.8	0.0	10.2
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1545	689	670	2458	0				556	0	247
V/C Ratio(X)	0.00	0.55	0.93	0.97	0.22	0.00				0.73	0.00	0.75
Avail Cap(c_a), veh/h	0	1545	689	670	2458	0				1139	0	507
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.32	0.32	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	18.7	23.9	30.0	0.0	0.0				36.1	0.0	36.2
Incr Delay (d2), s/veh	0.0	1.4	20.6	13.2	0.1	0.0				1.8	0.0	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.4	15.7	6.8	0.0	0.0				4.3	0.0	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	20.1	44.5	43.3	0.1	0.0				37.9	0.0	40.8
LnGrp LOS	A	C	D	D	A	A				D	A	D
Approach Vol, veh/h		1483			1186						590	
Approach Delay, s/veh		30.6			23.8						38.8	
Approach LOS		C			C						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	23.3	46.4		20.3		69.7
Change Period (Y+Rc), s *	5.7	7.0		6.1		7.0
Max Green Setting (Gmax), s *	18.0	24.6		29.0		47.9
Max Q Clear Time (g_c+I1), s	19.8	36.6		12.2		2.0
Green Ext Time (p_c), s	0.0	0.0		2.0		3.9

Intersection Summary	
HCM 6th Ctrl Delay	29.6
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	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	240	42	216	682	0	874	930
Future Volume (veh/h)	240	42	216	682	0	874	930
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856		1856	1856
Adj Flow Rate, veh/h	261	46	235	741		950	1011
Peak Hour Factor	0.92	0.92	0.92	0.92		0.92	0.92
Percent Heavy Veh, %	3	3	3	3		3	3
Cap, veh/h	354	162	287	4078		2312	1073
Arrive On Green	0.10	0.10	0.17	1.00		0.68	0.68
Sat Flow, veh/h	3428	1572	3428	5233		3544	1567
Grp Volume(v), veh/h	261	46	235	741		950	1011
Grp Sat Flow(s),veh/h/ln	1714	1572	1714	1689		1689	1567
Q Serve(g_s), s	8.9	3.2	7.9	0.0		14.8	68.8
Cycle Q Clear(g_c), s	8.9	3.2	7.9	0.0		14.8	68.8
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	354	162	287	4078		2312	1073
V/C Ratio(X)	0.74	0.28	0.82	0.18		0.41	0.94
Avail Cap(c_a), veh/h	980	449	360	4078		2312	1073
HCM Platoon Ratio	1.00	1.00	2.00	2.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	0.95	0.95		0.47	0.47
Uniform Delay (d), s/veh	52.2	49.7	49.1	0.0		8.3	16.8
Incr Delay (d2), s/veh	4.0	1.3	8.8	0.1		0.3	9.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	3.0	3.5	0.0		5.0	23.9
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	56.2	51.0	57.8	0.1		8.6	26.3
LnGrp LOS	E	D	E	A		A	C
Approach Vol, veh/h	307			976		1961	
Approach Delay, s/veh	55.4			14.0		17.7	
Approach LOS	E			B		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		101.7		18.3	14.5	87.3
Change Period (Y+Rc), s		* 5.1		5.9	4.4	5.1
Max Green Setting (Gmax), s		* 67		34.3	12.6	57.7
Max Q Clear Time (g_c+I1), s		2.0		10.9	9.9	70.8
Green Ext Time (p_c), s		16.0		1.5	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	20.1
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	1140	687	310	1380	290	376	466	80	350	647	450
Future Volume (veh/h)	310	1140	687	310	1380	290	376	466	80	350	647	450
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	337	1239	672	337	1500	283	409	507	78	380	703	440
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	384	1831	567	355	1787	550	421	1401	431	395	1362	417
Arrive On Green	0.11	0.36	0.36	0.10	0.35	0.35	0.12	0.28	0.28	0.12	0.27	0.27
Sat Flow, veh/h	3428	5066	1570	3428	5066	1559	3428	5066	1557	3428	5066	1550
Grp Volume(v), veh/h	337	1239	672	337	1500	283	409	507	78	380	703	440
Grp Sat Flow(s),veh/h/ln	1714	1689	1570	1714	1689	1559	1714	1689	1557	1714	1689	1550
Q Serve(g_s), s	14.0	30.0	52.4	14.2	39.5	20.8	17.2	11.7	5.5	16.0	17.1	39.0
Cycle Q Clear(g_c), s	14.0	30.0	52.4	14.2	39.5	20.8	17.2	11.7	5.5	16.0	17.1	39.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	384	1831	567	355	1787	550	421	1401	431	395	1362	417
V/C Ratio(X)	0.88	0.68	1.18	0.95	0.84	0.51	0.97	0.36	0.18	0.96	0.52	1.06
Avail Cap(c_a), veh/h	418	1831	567	355	1787	550	421	1411	434	395	1362	417
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.4	39.1	46.3	64.6	43.2	37.1	63.4	42.2	39.9	63.8	45.0	53.0
Incr Delay (d2), s/veh	17.6	1.2	100.0	34.6	4.0	1.3	36.2	0.4	0.5	35.2	0.7	59.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	12.7	35.8	7.9	17.1	8.1	9.6	4.9	2.2	8.9	7.3	21.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	81.0	40.4	146.3	99.2	47.1	38.5	99.6	42.6	40.5	99.1	45.7	112.5
LnGrp LOS	F	D	F	F	D	D	F	D	D	F	D	F
Approach Vol, veh/h		2248			2120			994			1523	
Approach Delay, s/veh		78.1			54.3			65.9			78.3	
Approach LOS		E			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.4	58.9	22.2	44.5	20.7	57.6	21.1	45.6
Change Period (Y+Rc), s	4.4	6.5	4.4	5.5	4.4	* 6.5	4.4	* 5.5
Max Green Setting (Gmax), s	15.0	52.4	17.8	39.0	17.7	* 51	16.7	* 40
Max Q Clear Time (g_c+I1), s	16.2	54.4	19.2	41.0	16.0	41.5	18.0	13.7
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.2	8.2	0.0	7.8

Intersection Summary	
HCM 6th Ctrl Delay	69.0
HCM 6th LOS	E

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)	520	1300	221	387	1163	90	182	295	297	151	411	1090
Future Volume (veh/h)	520	1300	221	387	1163	90	182	295	297	151	411	1090
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	565	1413	240	421	1264	98	198	321	323	164	447	1088
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	551	1502	255	403	1446	112	195	549	487	164	1035	813
Arrive On Green	0.05	0.11	0.11	0.04	0.10	0.10	0.11	0.31	0.31	0.09	0.29	0.29
Sat Flow, veh/h	3428	4357	739	3428	4793	372	1767	1763	1565	1767	3526	2768
Grp Volume(v), veh/h	565	1095	558	421	891	471	198	321	323	164	447	1088
Grp Sat Flow(s),veh/h/ln	1714	1689	1719	1714	1689	1787	1767	1763	1565	1767	1763	1384
Q Serve(g_s), s	20.1	40.2	40.3	14.7	32.5	32.5	13.8	19.2	22.4	11.6	12.8	36.7
Cycle Q Clear(g_c), s	20.1	40.2	40.3	14.7	32.5	32.5	13.8	19.2	22.4	11.6	12.8	36.7
Prop In Lane	1.00		0.43	1.00		0.21	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	551	1164	593	403	1019	539	195	549	487	164	1035	813
V/C Ratio(X)	1.02	0.94	0.94	1.04	0.87	0.87	1.01	0.59	0.66	1.00	0.43	1.34
Avail Cap(c_a), veh/h	551	1164	593	403	1019	539	195	550	488	164	1035	813
HCM Platoon Ratio	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.51	0.51	0.51	0.73	0.73	0.73	0.89	0.89	0.89	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.2	54.1	54.1	60.1	53.9	53.9	55.6	36.3	37.4	56.7	35.7	44.2
Incr Delay (d2), s/veh	33.9	9.2	15.6	50.3	7.9	13.7	64.7	1.0	2.4	70.3	0.5	160.8
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	11.9	19.7	21.2	9.6	15.9	17.7	9.6	8.4	8.9	8.4	5.6	30.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	93.1	63.3	69.8	110.4	61.8	67.6	120.3	37.2	39.8	127.0	36.2	205.0
LnGrp LOS	F	E	E	F	E	E	F	D	D	F	D	F
Approach Vol, veh/h		2218			1783			842			1699	
Approach Delay, s/veh		72.5			74.8			57.7			153.0	
Approach LOS		E			E			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.6	48.2	18.2	42.5	25.0	42.8	16.0	44.7
Change Period (Y+Rc), s	4.9	5.0	4.4	5.8	4.9	* 5	4.4	* 5.8
Max Green Setting (Gmax), s	14.7	39.7	13.8	36.7	20.1	* 34	11.6	* 39
Max Q Clear Time (g_c+I1), s	16.7	42.3	15.8	38.7	22.1	34.5	13.6	24.4
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0

Intersection Summary	
HCM 6th Ctrl Delay	92.2
HCM 6th LOS	F

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)	220	1206	302	50	952	93	404	50	30	126	86	144
Future Volume (veh/h)	220	1206	302	50	952	93	404	50	30	126	86	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	244	1340	336	56	1058	103	520	0	0	140	96	160
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	266	2072	519	83	1922	187	622	326	0	201	211	179
Arrive On Green	0.30	1.00	1.00	0.09	0.81	0.81	0.17	0.00	0.00	0.11	0.11	0.11
Sat Flow, veh/h	1781	4067	1018	1781	4729	460	3563	1870	0	1781	1870	1585
Grp Volume(v), veh/h	244	1121	555	56	761	400	520	0	0	140	96	160
Grp Sat Flow(s),veh/h/ln	1781	1702	1681	1781	1702	1785	1781	1870	0	1781	1870	1585
Q Serve(g_s), s	16.5	0.0	0.0	3.8	9.5	9.5	17.6	0.0	0.0	9.5	6.0	12.5
Cycle Q Clear(g_c), s	16.5	0.0	0.0	3.8	9.5	9.5	17.6	0.0	0.0	9.5	6.0	12.5
Prop In Lane	1.00		0.61	1.00		0.26	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	1734	857	83	1383	725	622	326	0	201	211	179
V/C Ratio(X)	0.92	0.65	0.65	0.68	0.55	0.55	0.84	0.00	0.00	0.70	0.46	0.89
Avail Cap(c_a), veh/h	336	1734	857	108	1383	725	943	495	0	201	211	179
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.91	0.91	0.91	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.0	0.0	0.0	55.8	7.8	7.8	49.9	0.0	0.0	53.4	51.9	54.7
Incr Delay (d2), s/veh	3.0	0.2	0.3	4.5	1.4	2.7	2.5	0.0	0.0	8.6	0.6	38.2
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	6.3	0.0	0.1	1.7	2.5	2.9	8.1	0.0	0.0	4.7	2.9	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.1	0.2	0.3	60.3	9.3	10.6	52.4	0.0	0.0	62.0	52.4	93.0
LnGrp LOS	D	A	A	E	A	B	D	A	A	E	D	F
Approach Vol, veh/h		1920			1217			520			396	
Approach Delay, s/veh		6.1			12.0			52.4			72.2	
Approach LOS		A			B			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.2	69.1		19.0	23.1	56.2		26.7
Change Period (Y+Rc), s	4.4	* 5.4		4.9	4.4	5.4		4.9
Max Green Setting (Gmax), s	7.6	* 51		14.1	23.6	34.6		33.1
Max Q Clear Time (g_c+I1), s	5.8	2.0		14.5	18.5	11.5		19.6
Green Ext Time (p_c), s	0.0	42.4		0.0	0.2	16.3		0.9

Intersection Summary	
HCM 6th Ctrl Delay	20.3
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)	100	100	91	283	25	238	170	942	203	451	744	130
Future Volume (veh/h)	100	100	91	283	25	238	170	942	203	451	744	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	104	104	95	327	-19	248	177	981	211	470	775	135
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	138	145	122	639	0	301	231	1824	391	517	2267	392
Arrive On Green	0.08	0.08	0.08	0.18	0.00	0.18	0.07	0.44	0.44	0.30	1.00	1.00
Sat Flow, veh/h	1767	1856	1554	3534	-127	1664	3428	4163	893	3428	4346	751
Grp Volume(v), veh/h	104	104	95	327	0	229	177	795	397	470	601	309
Grp Sat Flow(s),veh/h/ln	1767	1856	1554	1767	0	1536	1714	1689	1679	1714	1689	1720
Q Serve(g_s), s	7.2	6.8	7.5	10.4	0.0	17.9	6.3	21.6	21.7	16.5	0.0	0.0
Cycle Q Clear(g_c), s	7.2	6.8	7.5	10.4	0.0	17.9	6.3	21.6	21.7	16.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.08	1.00		0.53	1.00		0.44
Lane Grp Cap(c), veh/h	138	145	122	639	0	278	231	1480	736	517	1761	897
V/C Ratio(X)	0.75	0.72	0.78	0.51	0.00	0.82	0.77	0.54	0.54	0.91	0.34	0.34
Avail Cap(c_a), veh/h	192	202	169	964	0	419	318	1480	736	592	1761	897
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	0.87	0.00	0.87	0.68	0.68	0.68	0.84	0.84	0.84
Uniform Delay (d), s/veh	56.4	56.3	56.6	46.2	0.0	48.4	57.3	25.8	25.8	42.8	0.0	0.0
Incr Delay (d2), s/veh	5.8	3.3	9.4	0.2	0.0	4.2	3.1	1.0	1.9	13.6	0.4	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	3.3	3.3	4.6	0.0	7.1	2.8	8.7	8.9	6.8	0.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.3	59.6	65.9	46.4	0.0	52.5	60.4	26.8	27.8	56.5	0.4	0.9
LnGrp LOS	E	E	E	D	A	D	E	C	C	E	A	A
Approach Vol, veh/h		303			556			1369			1380	
Approach Delay, s/veh		62.5			48.9			31.4			19.6	
Approach LOS		E			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	23.2	59.9		14.2	12.8	70.3		27.7
Change Period (Y+Rc), s	4.4	* 5.1		4.4	4.4	5.1		5.1
Max Green Setting (Gmax), s	21.6	* 37		13.6	11.6	46.7		34.1
Max Q Clear Time (g_c+I1), s	19.5	23.7		9.5	8.3	2.0		19.9
Green Ext Time (p_c), s	0.4	11.1		0.3	0.1	19.1		1.5

Intersection Summary	
HCM 6th Ctrl Delay	32.2
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)	140	50	163	60	60	110	243	865	20	160	1030	40
Future Volume (veh/h)	140	50	163	60	60	110	243	865	20	160	1030	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	125	87	173	64	64	117	259	920	21	170	1096	43
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	213	224	188	192	202	166	285	2587	59	194	2281	89
Arrive On Green	0.12	0.12	0.12	0.11	0.11	0.11	0.16	0.51	0.51	0.22	0.91	0.91
Sat Flow, veh/h	1767	1856	1553	1767	1856	1529	1767	5093	116	1767	5000	196
Grp Volume(v), veh/h	125	87	173	64	64	117	259	610	331	170	740	399
Grp Sat Flow(s),veh/h/ln	1767	1856	1553	1767	1856	1529	1767	1689	1832	1767	1689	1819
Q Serve(g_s), s	8.4	5.4	13.8	4.2	4.0	9.2	18.0	13.6	13.6	11.6	4.3	4.3
Cycle Q Clear(g_c), s	8.4	5.4	13.8	4.2	4.0	9.2	18.0	13.6	13.6	11.6	4.3	4.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.06	1.00		0.11
Lane Grp Cap(c), veh/h	213	224	188	192	202	166	285	1715	931	194	1541	830
V/C Ratio(X)	0.59	0.39	0.92	0.33	0.32	0.70	0.91	0.36	0.36	0.88	0.48	0.48
Avail Cap(c_a), veh/h	213	224	188	481	505	416	348	1715	931	297	1541	830
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.79	0.79	0.79	0.58	0.58	0.58
Uniform Delay (d), s/veh	52.0	50.7	54.4	51.5	51.4	53.8	51.5	18.5	18.5	48.0	3.2	3.2
Incr Delay (d2), s/veh	2.8	0.4	43.5	0.4	0.3	2.0	18.2	0.5	0.8	7.3	0.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	2.5	7.6	1.9	1.9	3.6	9.3	5.3	5.9	4.9	1.1	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.8	51.1	97.8	51.9	51.7	55.8	69.7	18.9	19.3	55.2	3.8	4.3
LnGrp LOS	D	D	F	D	D	E	E	B	B	E	A	A
Approach Vol, veh/h		385			245			1200			1309	
Approach Delay, s/veh		73.3			53.7			30.0			10.6	
Approach LOS		E			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.1	68.4		20.0	24.6	61.9		18.5
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9
Max Green Setting (Gmax), s	21.6	35.8		15.1	24.6	32.2		34.0
Max Q Clear Time (g_c+I1), s	13.6	15.6		15.8	20.0	6.3		11.2
Green Ext Time (p_c), s	0.1	13.3		0.0	0.2	19.9		0.5

Intersection Summary	
HCM 6th Ctrl Delay	29.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	40	70	40	20	82	30	622	65	149	740	20
Future Volume (veh/h)	40	40	70	40	20	82	30	622	65	149	740	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	43	43	74	43	21	87	32	662	69	159	787	21
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	213	158	250	308	50	208	53	1190	124	206	1600	43
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.03	0.37	0.37	0.12	0.46	0.46
Sat Flow, veh/h	472	992	1567	1262	315	1303	1767	3220	335	1767	3508	94
Grp Volume(v), veh/h	86	0	74	43	0	108	32	362	369	159	395	413
Grp Sat Flow(s),veh/h/ln	1463	0	1567	1262	0	1618	1767	1763	1792	1767	1763	1838
Q Serve(g_s), s	0.0	0.0	1.6	1.2	0.0	2.4	0.7	6.4	6.4	3.4	6.2	6.2
Cycle Q Clear(g_c), s	2.4	0.0	1.6	3.6	0.0	2.4	0.7	6.4	6.4	3.4	6.2	6.2
Prop In Lane	0.50		1.00	1.00		0.81	1.00		0.19	1.00		0.05
Lane Grp Cap(c), veh/h	371	0	250	308	0	259	53	652	662	206	804	839
V/C Ratio(X)	0.23	0.00	0.30	0.14	0.00	0.42	0.60	0.56	0.56	0.77	0.49	0.49
Avail Cap(c_a), veh/h	1207	0	1117	994	0	1138	270	1145	1164	585	1477	1541
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.5	0.0	14.5	16.5	0.0	14.8	18.8	9.8	9.8	16.8	7.5	7.5
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.1	0.0	0.4	4.0	1.0	1.0	2.3	0.9	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	0.6	0.0	0.5	0.3	0.0	0.8	0.3	2.0	2.0	1.3	1.8	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.7	0.0	14.8	16.6	0.0	15.2	22.9	10.8	10.8	19.2	8.4	8.4
LnGrp LOS	B	A	B	B	A	B	C	B	B	B	A	A
Approach Vol, veh/h		160			151			763			967	
Approach Delay, s/veh		14.7			15.6			11.3			10.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.6	20.0		10.7	5.2	23.4		10.7
Change Period (Y+Rc), s	4.0	5.5		* 4.4	4.0	* 5.5		4.4
Max Green Setting (Gmax), s	13.6	25.5		* 28	6.0	* 33		27.6
Max Q Clear Time (g_c+I1), s	5.4	8.4		4.4	2.7	8.2		5.6
Green Ext Time (p_c), s	0.1	5.7		0.4	0.0	9.6		0.5

Intersection Summary	
HCM 6th Ctrl Delay	11.4
HCM 6th LOS	B

Notes

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

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (veh/h)	60	91	0	691	85	116	724
Future Volume (veh/h)	60	91	0	691	85	116	724
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No
Adj Sat Flow, veh/h/ln	1856	1856		1856	1856	1856	1856
Adj Flow Rate, veh/h	71	107		813	100	136	852
Peak Hour Factor	0.85	0.85		0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3		3	3	3	3
Cap, veh/h	186	165		1425	175	175	2300
Arrive On Green	0.11	0.11		0.45	0.45	0.10	0.65
Sat Flow, veh/h	1767	1572		3252	389	1767	3618
Grp Volume(v), veh/h	71	107		454	459	136	852
Grp Sat Flow(s),veh/h/ln	1767	1572		1763	1785	1767	1763
Q Serve(g_s), s	1.5	2.6		7.4	7.5	2.9	4.3
Cycle Q Clear(g_c), s	1.5	2.6		7.4	7.5	2.9	4.3
Prop In Lane	1.00	1.00			0.22	1.00	
Lane Grp Cap(c), veh/h	186	165		795	805	175	2300
V/C Ratio(X)	0.38	0.65		0.57	0.57	0.78	0.37
Avail Cap(c_a), veh/h	1173	1044		1328	1345	496	3178
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	16.8		7.9	7.9	17.2	3.1
Incr Delay (d2), s/veh	0.5	1.6		0.9	0.9	2.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.9		2.1	2.1	1.2	0.6
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	16.8	18.4		8.9	8.9	20.0	3.3
LnGrp LOS	B	B		A	A	C	A
Approach Vol, veh/h	178			913			988
Approach Delay, s/veh	17.8			8.9			5.6
Approach LOS	B			A			A

Timer - Assigned Phs	1	2			6		8
Phs Duration (G+Y+Rc), s	7.9	23.2			31.0		8.1
Change Period (Y+Rc), s	4.0	5.5			* 5.5		4.0
Max Green Setting (Gmax), s	11.0	29.5			* 35		26.0
Max Q Clear Time (g_c+I1), s	4.9	9.5			6.3		4.6
Green Ext Time (p_c), s	0.1	8.2			11.7		0.3

Intersection Summary	
HCM 6th Ctrl Delay	8.1
HCM 6th LOS	A

Notes

User approved ignoring U-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	5	25	60	5	30	20	779	70	75	711	21
Future Volume (veh/h)	18	5	25	60	5	30	20	779	70	75	711	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		1.00	1.00		0.96	1.00		0.99	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	20	6	28	67	6	33	22	866	78	83	790	23
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	162	55	111	338	24	206	38	1483	134	104	1717	50
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.02	0.45	0.45	0.06	0.49	0.49
Sat Flow, veh/h	350	403	811	1302	173	1507	1767	3268	294	1767	3495	102
Grp Volume(v), veh/h	54	0	0	73	0	33	22	467	477	83	398	415
Grp Sat Flow(s),veh/h/ln	1564	0	0	1476	0	1507	1767	1763	1799	1767	1763	1834
Q Serve(g_s), s	0.0	0.0	0.0	0.5	0.0	0.8	0.5	8.5	8.5	2.0	6.4	6.4
Cycle Q Clear(g_c), s	1.2	0.0	0.0	1.7	0.0	0.8	0.5	8.5	8.5	2.0	6.4	6.4
Prop In Lane	0.37		0.52	0.92		1.00	1.00		0.16	1.00		0.06
Lane Grp Cap(c), veh/h	328	0	0	362	0	206	38	800	817	104	866	901
V/C Ratio(X)	0.16	0.00	0.00	0.20	0.00	0.16	0.58	0.58	0.58	0.80	0.46	0.46
Avail Cap(c_a), veh/h	1027	0	0	1017	0	914	172	1306	1333	283	1421	1478
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.6	0.0	0.0	16.7	0.0	16.4	20.9	8.7	8.7	20.0	7.2	7.2
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.1	5.1	1.0	0.9	5.2	0.9	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	0.4	0.0	0.0	0.6	0.0	0.3	0.3	2.5	2.6	0.9	1.9	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.7	0.0	0.0	16.8	0.0	16.5	26.0	9.7	9.7	25.3	8.1	8.0
LnGrp LOS	B	A	A	B	A	B	C	A	A	C	A	A
Approach Vol, veh/h		54			106			966			896	
Approach Delay, s/veh		16.7			16.7			10.1			9.6	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.9	25.3		10.8	5.3	26.9		10.8
Change Period (Y+Rc), s	4.4	5.8		4.9	4.4	* 5.8		4.9
Max Green Setting (Gmax), s	6.9	31.9		26.1	4.2	* 35		26.1
Max Q Clear Time (g_c+I1), s	4.0	10.5		3.2	2.5	8.4		3.7
Green Ext Time (p_c), s	0.0	8.8		0.1	0.0	10.7		0.3

Intersection Summary	
HCM 6th Ctrl Delay	10.4
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* 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	1674	1424	0	1764	213	900	140	1132	0	0	0
Future Volume (veh/h)	0	1674	1424	0	1764	213	900	140	1132	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	0	1708	1453	0	1800	217	1020	0	1155			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98			
Percent Heavy Veh, %	0	3	3	0	3	3	3	3	3			
Cap, veh/h	0	2558	2451	0	1780	784	1345	0	1197			
Arrive On Green	0.00	1.00	1.00	0.00	0.50	0.50	0.38	0.00	0.38			
Sat Flow, veh/h	0	5233	2768	0	3618	1552	3534	0	3145			
Grp Volume(v), veh/h	0	1708	1453	0	1800	217	1020	0	1155			
Grp Sat Flow(s),veh/h/ln	0	1689	1384	0	1763	1552	1767	0	1572			
Q Serve(g_s), s	0.0	0.0	55.5	0.0	55.5	8.8	27.6	0.0	39.6			
Cycle Q Clear(g_c), s	0.0	0.0	55.5	0.0	55.5	8.8	27.6	0.0	39.6			
Prop In Lane	0.00		1.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	2558	2451	0	1780	784	1345	0	1197			
V/C Ratio(X)	0.00	0.67	0.59	0.00	1.01	0.28	0.76	0.00	0.97			
Avail Cap(c_a), veh/h	0	2558	2451	0	1780	784	1346	0	1198			
HCM Platoon Ratio	1.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	0.57	0.57	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	27.2	15.7	29.7	0.0	33.4			
Incr Delay (d2), s/veh	0.0	0.8	0.6	0.0	24.1	0.9	2.5	0.0	18.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.2	0.0	26.8	3.1	12.0	0.0	17.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.8	0.6	0.0	51.3	16.5	32.2	0.0	51.6			
LnGrp LOS	A	A	A	A	F	B	C	A	D			
Approach Vol, veh/h		3161			2017			2175				
Approach Delay, s/veh		0.7			47.6			42.5				
Approach LOS		A			D			D				

Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		63.0				63.0		47.0				
Change Period (Y+Rc), s		7.5				7.5		5.1				
Max Green Setting (Gmax), s		55.5				55.5		41.9				
Max Q Clear Time (g_c+I1), s		57.5				57.5		41.6				
Green Ext Time (p_c), s		0.0				0.0		0.3				

Intersection Summary			
HCM 6th Ctrl Delay			25.9
HCM 6th LOS			C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2841	650	0	1924	740	0	0	0	257	10	0
Future Volume (veh/h)	0	2841	650	0	1924	740	0	0	0	257	10	0
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856				1856	1856	0
Adj Flow Rate, veh/h	0	2899	663	0	1963	0				269	0	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	3	3	0	3	3				3	3	0
Cap, veh/h	0	3991	1239	0	2778					345	181	0
Arrive On Green	0.00	0.79	0.79	0.00	1.00	0.00				0.10	0.00	0.00
Sat Flow, veh/h	0	5233	1572	0	3618	1572				3534	1856	0
Grp Volume(v), veh/h	0	2899	663	0	1963	0				269	0	0
Grp Sat Flow(s),veh/h/ln	0	1689	1572	0	1763	1572				1767	1856	0
Q Serve(g_s), s	0.0	31.2	17.0	0.0	0.0	0.0				8.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	31.2	17.0	0.0	0.0	0.0				8.2	0.0	0.0
Prop In Lane	0.00		1.00	0.00		1.00				1.00		0.00
Lane Grp Cap(c), veh/h	0	3991	1239	0	2778					345	181	0
V/C Ratio(X)	0.00	0.73	0.54	0.00	0.71					0.78	0.00	0.00
Avail Cap(c_a), veh/h	0	3991	1239	0	2778					575	302	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.15	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	5.8	4.3	0.0	0.0	0.0				48.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	1.7	0.0	0.2	0.0				3.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.0	3.9	0.0	0.1	0.0				3.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	7.0	5.9	0.0	0.2	0.0				52.3	0.0	0.0
LnGrp LOS	A	A	A	A	A					D	A	A
Approach Vol, veh/h		3562			1963	A					269	
Approach Delay, s/veh		6.8			0.2						52.3	
Approach LOS		A			A						D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		94.2		15.8		94.2
Change Period (Y+Rc), s		7.5		5.1		7.5
Max Green Setting (Gmax), s		79.5		17.9		79.5
Max Q Clear Time (g_c+I1), s		33.2		10.2		2.0
Green Ext Time (p_c), s		41.1		0.6		29.9

Intersection Summary	
HCM 6th Ctrl Delay	6.7
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	128	10	77	460	862	0	0	376	495
Future Volume (veh/h)	0	0	0	128	10	77	460	862	0	0	376	495
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1856	1856	1856	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				136	11	82	489	917	0	0	400	527
Peak Hour Factor				0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %				3	3	3	3	3	0	0	3	3
Cap, veh/h				204	16	193	586	2528	0	0	1732	1326
Arrive On Green				0.12	0.12	0.12	0.17	0.72	0.00	0.00	0.49	0.49
Sat Flow, veh/h				1641	133	1551	3428	3618	0	0	3618	2700
Grp Volume(v), veh/h				147	0	82	489	917	0	0	400	527
Grp Sat Flow(s),veh/h/ln				1774	0	1551	1714	1763	0	0	1763	1350
Q Serve(g_s), s				6.3	0.0	3.9	11.0	8.0	0.0	0.0	5.2	9.9
Cycle Q Clear(g_c), s				6.3	0.0	3.9	11.0	8.0	0.0	0.0	5.2	9.9
Prop In Lane				0.93		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				220	0	193	586	2528	0	0	1732	1326
V/C Ratio(X)				0.67	0.00	0.43	0.83	0.36	0.00	0.00	0.23	0.40
Avail Cap(c_a), veh/h				443	0	388	883	2528	0	0	1732	1326
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.93	0.93	0.00	0.00	0.94	0.94
Uniform Delay (d), s/veh				33.5	0.0	32.4	32.1	4.3	0.0	0.0	11.7	12.9
Incr Delay (d2), s/veh				1.3	0.0	0.6	2.5	0.4	0.0	0.0	0.3	0.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.6	0.0	1.4	4.4	1.8	0.0	0.0	1.8	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				34.8	0.0	32.9	34.6	4.7	0.0	0.0	12.0	13.7
LnGrp LOS				C	A	C	C	A	A	A	B	B
Approach Vol, veh/h					229			1406			927	
Approach Delay, s/veh					34.1			15.1			13.0	
Approach LOS					C			B			B	

Timer - Assigned Phs	2	5	6	8
Phs Duration (G+Y+Rc), s	63.1	18.1	45.0	16.9
Change Period (Y+Rc), s	* 5.7	4.4	5.7	7.0
Max Green Setting (Gmax), s	* 48	20.6	22.3	20.0
Max Q Clear Time (g_c+I1), s	10.0	13.0	11.9	8.3
Green Ext Time (p_c), s	4.9	0.6	4.3	0.4

Intersection Summary	
HCM 6th Ctrl Delay	16.0
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)	446	0	300	0	0	0	0	666	180	33	291	0
Future Volume (veh/h)	446	0	300	0	0	0	0	666	180	33	291	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	1856	1856	1856				0	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	537	0	361				0	802	217	40	351	0
Peak Hour Factor	0.83	0.83	0.83				0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	3	3	3				0	3	3	3	3	0
Cap, veh/h	732	0	652				0	2905	761	52	2328	0
Arrive On Green	0.21	0.00	0.21				0.00	0.58	0.58	0.06	1.00	0.00
Sat Flow, veh/h	3534	0	3145				0	5304	1321	1767	3618	0
Grp Volume(v), veh/h	537	0	361				0	760	259	40	351	0
Grp Sat Flow(s),veh/h/ln	1767	0	1572				0	1596	1578	1767	1763	0
Q Serve(g_s), s	11.4	0.0	8.2				0.0	6.4	6.7	1.8	0.0	0.0
Cycle Q Clear(g_c), s	11.4	0.0	8.2				0.0	6.4	6.7	1.8	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.84	1.00		0.00
Lane Grp Cap(c), veh/h	732	0	652				0	2757	909	52	2328	0
V/C Ratio(X)	0.73	0.00	0.55				0.00	0.28	0.29	0.77	0.15	0.00
Avail Cap(c_a), veh/h	1241	0	1105				0	2757	909	389	2328	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.98	0.98	0.00
Uniform Delay (d), s/veh	29.6	0.0	28.4				0.0	8.6	8.6	37.4	0.0	0.0
Incr Delay (d2), s/veh	1.4	0.0	0.7				0.0	0.2	0.8	8.4	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	0.0	3.1				0.0	1.8	2.0	0.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.1	0.0	29.1				0.0	8.8	9.4	45.7	0.1	0.0
LnGrp LOS	C	A	C				A	A	A	D	A	A
Approach Vol, veh/h		898						1019			391	
Approach Delay, s/veh		30.3						9.0			4.8	
Approach LOS		C						A			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.8	51.8		21.5		58.5
Change Period (Y+Rc), s	4.4	* 5.7		4.9		5.7
Max Green Setting (Gmax), s	17.6	* 19		28.1		41.3
Max Q Clear Time (g_c+I1), s	13.8	8.7		13.4		2.0
Green Ext Time (p_c), s	0.0	5.8		3.2		1.5

Intersection Summary	
HCM 6th Ctrl Delay	16.6
HCM 6th LOS	B

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)	379	1954	80	130	1044	106	50	54	41	83	40	63
Future Volume (veh/h)	379	1954	80	130	1044	106	50	54	41	83	40	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	391	2014	82	134	1076	109	52	56	42	86	41	65
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	422	2383	97	165	1549	157	104	58	43	237	85	134
Arrive On Green	0.24	0.48	0.48	0.09	0.33	0.33	0.06	0.06	0.06	0.13	0.13	0.13
Sat Flow, veh/h	1767	4993	203	1767	4669	472	1767	982	737	1767	630	998
Grp Volume(v), veh/h	391	1360	736	134	778	407	52	0	98	86	0	106
Grp Sat Flow(s),veh/h/ln	1767	1689	1819	1767	1689	1765	1767	0	1719	1767	0	1628
Q Serve(g_s), s	19.4	31.7	31.9	6.7	18.0	18.0	2.6	0.0	5.1	4.0	0.0	5.4
Cycle Q Clear(g_c), s	19.4	31.7	31.9	6.7	18.0	18.0	2.6	0.0	5.1	4.0	0.0	5.4
Prop In Lane	1.00		0.11	1.00		0.27	1.00		0.43	1.00		0.61
Lane Grp Cap(c), veh/h	422	1611	868	165	1121	586	104	0	101	237	0	219
V/C Ratio(X)	0.93	0.84	0.85	0.81	0.69	0.70	0.50	0.00	0.97	0.36	0.00	0.48
Avail Cap(c_a), veh/h	425	1658	893	185	1215	635	104	0	101	787	0	725
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	33.4	20.6	20.6	39.9	26.0	26.1	41.0	0.0	42.2	35.4	0.0	36.0
Incr Delay (d2), s/veh	25.8	4.3	7.8	19.0	1.8	3.4	1.4	0.0	77.8	0.3	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	10.5	11.2	13.0	3.6	6.7	7.3	1.1	0.0	4.3	1.7	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.2	24.8	28.4	58.9	27.9	29.5	42.3	0.0	120.0	35.7	0.0	36.6
LnGrp LOS	E	C	C	E	C	C	D	A	F	D	A	D
Approach Vol, veh/h		2487			1319			150			192	
Approach Delay, s/veh		31.3			31.5			93.1			36.2	
Approach LOS		C			C			F			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.8	49.9		17.0	25.8	36.8		10.2
Change Period (Y+Rc), s	4.4	7.0		4.9	4.4	* 7		4.9
Max Green Setting (Gmax), s	9.4	44.1		40.0	21.6	* 32		5.3
Max Q Clear Time (g_c+I1), s	10.7	33.9		7.4	21.4	20.0		7.1
Green Ext Time (p_c), s	0.0	9.0		0.5	0.0	7.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	33.8
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)	434	1636	25	50	948	366	30	32	25	345	32	253
Future Volume (veh/h)	434	1636	25	50	948	366	30	32	25	345	32	253
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	457	1722	26	53	998	385	32	34	26	387	0	266
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	547	2681	40	67	1432	552	90	97	75	382	0	167
Arrive On Green	0.16	0.52	0.52	0.04	0.40	0.40	0.08	0.08	0.08	0.11	0.00	0.11
Sat Flow, veh/h	3428	5139	78	1767	3579	1380	1183	1269	979	3534	0	1547
Grp Volume(v), veh/h	457	1131	617	53	942	441	49	0	43	387	0	266
Grp Sat Flow(s),veh/h/ln	1714	1689	1839	1767	1689	1582	1796	0	1634	1767	0	1547
Q Serve(g_s), s	10.8	20.1	20.1	2.5	19.3	19.3	2.1	0.0	2.1	9.0	0.0	9.0
Cycle Q Clear(g_c), s	10.8	20.1	20.1	2.5	19.3	19.3	2.1	0.0	2.1	9.0	0.0	9.0
Prop In Lane	1.00		0.04	1.00		0.87	0.66		0.60	1.00		1.00
Lane Grp Cap(c), veh/h	547	1762	960	67	1351	633	137	0	125	382	0	167
V/C Ratio(X)	0.83	0.64	0.64	0.79	0.70	0.70	0.35	0.00	0.35	1.01	0.00	1.59
Avail Cap(c_a), veh/h	807	1960	1067	136	1424	667	755	0	687	382	0	167
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	33.9	14.3	14.3	39.7	20.8	20.8	36.5	0.0	36.5	37.1	0.0	37.1
Incr Delay (d2), s/veh	3.2	1.2	2.1	7.4	1.8	3.8	2.2	0.0	2.4	49.3	0.0	292.0
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	4.3	6.3	7.1	1.1	6.8	6.7	1.0	0.0	0.9	6.3	0.0	16.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.1	15.5	16.4	47.1	22.6	24.6	38.7	0.0	38.8	86.4	0.0	329.1
LnGrp LOS	D	B	B	D	C	C	D	A	D	F	A	F
Approach Vol, veh/h		2205			1436			92			653	
Approach Delay, s/veh		20.2			24.1			38.8			185.3	
Approach LOS		C			C			D			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	49.4		15.0	17.7	39.3		11.3
Change Period (Y+Rc), s	4.4	6.0		6.0	4.4	6.0		4.9
Max Green Setting (Gmax), s	6.4	48.3		9.0	19.6	35.1		35.0
Max Q Clear Time (g_c+I1), s	4.5	22.1		11.0	12.8	21.3		4.1
Green Ext Time (p_c), s	0.0	21.4		0.0	0.5	9.9		0.7

Intersection Summary	
HCM 6th Ctrl Delay	46.5
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	611	873	447	230	440	20	446	950	70	15	730	418
Future Volume (veh/h)	611	873	447	230	440	20	446	950	70	15	730	418
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		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	664	949	447	250	478	22	485	1033	76	16	793	418
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	709	1013	444	271	1130	52	494	1351	99	23	949	414
Arrive On Green	0.21	0.29	0.29	0.15	0.23	0.23	0.14	0.41	0.41	0.01	0.27	0.27
Sat Flow, veh/h	3428	3526	1546	1767	4964	227	3428	3324	244	1767	3526	1536
Grp Volume(v), veh/h	664	949	447	250	324	176	485	548	561	16	793	418
Grp Sat Flow(s),veh/h/ln	1714	1763	1546	1767	1689	1814	1714	1763	1805	1767	1763	1536
Q Serve(g_s), s	28.4	39.2	42.9	20.8	12.2	12.4	21.1	40.0	40.0	1.3	31.7	40.2
Cycle Q Clear(g_c), s	28.4	39.2	42.9	20.8	12.2	12.4	21.1	40.0	40.0	1.3	31.7	40.2
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	709	1013	444	271	769	413	494	716	734	23	949	414
V/C Ratio(X)	0.94	0.94	1.01	0.92	0.42	0.43	0.98	0.76	0.77	0.70	0.84	1.01
Avail Cap(c_a), veh/h	760	1013	444	289	785	422	494	716	734	49	949	414
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.2	51.9	53.2	62.3	49.2	49.3	63.7	38.2	38.2	73.4	51.4	54.5
Incr Delay (d2), s/veh	17.6	15.5	44.2	31.4	0.4	0.8	35.7	5.1	5.0	13.2	6.7	47.0
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	18.6	18.8	21.7	11.5	5.1	5.6	11.5	17.8	18.2	0.7	14.7	20.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.9	67.3	97.4	93.7	49.7	50.1	99.4	43.3	43.2	86.6	58.1	101.6
LnGrp LOS	E	E	F	F	D	D	F	D	D	F	E	F
Approach Vol, veh/h		2060			750			1594			1227	
Approach Delay, s/veh		76.6			64.5			60.3			73.3	
Approach LOS		E			E			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.5	67.3	26.5	50.0	26.0	46.8	35.4	41.1
Change Period (Y+Rc), s	3.6	6.6	3.6	7.1	4.5	* 6.6	4.5	* 7.1
Max Green Setting (Gmax), s	4.1	57.7	24.4	42.9	21.5	* 40	33.1	* 35
Max Q Clear Time (g_c+I1), s	3.3	42.0	22.8	44.9	23.1	42.2	30.4	14.4
Green Ext Time (p_c), s	0.0	7.1	0.1	0.0	0.0	0.0	0.5	3.3

Intersection Summary	
HCM 6th Ctrl Delay	69.6
HCM 6th LOS	E

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)	95	5	38	25	10	26	70	642	50	79	562	147
Future Volume (veh/h)	95	5	38	25	10	26	70	642	50	79	562	147
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.98	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	99	5	40	26	10	27	73	669	52	82	585	153
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	286	27	67	186	81	112	143	1288	100	153	1094	285
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.08	0.39	0.39	0.09	0.40	0.40
Sat Flow, veh/h	905	168	413	429	501	697	1767	3304	257	1767	2764	721
Grp Volume(v), veh/h	144	0	0	63	0	0	73	357	364	82	372	366
Grp Sat Flow(s),veh/h/ln	1486	0	0	1627	0	0	1767	1763	1798	1767	1763	1723
Q Serve(g_s), s	2.3	0.0	0.0	0.0	0.0	0.0	1.7	6.7	6.7	1.9	7.0	7.1
Cycle Q Clear(g_c), s	3.7	0.0	0.0	1.4	0.0	0.0	1.7	6.7	6.7	1.9	7.0	7.1
Prop In Lane	0.69		0.28	0.41		0.43	1.00		0.14	1.00		0.42
Lane Grp Cap(c), veh/h	380	0	0	379	0	0	143	687	701	153	697	682
V/C Ratio(X)	0.38	0.00	0.00	0.17	0.00	0.00	0.51	0.52	0.52	0.53	0.53	0.54
Avail Cap(c_a), veh/h	1209	0	0	1278	0	0	351	1358	1386	351	1354	1323
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.7	0.0	0.0	15.8	0.0	0.0	19.1	10.1	10.1	18.9	10.0	10.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.1	0.0	0.0	1.0	1.2	1.2	1.1	1.0	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	1.2	0.0	0.0	0.5	0.0	0.0	0.6	2.0	2.0	0.7	2.1	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.0	0.0	0.0	15.9	0.0	0.0	20.1	11.3	11.3	20.0	11.1	11.1
LnGrp LOS	B	A	A	B	A	A	C	B	B	C	B	B
Approach Vol, veh/h		144			63			794			820	
Approach Delay, s/veh		17.0			15.9			12.1			12.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.2	22.6		12.6	7.9	22.8		12.6
Change Period (Y+Rc), s	4.4	* 5.7		* 5.6	4.4	5.7		5.6
Max Green Setting (Gmax), s	8.6	* 33		* 33	8.6	33.3		32.4
Max Q Clear Time (g_c+I1), s	3.9	8.7		3.4	3.7	9.1		5.7
Green Ext Time (p_c), s	0.0	8.0		0.2	0.0	7.4		0.6

Intersection Summary	
HCM 6th Ctrl Delay	12.6
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)	150	668	43	54	624	82	24	6	24	49	7	143
Future Volume (veh/h)	150	668	43	54	624	82	24	6	24	49	7	143
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.85	0.99		0.95	0.97		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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	165	734	47	59	686	90	26	7	26	54	8	157
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	199	1577	101	76	1221	160	239	74	205	146	43	363
Arrive On Green	0.11	0.47	0.47	0.04	0.40	0.40	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1767	3363	215	1767	3060	401	553	221	610	299	128	1079
Grp Volume(v), veh/h	165	385	396	59	395	381	59	0	0	219	0	0
Grp Sat Flow(s),veh/h/ln	1767	1763	1815	1767	1763	1698	1385	0	0	1505	0	0
Q Serve(g_s), s	9.0	14.6	14.6	3.3	17.1	17.2	0.0	0.0	0.0	4.7	0.0	0.0
Cycle Q Clear(g_c), s	9.0	14.6	14.6	3.3	17.1	17.2	2.4	0.0	0.0	10.7	0.0	0.0
Prop In Lane	1.00		0.12	1.00		0.24	0.44		0.44	0.25		0.72
Lane Grp Cap(c), veh/h	199	827	851	76	703	677	518	0	0	551	0	0
V/C Ratio(X)	0.83	0.47	0.47	0.78	0.56	0.56	0.11	0.00	0.00	0.40	0.00	0.00
Avail Cap(c_a), veh/h	334	827	851	102	703	677	518	0	0	551	0	0
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	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	42.8	17.8	17.8	46.7	22.9	23.0	22.5	0.0	0.0	25.2	0.0	0.0
Incr Delay (d2), s/veh	8.4	1.9	1.8	23.1	3.2	3.4	0.4	0.0	0.0	2.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	5.9	6.1	1.9	7.3	7.1	1.0	0.0	0.0	4.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.2	19.6	19.6	69.8	26.1	26.3	23.0	0.0	0.0	27.3	0.0	0.0
LnGrp LOS	D	B	B	E	C	C	C	A	A	C	A	A
Approach Vol, veh/h		946			835			59			219	
Approach Delay, s/veh		25.1			29.3			23.0			27.3	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.5	45.0		38.0	8.6	51.9		38.0
Change Period (Y+Rc), s	4.4	* 5.7		4.9	4.4	5.7		4.9
Max Green Setting (Gmax), s	18.6	* 34		33.1	5.7	46.2		33.1
Max Q Clear Time (g_c+I1), s	11.0	19.2		12.7	5.3	16.6		4.4
Green Ext Time (p_c), s	0.2	4.0		1.4	0.0	5.0		0.3

Intersection Summary	
HCM 6th Ctrl Delay	27.0
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)	190	432	40	206	314	216	40	190	189	219	241	62
Future Volume (veh/h)	190	432	40	206	314	216	40	190	189	219	241	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	196	445	41	212	324	223	41	196	195	226	248	64
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	233	964	88	250	609	408	52	375	324	264	926	234
Arrive On Green	0.13	0.30	0.30	0.14	0.30	0.30	0.03	0.21	0.21	0.15	0.33	0.33
Sat Flow, veh/h	1767	3262	299	1767	1997	1339	1767	1763	1520	1767	2781	702
Grp Volume(v), veh/h	196	240	246	212	285	262	41	196	195	226	155	157
Grp Sat Flow(s),veh/h/ln	1767	1763	1798	1767	1763	1574	1767	1763	1520	1767	1763	1720
Q Serve(g_s), s	10.2	10.5	10.6	11.1	12.7	13.1	2.2	9.3	10.9	11.8	6.1	6.3
Cycle Q Clear(g_c), s	10.2	10.5	10.6	11.1	12.7	13.1	2.2	9.3	10.9	11.8	6.1	6.3
Prop In Lane	1.00		0.17	1.00		0.85	1.00		1.00	1.00		0.41
Lane Grp Cap(c), veh/h	233	521	531	250	538	480	52	375	324	264	587	573
V/C Ratio(X)	0.84	0.46	0.46	0.85	0.53	0.55	0.79	0.52	0.60	0.86	0.26	0.27
Avail Cap(c_a), veh/h	367	521	531	385	538	480	133	597	515	385	849	829
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	27.1	27.2	39.6	27.2	27.4	45.6	32.9	33.6	39.2	23.0	23.1
Incr Delay (d2), s/veh	9.7	2.9	2.9	10.4	3.7	4.4	23.2	1.1	1.8	12.1	0.2	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	4.9	4.6	4.7	5.3	5.6	5.3	1.3	4.0	4.1	5.9	2.5	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.8	30.0	30.0	50.0	30.9	31.8	68.7	34.0	35.4	51.3	23.3	23.4
LnGrp LOS	D	C	C	D	C	C	E	C	D	D	C	C
Approach Vol, veh/h		682			759			432			538	
Approach Delay, s/veh		35.7			36.5			37.9			35.1	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.7	33.2	7.2	36.3	16.8	34.1	18.5	25.0
Change Period (Y+Rc), s	4.4	5.3	4.4	4.9	4.4	5.3	4.4	4.9
Max Green Setting (Gmax), s	20.6	27.8	7.1	45.5	19.6	28.8	20.6	32.0
Max Q Clear Time (g_c+I1), s	13.1	12.6	4.2	8.3	12.2	15.1	13.8	12.9
Green Ext Time (p_c), s	0.3	2.3	0.0	1.9	0.3	2.7	0.3	2.2

Intersection Summary	
HCM 6th Ctrl Delay	36.2
HCM 6th LOS	D

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	54	45	62	52	50	79
Future Vol, veh/h	54	45	62	52	50	79
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	64	53	73	61	59	93
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Righ	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	8.2	7.9	8.5
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	55%	39%
Vol Thru, %	54%	0%	61%
Vol Right, %	46%	45%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	114	99	129
LT Vol	0	54	50
Through Vol	62	0	79
RT Vol	52	45	0
Lane Flow Rate	134	116	152
Geometry Grp	1	1	1
Degree of Util (X)	0.153	0.143	0.188
Departure Headway (Hd)	4.112	4.417	4.448
Convergence, Y/N	Yes	Yes	Yes
Cap	874	814	812
Service Time	2.126	2.433	2.448
HCM Lane V/C Ratio	0.153	0.143	0.187
HCM Control Delay	7.9	8.2	8.5
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.5	0.5	0.7

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	28	103	118	66	68
Future Vol, veh/h	16	28	103	118	66	68
Conflicting Peds, #/hr	4	3	0	7	7	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	79	79	79	79	79	79
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	20	35	130	149	84	86

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	470	215	0	0	286	0
Stage 1	212	-	-	-	-	-
Stage 2	258	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	550	822	-	-	1270	-
Stage 1	821	-	-	-	-	-
Stage 2	783	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	506	814	-	-	1262	-
Mov Cap-2 Maneuver	506	-	-	-	-	-
Stage 1	815	-	-	-	-	-
Stage 2	725	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.9	0	4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	666	1262	-
HCM Lane V/C Ratio	-	-	0.084	0.066	-
HCM Control Delay (s)	-	-	10.9	8.1	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.2	-

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	5	15	58	15	16	20	176	199	22	141	15
Future Vol, veh/h	10	5	15	58	15	16	20	176	199	22	141	15
Conflicting Peds, #/hr	15	0	3	3	0	15	2	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	11	5	16	63	16	17	22	191	216	24	153	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	586	662	166	566	562	314	171	0	0	407	0	0
Stage 1	211	211	-	343	343	-	-	-	-	-	-	-
Stage 2	375	451	-	223	219	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	420	381	876	433	434	724	1400	-	-	1146	-	-
Stage 1	789	726	-	670	636	-	-	-	-	-	-	-
Stage 2	644	569	-	777	720	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	378	364	872	405	414	714	1397	-	-	1146	-	-
Mov Cap-2 Maneuver	378	364	-	405	414	-	-	-	-	-	-	-
Stage 1	771	708	-	656	623	-	-	-	-	-	-	-
Stage 2	590	557	-	737	702	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.3	15.4	0.4	1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1397	-	-	523	441	1146	-	-
HCM Lane V/C Ratio	0.016	-	-	0.062	0.219	0.021	-	-
HCM Control Delay (s)	7.6	0	-	12.3	15.4	8.2	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.8	0.1	-	-

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	104	30	10	15	10	10	17	90	25	10	98	17
Future Vol, veh/h	104	30	10	15	10	10	17	90	25	10	98	17
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	127	37	12	18	12	12	21	110	30	12	120	21
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.4	8.2	8.8	8.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	13%	72%	43%	8%
Vol Thru, %	68%	21%	29%	78%
Vol Right, %	19%	7%	29%	14%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	132	144	35	125
LT Vol	17	104	15	10
Through Vol	90	30	10	98
RT Vol	25	10	10	17
Lane Flow Rate	161	176	43	152
Geometry Grp	1	1	1	1
Degree of Util (X)	0.205	0.236	0.057	0.195
Departure Headway (Hd)	4.583	4.832	4.82	4.614
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	782	741	740	776
Service Time	2.618	2.871	2.868	2.65
HCM Lane V/C Ratio	0.206	0.238	0.058	0.196
HCM Control Delay	8.8	9.4	8.2	8.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	0.9	0.2	0.7

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑↳			↱
Traffic Vol, veh/h	0	1958	1112	47	0	98
Future Vol, veh/h	0	1958	1112	47	0	98
Conflicting Peds, #/hr	6	0	0	6	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	2040	1158	49	0	102

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	610
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.93
Pot Cap-1 Maneuver	0	-	-	-	0	373
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	371
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	371
HCM Lane V/C Ratio	-	-	-	0.275
HCM Control Delay (s)	-	-	-	18.3
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	1.1

Intersection	
Intersection Delay, s/veh	10.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	10	0	113	30	180	5	50	81	150	81	20
Future Vol, veh/h	15	10	0	113	30	180	5	50	81	150	81	20
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
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	16	10	0	118	31	188	5	52	84	156	84	21
Number of Lanes	0	1	0	0	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay	9.6	10	9.6	10.5
HCM LOS	A	A	A	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	60%	79%	0%	100%	0%
Vol Thru, %	0%	38%	40%	21%	0%	0%	80%
Vol Right, %	0%	62%	0%	0%	100%	0%	20%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	5	131	25	143	180	150	101
LT Vol	5	0	15	113	0	150	0
Through Vol	0	50	10	30	0	0	81
RT Vol	0	81	0	0	180	0	20
Lane Flow Rate	5	136	26	149	188	156	105
Geometry Grp	7	7	6	7	7	7	7
Degree of Util (X)	0.009	0.207	0.046	0.249	0.257	0.266	0.161
Departure Headway (Hd)	6.413	5.469	6.292	6.029	4.927	6.139	5.494
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	561	660	572	590	720	580	646
Service Time	4.115	3.171	4.299	3.82	2.717	3.934	3.289
HCM Lane V/C Ratio	0.009	0.206	0.045	0.253	0.261	0.269	0.163
HCM Control Delay	9.2	9.6	9.6	10.8	9.4	11.2	9.4
HCM Lane LOS	A	A	A	B	A	B	A
HCM 95th-tile Q	0	0.8	0.1	1	1	1.1	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	1041	0	0	1675	620	460	5	1070	0	0	0
Future Volume (veh/h)	280	1041	0	0	1675	620	460	5	1070	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	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				
Adj Sat Flow, veh/h/ln	1856	1856	0	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	292	1084	0	0	1745	646	483	0	1115			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	3	3	0	0	3	3	3	3	3			
Cap, veh/h	657	3682	0	0	1689	751	990	0	881			
Arrive On Green	0.38	1.00	0.00	0.00	0.96	0.96	0.28	0.00	0.28			
Sat Flow, veh/h	3428	5233	0	0	3618	1568	3534	0	3145			
Grp Volume(v), veh/h	292	1084	0	0	1745	646	483	0	1115			
Grp Sat Flow(s),veh/h/ln	1714	1689	0	0	1763	1568	1767	0	1572			
Q Serve(g_s), s	7.9	0.0	0.0	0.0	59.9	12.2	14.2	0.0	35.0			
Cycle Q Clear(g_c), s	7.9	0.0	0.0	0.0	59.9	12.2	14.2	0.0	35.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	657	3682	0	0	1689	751	990	0	881			
V/C Ratio(X)	0.44	0.29	0.00	0.00	1.03	0.86	0.49	0.00	1.27			
Avail Cap(c_a), veh/h	657	3682	0	0	1689	751	990	0	881			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.52	0.52	0.00	0.00	0.09	0.09	1.00	0.00	1.00			
Uniform Delay (d), s/veh	33.6	0.0	0.0	0.0	2.6	1.6	37.5	0.0	45.0			
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.0	17.4	1.3	0.1	0.0	128.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.0	0.0	0.0	0.0	5.1	1.1	6.2	0.0	29.3			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.7	0.1	0.0	0.0	20.0	2.9	37.7	0.0	173.8			
LnGrp LOS	C	A	A	A	F	A	D	A	F			
Approach Vol, veh/h		1376			2391			1598				
Approach Delay, s/veh		7.2			15.4			132.7				
Approach LOS		A			B			F				

Timer - Assigned Phs	2			5	6		8					
Phs Duration (G+Y+Rc), s	97.9			31.0	66.9		41.1					
Change Period (Y+Rc), s	7.0			7.0	* 7		6.1					
Max Green Setting (Gmax), s	76.9			11.3	* 60		35.0					
Max Q Clear Time (g_c+I1), s	2.0			9.9	61.9		37.0					
Green Ext Time (p_c), s	6.0			0.1	0.0		0.0					

Intersection Summary	
HCM 6th Ctrl Delay	48.2
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	794	300	999	1136	0	0	0	0	527	5	360
Future Volume (veh/h)	0	794	300	999	1136	0	0	0	0	527	5	360
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1856	1856	1856	1856	0				1856	1856	1856
Adj Flow Rate, veh/h	0	819	309	1030	1171	0				660	0	249
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97				0.97	0.97	0.97
Percent Heavy Veh, %	0	3	3	3	3	0				3	3	3
Cap, veh/h	0	906	404	1289	2429	0				729	0	324
Arrive On Green	0.00	0.26	0.26	0.75	1.00	0.00				0.21	0.00	0.21
Sat Flow, veh/h	0	3618	1571	3428	3618	0				3534	0	1572
Grp Volume(v), veh/h	0	819	309	1030	1171	0				660	0	249
Grp Sat Flow(s),veh/h/ln	0	1763	1571	1714	1763	0				1767	0	1572
Q Serve(g_s), s	0.0	28.1	22.7	23.3	0.0	0.0				22.8	0.0	18.7
Cycle Q Clear(g_c), s	0.0	28.1	22.7	23.3	0.0	0.0				22.8	0.0	18.7
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	906	404	1289	2429	0				729	0	324
V/C Ratio(X)	0.00	0.90	0.77	0.80	0.48	0.00				0.91	0.00	0.77
Avail Cap(c_a), veh/h	0	982	437	1289	2429	0				823	0	366
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.15	0.15	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	44.9	43.0	12.6	0.0	0.0				48.4	0.0	46.8
Incr Delay (d2), s/veh	0.0	14.1	13.0	0.5	0.1	0.0				11.8	0.0	7.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	13.9	10.2	4.4	0.0	0.0				11.2	0.0	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	59.0	55.9	13.1	0.1	0.0				60.2	0.0	53.9
LnGrp LOS	A	E	E	B	A	A				E	A	D
Approach Vol, veh/h		1128			2201						909	
Approach Delay, s/veh		58.2			6.2						58.5	
Approach LOS		E			A						E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	54.0	39.1		31.9		93.1
Change Period (Y+Rc), s	7.0	* 7		6.1		7.0
Max Green Setting (Gmax), s	42.3	* 35		29.1		82.8
Max Q Clear Time (g_c+I1), s	25.3	30.1		24.8		2.0
Green Ext Time (p_c), s	2.1	2.0		1.0		6.8

Intersection Summary	
HCM 6th Ctrl Delay	31.2
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	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	1020	245	192	1063	0	1255	490
Future Volume (veh/h)	1020	245	192	1063	0	1255	490
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				0.99
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	1856	1856	1856	1856		1856	1856
Adj Flow Rate, veh/h	1030	247	194	1074		1268	495
Peak Hour Factor	0.99	0.99	0.99	0.99		0.99	0.99
Percent Heavy Veh, %	3	3	3	3		3	3
Cap, veh/h	1156	530	244	2912		1677	651
Arrive On Green	0.34	0.34	0.14	1.00		0.47	0.47
Sat Flow, veh/h	3428	1572	3428	5233		3747	1390
Grp Volume(v), veh/h	1030	247	194	1074		1196	567
Grp Sat Flow(s),veh/h/ln	1714	1572	1714	1689		1689	1593
Q Serve(g_s), s	35.6	15.4	6.8	0.0		36.4	36.8
Cycle Q Clear(g_c), s	35.6	15.4	6.8	0.0		36.4	36.8
Prop In Lane	1.00	1.00	1.00				0.87
Lane Grp Cap(c), veh/h	1156	530	244	2912		1582	746
V/C Ratio(X)	0.89	0.47	0.80	0.37		0.76	0.76
Avail Cap(c_a), veh/h	1264	580	291	2912		1582	746
HCM Platoon Ratio	1.00	1.00	2.00	2.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	0.90	0.90		0.38	0.38
Uniform Delay (d), s/veh	39.3	32.6	52.7	0.0		27.3	27.4
Incr Delay (d2), s/veh	8.1	0.8	9.1	0.3		1.3	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	16.1	14.4	3.1	0.1		14.5	14.1
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	47.3	33.4	61.8	0.3		28.7	30.3
LnGrp LOS	D	C	E	A		C	C
Approach Vol, veh/h	1277			1268		1763	
Approach Delay, s/veh	44.6			9.7		29.2	
Approach LOS	D			A		C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		77.0		48.0	13.3	63.7
Change Period (Y+Rc), s		* 5.1		5.9	4.4	5.1
Max Green Setting (Gmax), s		* 60		46.1	10.6	52.9
Max Q Clear Time (g_c+I1), s		2.0		37.6	8.8	38.8
Green Ext Time (p_c), s		25.7		4.6	0.1	12.3

Intersection Summary	
HCM 6th Ctrl Delay	28.0
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	450	1330	777	350	1440	250	790	893	350	190	478	190
Future Volume (veh/h)	450	1330	777	350	1440	250	790	893	350	190	478	190
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	459	1357	659	357	1469	177	806	911	280	194	488	118
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	433	1737	538	380	1668	513	772	1600	496	247	825	256
Arrive On Green	0.13	0.34	0.34	0.11	0.33	0.33	0.23	0.32	0.32	0.07	0.16	0.16
Sat Flow, veh/h	3428	5066	1570	3428	5066	1557	3428	5066	1571	3428	5066	1570
Grp Volume(v), veh/h	459	1357	659	357	1469	177	806	911	280	194	488	118
Grp Sat Flow(s),veh/h/ln	1714	1689	1570	1714	1689	1557	1714	1689	1571	1714	1689	1570
Q Serve(g_s), s	16.6	31.6	24.0	13.6	36.0	8.7	29.6	19.7	14.2	7.3	11.7	6.8
Cycle Q Clear(g_c), s	16.6	31.6	24.0	13.6	36.0	8.7	29.6	19.7	14.2	7.3	11.7	6.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	433	1737	538	380	1668	513	772	1600	496	247	825	256
V/C Ratio(X)	1.06	0.78	1.22	0.94	0.88	0.35	1.04	0.57	0.56	0.79	0.59	0.46
Avail Cap(c_a), veh/h	433	1810	561	380	1703	523	772	2103	652	373	1502	465
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.5	38.8	12.2	58.0	41.7	19.9	51.0	37.5	19.8	60.0	51.0	28.7
Incr Delay (d2), s/veh	60.3	2.5	116.6	30.4	5.9	0.7	44.6	0.8	2.6	3.1	1.6	3.0
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	10.6	12.9	25.3	7.3	15.2	3.2	17.3	8.2	5.5	3.3	5.1	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	117.7	41.3	128.8	88.4	47.6	20.5	95.6	38.4	22.5	63.1	52.6	31.8
LnGrp LOS	F	D	F	F	D	C	F	D	C	E	D	C
Approach Vol, veh/h		2475			2003			1997			800	
Approach Delay, s/veh		78.7			52.5			59.2			52.1	
Approach LOS		E			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	51.6	34.0	26.9	21.0	49.6	13.9	47.0
Change Period (Y+Rc), s	4.4	6.5	4.4	5.5	4.4	6.3	4.4	* 5.5
Max Green Setting (Gmax), s	13.6	47.0	29.6	39.0	16.6	44.2	14.3	* 55
Max Q Clear Time (g_c+I1), s	15.6	33.6	31.6	13.7	18.6	38.0	9.3	21.7
Green Ext Time (p_c), s	0.0	11.5	0.0	7.3	0.0	5.3	0.1	17.9

Intersection Summary	
HCM 6th Ctrl Delay	63.2
HCM 6th LOS	E

Notes

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

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	41	1062	1521	19	30	267
Future Volume (veh/h)	41	1062	1521	19	30	267
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	0.99
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	1856	1856	1856	1856	1900	1900
Adj Flow Rate, veh/h	46	1180	1653	21	37	326
Peak Hour Factor	0.90	0.90	0.92	0.92	0.82	0.82
Percent Heavy Veh, %	3	3	3	3	0	0
Cap, veh/h	71	3008	2534	32	41	362
Arrive On Green	0.04	0.59	0.49	0.49	0.26	0.26
Sat Flow, veh/h	1767	5233	5320	65	160	1408
Grp Volume(v), veh/h	46	1180	1083	591	364	0
Grp Sat Flow(s),veh/h/ln	1767	1689	1689	1841	1572	0
Q Serve(g_s), s	2.1	9.9	19.3	19.3	18.0	0.0
Cycle Q Clear(g_c), s	2.1	9.9	19.3	19.3	18.0	0.0
Prop In Lane	1.00			0.04	0.10	0.90
Lane Grp Cap(c), veh/h	71	3008	1661	905	404	0
V/C Ratio(X)	0.65	0.39	0.65	0.65	0.90	0.00
Avail Cap(c_a), veh/h	176	4157	2226	1214	821	0
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	0.00
Uniform Delay (d), s/veh	38.1	8.6	15.3	15.3	28.9	0.0
Incr Delay (d2), s/veh	3.7	0.1	0.6	1.1	3.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.6	6.0	6.7	6.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	41.8	8.8	15.9	16.4	31.9	0.0
LnGrp LOS	D	A	B	B	C	A
Approach Vol, veh/h		1226	1674		364	
Approach Delay, s/veh		10.0	16.1		31.9	
Approach LOS		B	B		C	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		54.8		25.7	8.2	46.5
Change Period (Y+Rc), s		7.0		5.0	5.0	7.0
Max Green Setting (Gmax), s		66.0		42.0	8.0	53.0
Max Q Clear Time (g_c+I1), s		11.9		20.0	4.1	21.3
Green Ext Time (p_c), s		14.4		0.7	0.0	18.2

Intersection Summary	
HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	273	917	559	248	1112	251	312	416	68	304	569	397
Future Volume (veh/h)	273	917	559	248	1112	251	312	416	68	304	569	397
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	303	1019	560	264	1183	240	367	489	73	405	759	486
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.85	0.85	0.85	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	334	1746	541	299	1695	521	342	1531	471	360	1558	631
Arrive On Green	0.10	0.34	0.34	0.09	0.33	0.33	0.10	0.30	0.30	0.11	0.31	0.31
Sat Flow, veh/h	3428	5066	1570	3428	5066	1558	3428	5066	1558	3428	5066	1553
Grp Volume(v), veh/h	303	1019	560	264	1183	240	367	489	73	405	759	486
Grp Sat Flow(s),veh/h/ln	1714	1689	1570	1714	1689	1558	1714	1689	1558	1714	1689	1553
Q Serve(g_s), s	11.3	21.4	44.6	9.9	26.2	15.7	12.9	9.6	4.4	13.6	15.8	35.1
Cycle Q Clear(g_c), s	11.3	21.4	44.6	9.9	26.2	15.7	12.9	9.6	4.4	13.6	15.8	35.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	334	1746	541	299	1695	521	342	1531	471	360	1558	631
V/C Ratio(X)	0.91	0.58	1.04	0.88	0.70	0.46	1.07	0.32	0.16	1.12	0.49	0.77
Avail Cap(c_a), veh/h	334	1746	541	299	1742	536	342	1566	482	360	1581	638
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.8	34.8	42.4	58.4	37.4	33.9	58.3	34.9	33.1	57.9	36.5	33.3
Incr Delay (d2), s/veh	27.3	0.7	48.0	24.2	1.4	1.1	69.7	0.3	0.4	85.4	0.6	6.9
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	6.2	8.9	24.1	5.3	11.0	6.1	8.9	4.0	1.7	10.1	6.6	14.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	85.2	35.5	90.4	82.5	38.8	34.9	128.0	35.2	33.5	143.3	37.0	40.2
LnGrp LOS	F	D	F	F	D	C	F	D	C	F	D	D
Approach Vol, veh/h		1882			1687			929			1650	
Approach Delay, s/veh		59.8			45.1			71.7			64.1	
Approach LOS		E			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.7	51.1	17.3	45.3	17.0	49.8	18.0	44.6
Change Period (Y+Rc), s	4.4	6.5	4.4	5.5	4.4	* 6.5	4.4	* 5.5
Max Green Setting (Gmax), s	11.3	44.6	12.9	40.4	12.6	* 45	13.6	* 40
Max Q Clear Time (g_c+I1), s	11.9	46.6	14.9	37.1	13.3	28.2	15.6	11.6
Green Ext Time (p_c), s	0.0	0.0	0.0	2.7	0.0	11.5	0.0	7.6

Intersection Summary	
HCM 6th Ctrl Delay	58.7
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	434	1105	195	323	1007	68	160	243	251	122	342	903
Future Volume (veh/h)	434	1105	195	323	1007	68	160	243	251	122	342	903
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	467	1188	210	351	1095	74	182	276	285	139	389	981
Peak Hour Factor	0.93	0.93	0.93	0.92	0.92	0.92	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	516	1396	247	403	1405	95	207	540	479	164	993	1196
Arrive On Green	0.15	0.32	0.32	0.04	0.10	0.10	0.12	0.31	0.31	0.09	0.28	0.28
Sat Flow, veh/h	3428	4327	765	3428	4845	327	1767	1763	1565	1767	3526	2768
Grp Volume(v), veh/h	467	927	471	351	763	406	182	276	285	139	389	981
Grp Sat Flow(s),veh/h/ln	1714	1689	1715	1714	1689	1795	1767	1763	1565	1767	1763	1384
Q Serve(g_s), s	16.7	32.0	32.0	12.7	27.6	27.6	12.7	16.1	19.3	9.7	11.1	35.2
Cycle Q Clear(g_c), s	16.7	32.0	32.0	12.7	27.6	27.6	12.7	16.1	19.3	9.7	11.1	35.2
Prop In Lane	1.00		0.45	1.00		0.18	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	516	1090	553	403	979	521	207	540	479	164	993	1196
V/C Ratio(X)	0.91	0.85	0.85	0.87	0.78	0.78	0.88	0.51	0.59	0.85	0.39	0.82
Avail Cap(c_a), veh/h	524	1090	553	403	979	521	216	550	488	164	993	1196
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.70	0.70	0.70	0.80	0.80	0.80	0.92	0.92	0.92	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.2	39.5	39.5	59.1	52.6	52.6	54.3	35.7	36.8	55.8	36.3	31.2
Incr Delay (d2), s/veh	14.1	6.0	11.1	14.6	4.9	9.0	27.2	0.3	1.2	30.6	0.4	5.0
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	8.1	14.0	15.0	6.7	13.2	14.6	7.2	7.0	7.6	5.7	4.9	13.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.3	45.6	50.7	73.8	57.6	61.6	81.5	35.9	38.0	86.4	36.7	36.2
LnGrp LOS	E	D	D	E	E	E	F	D	D	F	D	D
Approach Vol, veh/h		1865			1520			743			1509	
Approach Delay, s/veh		52.1			62.4			47.9			40.9	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.6	45.3	19.1	41.0	23.7	41.2	16.0	44.1
Change Period (Y+Rc), s	4.9	5.0	4.4	5.8	4.9	* 5	4.4	* 5.8
Max Green Setting (Gmax), s	14.7	39.7	15.3	35.2	19.1	* 35	11.6	* 39
Max Q Clear Time (g_c+I1), s	14.7	34.0	14.7	37.2	18.7	29.6	11.7	21.3
Green Ext Time (p_c), s	0.0	5.2	0.0	0.0	0.0	5.2	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	51.3
HCM 6th LOS	D

Notes

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

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	138	1772	1010	44	14	96
Future Volume (veh/h)	138	1772	1010	44	14	96
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	0.99
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	1856	1856	1856	1856	1900	1900
Adj Flow Rate, veh/h	152	1947	1074	47	16	112
Peak Hour Factor	0.91	0.91	0.94	0.94	0.86	0.86
Percent Heavy Veh, %	3	3	3	3	0	0
Cap, veh/h	192	3673	2704	118	20	140
Arrive On Green	0.11	0.73	0.54	0.54	0.10	0.10
Sat Flow, veh/h	1767	5233	5136	217	195	1368
Grp Volume(v), veh/h	152	1947	730	391	129	0
Grp Sat Flow(s),veh/h/ln	1767	1689	1689	1809	1576	0
Q Serve(g_s), s	5.8	11.9	8.7	8.7	5.6	0.0
Cycle Q Clear(g_c), s	5.8	11.9	8.7	8.7	5.6	0.0
Prop In Lane	1.00			0.12	0.12	0.87
Lane Grp Cap(c), veh/h	192	3673	1838	984	161	0
V/C Ratio(X)	0.79	0.53	0.40	0.40	0.80	0.00
Avail Cap(c_a), veh/h	713	6203	2530	1355	522	0
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	0.00
Uniform Delay (d), s/veh	30.2	4.3	9.2	9.2	30.5	0.0
Incr Delay (d2), s/veh	2.7	0.2	0.2	0.4	3.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	1.4	2.3	2.5	2.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	32.9	4.4	9.4	9.6	34.0	0.0
LnGrp LOS	C	A	A	A	C	A
Approach Vol, veh/h		2099	1121		129	
Approach Delay, s/veh		6.5	9.5		34.0	
Approach LOS		A	A		C	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	57.3	12.1	12.6	44.8
Change Period (Y+Rc), s	7.0	5.0	5.0	7.0
Max Green Setting (Gmax), s	85.0	23.0	28.0	52.0
Max Q Clear Time (g_c+I1), s	13.9	7.6	7.8	10.7
Green Ext Time (p_c), s	36.4	0.2	0.2	11.9

Intersection Summary	
HCM 6th Ctrl Delay	8.5
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	468	391	433	100	588	20	391	730	50	10	770	484
Future Volume (veh/h)	468	391	433	100	588	20	391	730	50	10	770	484
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	538	449	459	115	676	23	449	839	57	11	885	509
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	592	998	670	139	916	31	503	1566	106	18	1145	771
Arrive On Green	0.17	0.28	0.28	0.08	0.18	0.18	0.15	0.47	0.47	0.01	0.32	0.32
Sat Flow, veh/h	3428	3526	1551	1767	5030	171	3428	3345	227	1767	3526	1539
Grp Volume(v), veh/h	538	449	459	115	453	246	449	442	454	11	885	509
Grp Sat Flow(s),veh/h/ln	1714	1763	1551	1767	1689	1824	1714	1763	1809	1767	1763	1539
Q Serve(g_s), s	20.1	13.7	31.3	8.4	16.5	16.6	16.8	23.2	23.2	0.8	29.5	32.4
Cycle Q Clear(g_c), s	20.1	13.7	31.3	8.4	16.5	16.6	16.8	23.2	23.2	0.8	29.5	32.4
Prop In Lane	1.00		1.00	1.00		0.09	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	592	998	670	139	615	332	503	825	847	18	1145	771
V/C Ratio(X)	0.91	0.45	0.69	0.83	0.74	0.74	0.89	0.54	0.54	0.62	0.77	0.66
Avail Cap(c_a), veh/h	670	1165	743	188	828	447	591	920	945	54	1338	855
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.0	38.4	30.1	59.2	50.4	50.4	54.6	24.6	24.6	64.3	39.7	24.6
Incr Delay (d2), s/veh	14.4	0.4	2.5	14.9	2.7	5.0	13.0	0.7	0.6	12.2	2.6	1.8
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	9.5	5.7	11.6	4.2	7.0	7.9	8.0	9.4	9.7	0.4	12.8	11.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.4	38.8	32.6	74.2	53.1	55.4	67.7	25.3	25.3	76.5	42.3	26.4
LnGrp LOS	E	D	C	E	D	E	E	C	C	E	D	C
Approach Vol, veh/h		1446			814			1345			1405	
Approach Delay, s/veh		47.5			56.7			39.4			36.8	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.9	67.7	13.8	44.0	23.6	49.0	27.0	30.8
Change Period (Y+Rc), s	3.6	6.6	3.6	7.1	4.5	* 6.6	4.5	* 7.1
Max Green Setting (Gmax), s	4.0	68.1	13.9	43.1	22.5	* 50	25.5	* 32
Max Q Clear Time (g_c+I1), s	2.8	25.2	10.4	33.3	18.8	34.4	22.1	18.6
Green Ext Time (p_c), s	0.0	7.5	0.0	3.6	0.4	7.9	0.4	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.

HCM 6th Signalized Intersection Summary
22: Ted Williams Pkwy & Carmel Ridge Rd

12/16/2020

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	41	1169	1680	21	30	276
Future Volume (veh/h)	41	1169	1680	21	30	276
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	0.99
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	1856	1856	1856	1856	1900	1900
Adj Flow Rate, veh/h	43	1218	1750	22	31	288
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	0	0
Cap, veh/h	67	3160	2702	34	35	323
Arrive On Green	0.04	0.62	0.52	0.52	0.23	0.23
Sat Flow, veh/h	1767	5233	5321	65	152	1414
Grp Volume(v), veh/h	43	1218	1147	625	320	0
Grp Sat Flow(s),veh/h/ln	1767	1689	1689	1842	1571	0
Q Serve(g_s), s	2.0	9.7	19.9	19.9	16.1	0.0
Cycle Q Clear(g_c), s	2.0	9.7	19.9	19.9	16.1	0.0
Prop In Lane	1.00			0.04	0.10	0.90
Lane Grp Cap(c), veh/h	67	3160	1771	966	359	0
V/C Ratio(X)	0.64	0.39	0.65	0.65	0.89	0.00
Avail Cap(c_a), veh/h	152	4293	2364	1289	753	0
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	0.00
Uniform Delay (d), s/veh	38.6	7.6	13.9	13.9	30.4	0.0
Incr Delay (d2), s/veh	3.7	0.1	0.6	1.0	3.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.4	6.0	6.7	6.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	42.3	7.7	14.5	15.0	33.5	0.0
LnGrp LOS	D	A	B	B	C	A
Approach Vol, veh/h		1261	1772		320	
Approach Delay, s/veh		8.9	14.7		33.5	
Approach LOS		A	B		C	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	57.8	23.6	8.1	49.7
Change Period (Y+Rc), s	7.0	5.0	5.0	7.0
Max Green Setting (Gmax), s	69.0	39.0	7.0	57.0
Max Q Clear Time (g_c+I1), s	11.7	18.1	4.0	21.9
Green Ext Time (p_c), s	15.3	0.6	0.0	20.8

Intersection Summary	
HCM 6th Ctrl Delay	14.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary
27: Carmel Mountain Rd & Camino Del Norte

12/18/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	1140	687	310	1380	290	376	466	80	350	647	450
Future Volume (veh/h)	310	1140	687	310	1380	290	376	466	80	350	647	450
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	337	1239	672	337	1500	283	409	507	78	380	703	448
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	384	1831	568	355	1788	550	421	1399	430	395	1361	593
Arrive On Green	0.11	0.36	0.36	0.10	0.35	0.35	0.12	0.28	0.28	0.12	0.27	0.27
Sat Flow, veh/h	3428	5066	1570	3428	5066	1559	3428	5066	1557	3428	5066	1550
Grp Volume(v), veh/h	337	1239	672	337	1500	283	409	507	78	380	703	448
Grp Sat Flow(s),veh/h/ln	1714	1689	1570	1714	1689	1559	1714	1689	1557	1714	1689	1550
Q Serve(g_s), s	14.0	30.0	52.4	14.2	39.5	20.8	17.2	11.7	5.5	16.0	17.1	36.5
Cycle Q Clear(g_c), s	14.0	30.0	52.4	14.2	39.5	20.8	17.2	11.7	5.5	16.0	17.1	36.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	384	1831	568	355	1788	550	421	1399	430	395	1361	593
V/C Ratio(X)	0.88	0.68	1.18	0.95	0.84	0.51	0.97	0.36	0.18	0.96	0.52	0.76
Avail Cap(c_a), veh/h	419	1831	568	355	1788	550	421	1412	434	395	1363	593
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.4	39.1	46.3	64.6	43.1	37.1	63.3	42.2	40.0	63.8	45.0	39.1
Incr Delay (d2), s/veh	17.6	1.2	99.7	34.5	4.0	1.3	36.1	0.4	0.5	35.1	0.7	6.7
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	7.1	12.7	35.8	7.9	17.1	8.1	9.6	4.9	2.2	8.9	7.3	14.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.9	40.3	146.0	99.1	47.1	38.4	99.4	42.6	40.5	98.9	45.7	45.8
LnGrp LOS	F	D	F	F	D	D	F	D	D	F	D	D
Approach Vol, veh/h		2248			2120			994			1531	
Approach Delay, s/veh		78.0			54.2			65.8			59.0	
Approach LOS		E			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.4	58.9	22.2	44.4	20.7	57.6	21.1	45.5
Change Period (Y+Rc), s	4.4	6.5	4.4	5.5	4.4	* 6.5	4.4	* 5.5
Max Green Setting (Gmax), s	15.0	52.4	17.8	39.0	17.7	* 51	16.7	* 40
Max Q Clear Time (g_c+I1), s	16.2	54.4	19.2	38.5	16.0	41.5	18.0	13.7
Green Ext Time (p_c), s	0.0	0.0	0.0	0.4	0.2	8.3	0.0	7.8

Intersection Summary	
HCM 6th Ctrl Delay	64.7
HCM 6th LOS	E

Notes

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

HCM 6th Signalized Intersection Summary
1: Rancho Carmel Dr. & Carmel Mountain Rd

10/30/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	520	1300	221	387	1163	90	182	295	297	151	411	1090
Future Volume (veh/h)	520	1300	221	387	1163	90	182	295	297	151	411	1090
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	565	1413	240	421	1264	98	198	321	323	164	447	1150
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	551	1502	255	403	1446	112	195	549	487	164	1035	1258
Arrive On Green	0.05	0.11	0.11	0.04	0.10	0.10	0.11	0.31	0.31	0.09	0.29	0.29
Sat Flow, veh/h	3428	4357	739	3428	4793	372	1767	1763	1565	1767	3526	2768
Grp Volume(v), veh/h	565	1095	558	421	891	471	198	321	323	164	447	1150
Grp Sat Flow(s),veh/h/ln	1714	1689	1719	1714	1689	1787	1767	1763	1565	1767	1763	1384
Q Serve(g_s), s	20.1	40.2	40.3	14.7	32.5	32.5	13.8	19.2	22.4	11.6	12.8	36.7
Cycle Q Clear(g_c), s	20.1	40.2	40.3	14.7	32.5	32.5	13.8	19.2	22.4	11.6	12.8	36.7
Prop In Lane	1.00		0.43	1.00		0.21	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	551	1164	593	403	1019	539	195	549	487	164	1035	1258
V/C Ratio(X)	1.02	0.94	0.94	1.04	0.87	0.87	1.01	0.59	0.66	1.00	0.43	0.91
Avail Cap(c_a), veh/h	551	1164	593	403	1019	539	195	550	488	164	1035	1258
HCM Platoon Ratio	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.51	0.51	0.51	0.73	0.73	0.73	0.89	0.89	0.89	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.2	54.1	54.1	60.1	53.9	53.9	55.6	36.3	37.4	56.7	35.7	31.8
Incr Delay (d2), s/veh	33.9	9.2	15.6	50.3	7.9	13.7	64.7	1.0	2.4	70.3	0.5	10.6
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	11.9	19.7	21.2	9.6	15.9	17.7	9.6	8.4	8.9	8.4	5.6	17.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	93.1	63.3	69.8	110.4	61.8	67.6	120.3	37.2	39.8	127.0	36.2	42.5
LnGrp LOS	F	E	E	F	E	E	F	D	D	F	D	D
Approach Vol, veh/h		2218			1783			842			1761	
Approach Delay, s/veh		72.5			74.8			57.7			48.7	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.6	48.2	18.2	42.5	25.0	42.8	16.0	44.7
Change Period (Y+Rc), s	4.9	5.0	4.4	5.8	4.9	* 5	4.4	* 5.8
Max Green Setting (Gmax), s	14.7	39.7	13.8	36.7	20.1	* 34	11.6	* 39
Max Q Clear Time (g_c+I1), s	16.7	42.3	15.8	38.7	22.1	34.5	13.6	24.4
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0

Intersection Summary	
HCM 6th Ctrl Delay	64.9
HCM 6th LOS	E

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)	611	873	447	230	440	20	446	950	70	15	730	418
Future Volume (veh/h)	611	873	447	230	440	20	446	950	70	15	730	418
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		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	664	949	447	250	478	22	485	1033	76	16	793	418
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	712	1020	680	272	1138	52	506	1330	98	23	914	725
Arrive On Green	0.21	0.29	0.29	0.15	0.23	0.23	0.15	0.40	0.40	0.01	0.26	0.26
Sat Flow, veh/h	3428	3526	1546	1767	4964	227	3428	3324	244	1767	3526	1535
Grp Volume(v), veh/h	664	949	447	250	324	176	485	548	561	16	793	418
Grp Sat Flow(s),veh/h/ln	1714	1763	1546	1767	1689	1814	1714	1763	1805	1767	1763	1535
Q Serve(g_s), s	27.7	38.1	33.3	20.3	11.9	12.0	20.4	39.4	39.4	1.3	31.3	29.0
Cycle Q Clear(g_c), s	27.7	38.1	33.3	20.3	11.9	12.0	20.4	39.4	39.4	1.3	31.3	29.0
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	712	1020	680	272	774	416	506	705	722	23	914	725
V/C Ratio(X)	0.93	0.93	0.66	0.92	0.42	0.42	0.96	0.78	0.78	0.69	0.87	0.58
Avail Cap(c_a), veh/h	780	1039	688	296	805	432	506	705	722	50	974	751
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.6	50.3	32.4	60.7	47.8	47.9	61.6	38.0	38.0	71.5	51.5	28.4
Incr Delay (d2), s/veh	16.4	14.1	2.4	29.8	0.4	0.8	29.3	5.6	5.5	12.8	8.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.2	18.1	12.5	11.2	5.0	5.5	10.8	17.5	18.0	0.7	14.7	10.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.0	64.4	34.8	90.5	48.3	48.7	90.8	43.6	43.5	84.4	59.7	29.6
LnGrp LOS	E	E	C	F	D	D	F	D	D	F	E	C
Approach Vol, veh/h		2060			750			1594			1227	
Approach Delay, s/veh		60.8			62.4			57.9			49.8	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.5	64.8	26.0	49.2	26.0	44.3	34.7	40.5
Change Period (Y+Rc), s	3.6	6.6	3.6	7.1	4.5	* 6.6	4.5	* 7.1
Max Green Setting (Gmax), s	4.1	57.7	24.4	42.9	21.5	* 40	33.1	* 35
Max Q Clear Time (g_c+I1), s	13.3	41.4	22.3	40.1	22.4	33.3	29.7	14.0
Green Ext Time (p_c), s	0.0	7.2	0.1	2.0	0.0	4.1	0.5	3.3

Intersection Summary	
HCM 6th Ctrl Delay	57.8
HCM 6th LOS	E

Notes

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

HCM 6th Signalized Intersection Summary
22: Ted Williams Pkwy & Carmel Ridge Rd

12/16/2020

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	138	1956	1112	47	14	98
Future Volume (veh/h)	138	1956	1112	47	14	98
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	0.99
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	1856	1856	1856	1856	1900	1900
Adj Flow Rate, veh/h	144	2038	1158	49	15	102
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	0	0
Cap, veh/h	182	3756	2834	120	19	127
Arrive On Green	0.10	0.74	0.57	0.57	0.09	0.09
Sat Flow, veh/h	1767	5233	5144	210	200	1363
Grp Volume(v), veh/h	144	2038	786	421	118	0
Grp Sat Flow(s),veh/h/ln	1767	1689	1689	1810	1577	0
Q Serve(g_s), s	5.8	12.6	9.5	9.5	5.3	0.0
Cycle Q Clear(g_c), s	5.8	12.6	9.5	9.5	5.3	0.0
Prop In Lane	1.00			0.12	0.13	0.86
Lane Grp Cap(c), veh/h	182	3756	1923	1031	147	0
V/C Ratio(X)	0.79	0.54	0.41	0.41	0.80	0.00
Avail Cap(c_a), veh/h	632	5926	2510	1345	499	0
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	0.00
Uniform Delay (d), s/veh	31.8	4.1	8.8	8.8	32.3	0.0
Incr Delay (d2), s/veh	2.9	0.2	0.2	0.4	3.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	1.4	2.4	2.7	2.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.7	4.2	9.0	9.1	36.1	0.0
LnGrp LOS	C	A	A	A	D	A
Approach Vol, veh/h		2182	1207		118	
Approach Delay, s/veh		6.3	9.0		36.1	
Approach LOS		A	A		D	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	60.9	11.8	12.5	48.4
Change Period (Y+Rc), s	7.0	5.0	5.0	7.0
Max Green Setting (Gmax), s	85.0	23.0	26.0	54.0
Max Q Clear Time (g_c+I1), s	14.6	7.3	7.8	11.5
Green Ext Time (p_c), s	39.2	0.2	0.1	13.3

Intersection Summary	
HCM 6th Ctrl Delay	8.2
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary
27: Carmel Mountain Rd & Camino Del Norte

12/18/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	450	1330	777	350	1440	250	790	893	350	190	478	190
Future Volume (veh/h)	450	1330	777	350	1440	250	790	893	350	190	478	190
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	459	1357	629	357	1469	177	806	911	280	194	488	132
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	432	1733	537	382	1667	512	771	1603	497	247	829	455
Arrive On Green	0.13	0.34	0.34	0.11	0.33	0.33	0.22	0.32	0.32	0.07	0.16	0.16
Sat Flow, veh/h	3428	5066	1570	3428	5066	1557	3428	5066	1571	3428	5066	1570
Grp Volume(v), veh/h	459	1357	629	357	1469	177	806	911	280	194	488	132
Grp Sat Flow(s),veh/h/ln	1714	1689	1570	1714	1689	1557	1714	1689	1571	1714	1689	1570
Q Serve(g_s), s	16.6	31.7	24.0	13.6	36.1	8.7	29.6	19.7	14.2	7.3	11.7	3.1
Cycle Q Clear(g_c), s	16.6	31.7	24.0	13.6	36.1	8.7	29.6	19.7	14.2	7.3	11.7	3.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	432	1733	537	382	1667	512	771	1603	497	247	829	455
V/C Ratio(X)	1.06	0.78	1.17	0.93	0.88	0.35	1.05	0.57	0.56	0.79	0.59	0.29
Avail Cap(c_a), veh/h	432	1808	560	382	1701	523	771	2101	652	372	1501	663
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.5	38.9	12.3	58.0	41.7	19.9	51.0	37.5	19.8	60.1	51.0	15.0
Incr Delay (d2), s/veh	60.6	2.5	95.5	29.6	6.0	0.7	45.0	0.8	2.6	3.1	1.6	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	10.6	12.9	22.2	7.3	15.2	3.3	17.4	8.2	5.5	3.3	5.1	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	118.2	41.4	107.8	87.6	47.7	20.6	96.0	38.3	22.4	63.2	52.5	15.8
LnGrp LOS	F	D	F	F	D	C	F	D	C	E	D	B
Approach Vol, veh/h		2445			2003			1997			814	
Approach Delay, s/veh		72.9			52.4			59.4			49.1	
Approach LOS		E			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.1	51.5	34.0	27.0	21.0	49.6	13.9	47.2
Change Period (Y+Rc), s	4.4	6.5	4.4	5.5	4.4	6.3	4.4	* 5.5
Max Green Setting (Gmax), s	13.6	47.0	29.6	39.0	16.6	44.2	14.3	* 55
Max Q Clear Time (g_c+I1), s	15.6	33.7	31.6	13.7	18.6	38.1	9.3	21.7
Green Ext Time (p_c), s	0.0	11.4	0.0	7.5	0.0	5.2	0.1	17.9

Intersection Summary	
HCM 6th Ctrl Delay	60.9
HCM 6th LOS	E

Notes

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

Intersection: 8: I-15 NB Ramps & Ted Williams Pkwy.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	R	R	T	T	R	L	LT	R	R
Maximum Queue (ft)	132	150	117	77	77	604	810	466	312	369	217	179
Average Queue (ft)	55	82	44	32	26	272	384	52	175	200	102	51
95th Queue (ft)	116	142	99	64	64	463	683	328	273	314	188	146
Link Distance (ft)		629	629	629		858	858	858	1031	1031	1031	
Upstream Blk Time (%)						0	1	0				
Queuing Penalty (veh)						0	0	0				
Storage Bay Dist (ft)	580				430							570
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 9: Ted Williams Pkwy. & I-15 SB Ramps

Movement	EB	EB	EB	EB	WB	WB	SB	SB
Directions Served	T	T	T	R	T	T	L	LT
Maximum Queue (ft)	147	403	626	426	212	221	241	284
Average Queue (ft)	66	51	221	191	133	140	55	150
95th Queue (ft)	127	235	460	341	197	206	168	247
Link Distance (ft)	634	634	634		629	629		1473
Upstream Blk Time (%)		0	0					
Queuing Penalty (veh)		0	0					
Storage Bay Dist (ft)				527			230	
Storage Blk Time (%)			0	0			0	2
Queuing Penalty (veh)			0	0			0	2

Intersection: 10: Rancho Carmel Dr. & Ted Williams Pkwy. (N)

Movement	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	L	L	T	T	T	T	R	R
Maximum Queue (ft)	184	77	203	223	109	88	149	60	143	86
Average Queue (ft)	94	22	75	117	36	26	67	14	65	8
95th Queue (ft)	159	57	158	186	85	67	121	45	118	44
Link Distance (ft)	779		231	231	231	231	535	535		
Upstream Blk Time (%)			0	0						
Queuing Penalty (veh)			0	0						
Storage Bay Dist (ft)		200							240	240
Storage Blk Time (%)	0									
Queuing Penalty (veh)	0									

Intersection: 11: Rancho Carmel Dr. & Ted Williams Pkwy. (S)

Movement	EB	EB	EB	EB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	R	T	T	T	TR	L	T	T
Maximum Queue (ft)	69	168	315	271	60	143	110	100	62	138	109
Average Queue (ft)	5	71	171	104	5	50	33	28	14	60	37
95th Queue (ft)	38	133	262	235	28	110	78	74	44	115	92
Link Distance (ft)		617	617				656	656		231	231
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	430			230	310	310			140		
Storage Blk Time (%)			2	0						0	
Queuing Penalty (veh)			4	0						0	

Intersection: 12: Shoal Creek Dr & Ted Williams Pkwy

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	TR	L	TR
Maximum Queue (ft)	97	307	269	175	238	476	433	339	270	363	120	299
Average Queue (ft)	37	187	146	64	167	263	234	182	121	152	43	128
95th Queue (ft)	82	273	242	148	269	430	382	321	220	318	105	242
Link Distance (ft)	884	884	884	884		1343	1343	1343	667	667		342
Upstream Blk Time (%)												0
Queuing Penalty (veh)												0
Storage Bay Dist (ft)					213						100	
Storage Blk Time (%)					3	13					1	17
Queuing Penalty (veh)					16	26					1	11

Intersection: 24: I-15 NB Ramp & Carmel Mountain Rd

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	T	T	T	R	L	LT	R	R
Maximum Queue (ft)	168	190	164	172	186	436	410	160	113	106	312	292
Average Queue (ft)	95	109	96	92	92	246	214	81	48	35	195	151
95th Queue (ft)	149	166	153	156	161	411	388	136	93	80	287	268
Link Distance (ft)			595	595	595	965	965	965		958		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	300	300							340		550	550
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 25: I-15 SB Ramp & Carmel Mountain Rd

Movement	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	L	LTR	R
Maximum Queue (ft)	378	359	396	237	274	76	100	179	217	180
Average Queue (ft)	260	179	238	156	172	18	32	89	127	58
95th Queue (ft)	382	348	407	216	242	56	80	158	203	153
Link Distance (ft)	353	353	353		595	595	595		1301	
Upstream Blk Time (%)	2	2	12							
Queuing Penalty (veh)	0	0	0							
Storage Bay Dist (ft)				265				930		320
Storage Blk Time (%)				0	0					
Queuing Penalty (veh)				0	1					

Network Summary

Network wide Queuing Penalty: 62

Intersection: 8: I-15 NB Ramps & Ted Williams Pkwy.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	R	R	T	T	R	L	LT	R	R
Maximum Queue (ft)	201	218	214	82	99	478	498	62	354	525	434	330
Average Queue (ft)	124	137	124	35	42	277	281	23	220	245	237	200
95th Queue (ft)	186	201	196	68	83	412	428	46	326	402	363	299
Link Distance (ft)		629	629	629		858	858	858	1031	1031	1031	
Upstream Blk Time (%)										0	0	
Queuing Penalty (veh)										0	0	
Storage Bay Dist (ft)	580				430							570
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 9: Ted Williams Pkwy. & I-15 SB Ramps

Movement	EB	EB	EB	EB	WB	WB	SB	SB
Directions Served	T	T	T	R	T	T	L	LT
Maximum Queue (ft)	302	618	636	507	223	250	174	217
Average Queue (ft)	93	143	266	159	127	142	41	120
95th Queue (ft)	195	441	547	349	206	221	121	195
Link Distance (ft)	634	634	634		629	629		1473
Upstream Blk Time (%)		0	1					
Queuing Penalty (veh)		0	0					
Storage Bay Dist (ft)				527			230	
Storage Blk Time (%)			1	0				0
Queuing Penalty (veh)			5	0				0

Intersection: 10: Rancho Carmel Dr. & Ted Williams Pkwy. (N)

Movement	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	L	L	T	T	T	T	R	R
Maximum Queue (ft)	158	69	197	232	145	138	174	106	176	118
Average Queue (ft)	73	26	102	133	59	50	80	21	83	13
95th Queue (ft)	131	53	173	201	123	112	144	71	154	68
Link Distance (ft)	779		231	231	231	231	535	535		
Upstream Blk Time (%)			0	0						
Queuing Penalty (veh)			0	1						
Storage Bay Dist (ft)		200							240	240
Storage Blk Time (%)	0									
Queuing Penalty (veh)	0									

Intersection: 11: Rancho Carmel Dr. & Ted Williams Pkwy. (S)

Movement	EB	EB	EB	EB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	R	T	T	T	TR	L	T	T
Maximum Queue (ft)	223	303	203	166	68	135	139	146	66	154	125
Average Queue (ft)	39	151	121	44	7	51	55	49	20	67	42
95th Queue (ft)	149	252	189	134	38	109	111	111	53	123	100
Link Distance (ft)		617	617				656	656		231	231
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	430			230	310	310			140		
Storage Blk Time (%)		0	0							0	
Queuing Penalty (veh)		0	0							0	

Intersection: 12: Shoal Creek Dr & Ted Williams Pkwy

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	TR	L	TR
Maximum Queue (ft)	264	527	502	387	197	318	270	190	94	148	104	126
Average Queue (ft)	139	279	236	161	95	147	117	65	37	65	46	49
95th Queue (ft)	231	458	417	321	175	252	222	152	79	122	92	96
Link Distance (ft)	884	884	884	884		1343	1343	1343	667	667		342
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)					213						100	
Storage Blk Time (%)					1	2					2	1
Queuing Penalty (veh)					4	2					1	1

Intersection: 24: I-15 NB Ramp & Carmel Mountain Rd

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	T	T	T	R	L	LT	R	R
Maximum Queue (ft)	170	189	71	67	76	1017	1017	1017	211	201	352	320
Average Queue (ft)	78	98	23	8	25	942	945	838	104	97	227	186
95th Queue (ft)	150	170	58	38	60	1135	1140	1368	180	173	323	293
Link Distance (ft)			595	595	595	965	965	965		958		
Upstream Blk Time (%)						41	60	48				
Queuing Penalty (veh)						0	0	0				
Storage Bay Dist (ft)	300	300							340		550	550
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 25: I-15 SB Ramp & Carmel Mountain Rd

Movement	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	L	LTR	R
Maximum Queue (ft)	377	327	214	290	516	120	149	274	302	257
Average Queue (ft)	270	190	86	216	260	57	73	162	202	142
95th Queue (ft)	376	289	158	319	428	104	131	239	271	243
Link Distance (ft)	353	353	353		595	595	595		1301	
Upstream Blk Time (%)	2	0			0					
Queuing Penalty (veh)	0	0			0					
Storage Bay Dist (ft)				265				930		320
Storage Blk Time (%)				1	3				0	
Queuing Penalty (veh)				4	15				0	

Network Summary

Network wide Queuing Penalty: 33

Intersection: 8: I-15 NB Ramps & Ted Williams Pkwy.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	R	R	T	T	R	L	LT	R	R
Maximum Queue (ft)	84	107	76	59	51	369	536	282	220	236	136	102
Average Queue (ft)	54	75	40	38	27	265	373	70	156	169	86	36
95th Queue (ft)	100	125	90	68	61	424	628	400	240	258	149	105
Link Distance (ft)		629	629	629		858	858	858	1031	1031	1031	
Upstream Blk Time (%)							1	1				
Queuing Penalty (veh)							0	0				
Storage Bay Dist (ft)	580				430							570
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 9: Ted Williams Pkwy. & I-15 SB Ramps

Movement	EB	EB	EB	EB	WB	WB	SB	SB
Directions Served	T	T	T	R	T	T	L	LT
Maximum Queue (ft)	93	140	249	272	170	176	159	199
Average Queue (ft)	58	63	165	187	128	139	49	130
95th Queue (ft)	122	173	282	296	192	203	157	215
Link Distance (ft)	634	634	634		629	629		1473
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)				527			230	
Storage Blk Time (%)							0	1
Queuing Penalty (veh)							0	1

Intersection: 10: Rancho Carmel Dr. & Ted Williams Pkwy. (N)

Movement	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	L	L	T	T	T	T	R	R
Maximum Queue (ft)	132	38	121	143	77	54	90	33	86	21
Average Queue (ft)	90	21	65	107	38	28	64	14	60	6
95th Queue (ft)	150	46	134	161	85	68	104	42	98	26
Link Distance (ft)	779		231	231	231	231	535	535		
Upstream Blk Time (%)				0						
Queuing Penalty (veh)				0						
Storage Bay Dist (ft)		200							240	240
Storage Blk Time (%)	0									
Queuing Penalty (veh)	0									

Intersection: 11: Rancho Carmel Dr. & Ted Williams Pkwy. (S)

Movement	EB	EB	EB	EB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	R	T	T	T	TR	L	T	T
Maximum Queue (ft)	12	105	195	142	19	88	74	55	35	98	73
Average Queue (ft)	3	70	148	80	4	44	36	23	15	63	44
95th Queue (ft)	15	122	218	179	32	99	83	66	42	121	95
Link Distance (ft)		617	617				656	656		231	231
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	430			230	310	310			140		
Storage Blk Time (%)			0							0	
Queuing Penalty (veh)			1							0	

Intersection: 12: Shoal Creek Dr & Ted Williams Pkwy

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	TR	L	TR
Maximum Queue (ft)	71	248	201	138	219	362	346	284	161	161	86	206
Average Queue (ft)	42	181	146	71	161	251	234	186	102	106	44	126
95th Queue (ft)	84	266	233	167	256	415	390	325	179	200	98	243
Link Distance (ft)	884	884	884	884		1343	1343	1343	667	667		342
Upstream Blk Time (%)												0
Queuing Penalty (veh)												0
Storage Bay Dist (ft)					213						100	
Storage Blk Time (%)					2	13					0	16
Queuing Penalty (veh)					11	25					1	9

Intersection: 24: I-15 NB Ramp & Carmel Mountain Rd

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	T	T	T	R	L	LT	R	R
Maximum Queue (ft)	132	138	126	139	144	260	242	95	85	81	248	216
Average Queue (ft)	96	110	95	97	92	191	184	68	51	40	185	141
95th Queue (ft)	145	153	139	153	155	309	295	102	93	90	266	238
Link Distance (ft)			595	595	595	965	965	965		958		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	300	300							240		550	550
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 25: I-15 SB Ramp & Carmel Mountain Rd

Movement	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	L	LTR	R
Maximum Queue (ft)	332	314	336	178	200	50	70	134	177	152
Average Queue (ft)	256	194	262	145	165	19	37	86	138	79
95th Queue (ft)	382	352	422	201	224	59	79	151	197	180
Link Distance (ft)	353	353	353		595	595	595		1301	
Upstream Blk Time (%)	3	2	10							
Queuing Penalty (veh)	0	0	0							
Storage Bay Dist (ft)				265				930		320
Storage Blk Time (%)										
Queuing Penalty (veh)										

Network Summary

Network wide Queuing Penalty: 48

Intersection: 8: I-15 NB Ramps & Ted Williams Pkwy.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	R	R	T	T	R	L	LT	R	R
Maximum Queue (ft)	200	211	218	83	105	530	612	65	347	377	370	343
Average Queue (ft)	124	132	124	35	42	303	316	22	217	238	238	200
95th Queue (ft)	185	192	198	68	84	477	526	47	321	344	339	299
Link Distance (ft)		629	629	629		858	858	858	1031	1031	1031	
Upstream Blk Time (%)							0					
Queuing Penalty (veh)							0					
Storage Bay Dist (ft)	580				430							570
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 9: Ted Williams Pkwy. & I-15 SB Ramps

Movement	EB	EB	EB	EB	WB	WB	SB	SB
Directions Served	T	T	T	R	T	T	L	LT
Maximum Queue (ft)	312	620	658	463	236	247	178	224
Average Queue (ft)	99	154	291	161	131	146	44	122
95th Queue (ft)	207	472	595	348	212	229	122	193
Link Distance (ft)	634	634	634		629	629		1473
Upstream Blk Time (%)		1	2					
Queuing Penalty (veh)		0	0					
Storage Bay Dist (ft)				527			230	
Storage Blk Time (%)			1	0			0	0
Queuing Penalty (veh)			5	0			0	0

Intersection: 10: Rancho Carmel Dr. & Ted Williams Pkwy. (N)

Movement	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	L	L	T	T	T	T	R	R
Maximum Queue (ft)	166	67	202	234	153	131	195	147	205	142
Average Queue (ft)	70	27	99	134	62	52	84	24	89	15
95th Queue (ft)	128	52	169	198	123	109	158	85	165	75
Link Distance (ft)	779		231	231	231	231	535	535		
Upstream Blk Time (%)			0	0						
Queuing Penalty (veh)			0	1						
Storage Bay Dist (ft)		200							240	240
Storage Blk Time (%)	0								0	0
Queuing Penalty (veh)	0								0	0

Intersection: 11: Rancho Carmel Dr. & Ted Williams Pkwy. (S)

Movement	EB	EB	EB	EB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	R	T	T	T	TR	L	T	T
Maximum Queue (ft)	192	264	210	180	58	129	146	158	66	152	137
Average Queue (ft)	33	148	112	40	4	49	53	51	18	68	50
95th Queue (ft)	133	238	188	135	28	102	112	117	50	122	112
Link Distance (ft)		617	617				656	656		231	231
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	430			230	310	310			140		
Storage Blk Time (%)			0	0						0	
Queuing Penalty (veh)			0	0						0	

Intersection: 12: Shoal Creek Dr & Ted Williams Pkwy

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	TR	L	TR
Maximum Queue (ft)	292	510	484	376	217	300	259	199	116	177	114	133
Average Queue (ft)	147	293	253	177	101	159	124	69	40	72	47	51
95th Queue (ft)	244	465	435	332	191	260	221	158	89	148	97	103
Link Distance (ft)	884	884	884	884		1343	1343	1343	667	667		342
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)					213						100	
Storage Blk Time (%)					1	2					2	1
Queuing Penalty (veh)					2	3					1	1

Intersection: 24: I-15 NB Ramp & Carmel Mountain Rd

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	T	T	T	R	L	LT	R	R
Maximum Queue (ft)	242	261	141	109	79	1015	1017	1015	241	262	381	342
Average Queue (ft)	126	147	57	29	28	979	981	948	118	131	237	197
95th Queue (ft)	258	278	262	204	63	1061	1058	1249	202	220	340	303
Link Distance (ft)			595	595	595	965	965	965		958		
Upstream Blk Time (%)			0	0		52	75	60				
Queuing Penalty (veh)			2	0		0	0	0				
Storage Bay Dist (ft)	300	300							340		550	550
Storage Blk Time (%)	1	5							0	0		
Queuing Penalty (veh)	2	15							0	0		

Intersection: 25: I-15 SB Ramp & Carmel Mountain Rd

Movement	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	L	LTR	R
Maximum Queue (ft)	376	337	213	289	484	155	179	264	321	289
Average Queue (ft)	303	216	103	214	247	77	95	161	208	153
95th Queue (ft)	402	324	181	307	396	133	158	239	288	260
Link Distance (ft)	353	353	353		595	595	595		1301	
Upstream Blk Time (%)	5	0			0					
Queuing Penalty (veh)	0	0			0					
Storage Bay Dist (ft)				265				930		320
Storage Blk Time (%)				1	2				0	0
Queuing Penalty (veh)				3	11				1	0

Network Summary

Network wide Queuing Penalty: 48

Intersection: 8: I-15 NB Ramps & Ted Williams Pkwy.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	R	R	T	T	R	L	LT	R	R
Maximum Queue (ft)	134	159	118	70	87	821	892	800	317	373	210	178
Average Queue (ft)	54	85	45	34	29	394	566	178	170	207	107	54
95th Queue (ft)	114	137	100	63	72	694	919	719	269	323	187	145
Link Distance (ft)		629	629	629		858	858	858	1031	1031	1031	
Upstream Blk Time (%)						0	6	4				
Queuing Penalty (veh)						0	0	0				
Storage Bay Dist (ft)	580				430							570
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 9: Ted Williams Pkwy. & I-15 SB Ramps

Movement	EB	EB	EB	EB	WB	WB	SB	SB
Directions Served	T	T	T	R	T	T	L	LT
Maximum Queue (ft)	153	399	587	436	233	235	245	280
Average Queue (ft)	64	59	224	197	132	141	57	149
95th Queue (ft)	129	236	457	350	199	213	165	239
Link Distance (ft)	634	634	634		629	629		1473
Upstream Blk Time (%)		0	0					
Queuing Penalty (veh)		0	0					
Storage Bay Dist (ft)				527			230	
Storage Blk Time (%)			0	0			0	2
Queuing Penalty (veh)			1	0			0	2

Intersection: 10: Rancho Carmel Dr. & Ted Williams Pkwy. (N)

Movement	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	L	L	T	T	T	T	R	R
Maximum Queue (ft)	206	90	164	186	95	86	148	78	178	128
Average Queue (ft)	101	22	71	109	33	21	66	13	78	14
95th Queue (ft)	173	59	141	165	77	61	122	46	143	62
Link Distance (ft)	779		231	231	231	231	535	535		
Upstream Blk Time (%)				0						
Queuing Penalty (veh)				0						
Storage Bay Dist (ft)		200							240	240
Storage Blk Time (%)	0									
Queuing Penalty (veh)	0									

Intersection: 11: Rancho Carmel Dr. & Ted Williams Pkwy. (S)

Movement	EB	EB	EB	EB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	R	T	T	T	TR	L	T	T
Maximum Queue (ft)	70	172	298	240	53	138	122	153	85	140	135
Average Queue (ft)	5	77	166	101	5	47	40	38	21	65	41
95th Queue (ft)	37	140	253	225	29	104	92	105	58	118	99
Link Distance (ft)		617	617				656	656		231	231
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	430			230	310	310			140		
Storage Blk Time (%)			1	0					0	0	
Queuing Penalty (veh)			3	0					0	0	

Intersection: 12: Shoal Creek Dr & Ted Williams Pkwy

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	TR	L	TR
Maximum Queue (ft)	179	341	289	210	238	635	617	522	240	398	124	336
Average Queue (ft)	75	207	165	86	184	361	330	264	115	163	64	139
95th Queue (ft)	168	300	263	186	287	600	564	478	213	346	128	267
Link Distance (ft)	884	884	884	884		1343	1343	1343	667	667		342
Upstream Blk Time (%)										0		1
Queuing Penalty (veh)										0		0
Storage Bay Dist (ft)					213						100	
Storage Blk Time (%)					7	24					3	18
Queuing Penalty (veh)					39	48					7	17

Intersection: 24: I-15 NB Ramp & Carmel Mountain Rd

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	T	T	T	R	L	LT	R	R
Maximum Queue (ft)	203	212	169	172	190	461	444	190	134	128	334	299
Average Queue (ft)	110	127	95	100	103	255	239	85	48	41	194	153
95th Queue (ft)	179	195	155	158	170	422	411	149	103	97	290	262
Link Distance (ft)			581	581	581	965	965	965		953		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	300	300							340		550	550
Storage Blk Time (%)						61						
Queuing Penalty (veh)						0						

Intersection: 25: I-15 SB Ramp & Carmel Mountain Rd

Movement	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	L	LTR	R
Maximum Queue (ft)	382	380	394	245	264	84	94	191	222	192
Average Queue (ft)	289	254	298	160	174	22	37	92	133	70
95th Queue (ft)	407	432	463	219	239	58	83	161	204	170
Link Distance (ft)	353	353	353		581	581	581		1301	
Upstream Blk Time (%)	6	6	31							
Queuing Penalty (veh)	0	0	0							
Storage Bay Dist (ft)				265				930		320
Storage Blk Time (%)				0	0					
Queuing Penalty (veh)				0	1					

Network Summary

Network wide Queuing Penalty: 118

Intersection: 8: I-15 NB Ramps & Ted Williams Pkwy.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	R	R	T	T	R	L	LT	R	R
Maximum Queue (ft)	214	217	229	79	107	594	663	227	342	503	574	445
Average Queue (ft)	135	145	138	35	42	329	341	30	219	245	279	241
95th Queue (ft)	200	207	210	67	83	513	561	151	310	397	441	369
Link Distance (ft)		629	629	629		858	858	858	1031	1031	1031	
Upstream Blk Time (%)							0	0		0	0	
Queuing Penalty (veh)							0	0		0	0	
Storage Bay Dist (ft)	580				430							570
Storage Blk Time (%)											0	0
Queuing Penalty (veh)											0	0

Intersection: 9: Ted Williams Pkwy. & I-15 SB Ramps

Movement	EB	EB	EB	EB	WB	WB	SB	SB
Directions Served	T	T	T	R	T	T	L	LT
Maximum Queue (ft)	349	658	656	501	243	243	179	240
Average Queue (ft)	108	181	301	173	138	151	54	130
95th Queue (ft)	223	526	602	378	215	225	143	208
Link Distance (ft)	634	634	634		629	629		1473
Upstream Blk Time (%)		1	2					
Queuing Penalty (veh)		0	0					
Storage Bay Dist (ft)				527			230	
Storage Blk Time (%)			1	0				0
Queuing Penalty (veh)			6	0				0

Intersection: 10: Rancho Carmel Dr. & Ted Williams Pkwy. (N)

Movement	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	L	L	T	T	T	T	R	R
Maximum Queue (ft)	154	86	207	219	173	158	179	129	210	149
Average Queue (ft)	73	28	98	133	71	59	81	24	89	16
95th Queue (ft)	134	64	174	203	142	126	146	81	163	76
Link Distance (ft)	779		231	231	231	231	535	535		
Upstream Blk Time (%)			0	0	0	0				
Queuing Penalty (veh)			0	0	0	0				
Storage Bay Dist (ft)		200							240	240
Storage Blk Time (%)	0								0	
Queuing Penalty (veh)	0								0	

Intersection: 11: Rancho Carmel Dr. & Ted Williams Pkwy. (S)

Movement	EB	EB	EB	EB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	R	T	T	T	TR	L	T	T
Maximum Queue (ft)	229	323	217	184	51	129	159	179	70	152	140
Average Queue (ft)	47	171	116	42	6	52	62	60	20	72	49
95th Queue (ft)	165	276	194	134	30	110	124	136	55	130	113
Link Distance (ft)		617	617				656	656		231	231
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	430			230	310	310			140		
Storage Blk Time (%)			0							0	
Queuing Penalty (veh)			0							0	

Intersection: 12: Shoal Creek Dr & Ted Williams Pkwy

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	TR	L	TR
Maximum Queue (ft)	631	477	453	388	232	354	326	235	121	169	120	182
Average Queue (ft)	334	252	225	172	103	186	153	104	43	72	53	53
95th Queue (ft)	583	416	390	332	196	300	267	204	95	149	102	118
Link Distance (ft)	1484	1484	1484	1484		1343	1343	1343	667	667		342
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)					213						100	
Storage Blk Time (%)					1	4					2	2
Queuing Penalty (veh)					4	6					2	1

Intersection: 24: I-15 NB Ramp & Carmel Mountain Rd

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	T	T	T	R	L	LT	R	R
Maximum Queue (ft)	244	253	112	65	71	1017	1017	1016	214	240	395	369
Average Queue (ft)	120	142	27	8	29	978	981	954	119	125	242	204
95th Queue (ft)	246	262	77	37	61	1056	1059	1218	193	207	351	316
Link Distance (ft)			595	595	595	965	965	965		958		
Upstream Blk Time (%)						51	75	62				
Queuing Penalty (veh)						0	0	0				
Storage Bay Dist (ft)	300	300							340		550	550
Storage Blk Time (%)	0	0										
Queuing Penalty (veh)	1	1										

Intersection: 25: I-15 SB Ramp & Carmel Mountain Rd

Movement	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	L	LTR	R
Maximum Queue (ft)	383	340	240	290	481	137	172	265	310	255
Average Queue (ft)	306	229	104	216	249	77	90	167	213	155
95th Queue (ft)	405	335	193	315	387	128	151	248	289	251
Link Distance (ft)	353	353	353		595	595	595		1301	
Upstream Blk Time (%)	6	0	0							
Queuing Penalty (veh)	0	0	0							
Storage Bay Dist (ft)				265				930		320
Storage Blk Time (%)				1	2				0	0
Queuing Penalty (veh)				3	11				1	0

Network Summary

Network wide Queuing Penalty: 38

Intersection: 8: I-15 NB Ramps & Ted Williams Pkwy.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	R	R	T	T	R	L	LT	R	R
Maximum Queue (ft)	139	158	115	69	92	876	910	910	481	562	234	205
Average Queue (ft)	51	84	48	35	37	734	873	849	281	340	133	84
95th Queue (ft)	113	141	102	63	77	962	974	1111	473	552	217	189
Link Distance (ft)		629	629	629		858	858	858	1031	1031	1031	
Upstream Blk Time (%)						2	53	37				
Queuing Penalty (veh)						0	0	0				
Storage Bay Dist (ft)	580				430							570
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 9: Ted Williams Pkwy. & I-15 SB Ramps

Movement	EB	EB	EB	EB	WB	WB	SB	SB
Directions Served	T	T	T	R	T	T	L	LT
Maximum Queue (ft)	255	654	663	535	220	234	271	302
Average Queue (ft)	106	211	374	275	139	151	91	186
95th Queue (ft)	211	592	664	482	200	216	216	281
Link Distance (ft)	634	634	634		629	629		1473
Upstream Blk Time (%)		1	2					
Queuing Penalty (veh)		0	0					
Storage Bay Dist (ft)				527			230	
Storage Blk Time (%)			1	0			0	5
Queuing Penalty (veh)			9	1			0	6

Intersection: 10: Rancho Carmel Dr. & Ted Williams Pkwy. (N)

Movement	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	L	L	T	T	T	T	R	R
Maximum Queue (ft)	235	91	173	213	112	101	167	111	183	132
Average Queue (ft)	117	24	76	117	44	32	81	19	86	16
95th Queue (ft)	195	62	148	179	94	81	141	64	151	72
Link Distance (ft)	779		231	231	231	231	535	535		
Upstream Blk Time (%)			0	0						
Queuing Penalty (veh)			0	0						
Storage Bay Dist (ft)		200							240	240
Storage Blk Time (%)	1	0								
Queuing Penalty (veh)	0	0								

Intersection: 11: Rancho Carmel Dr. & Ted Williams Pkwy. (S)

Movement	EB	EB	EB	EB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	R	T	T	T	TR	L	T	T
Maximum Queue (ft)	64	177	304	244	82	141	121	111	75	140	136
Average Queue (ft)	5	78	180	113	7	52	41	33	19	67	50
95th Queue (ft)	36	151	265	235	38	111	91	83	49	122	110
Link Distance (ft)		617	617				656	656		231	231
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	430			230	310	310			140		
Storage Blk Time (%)			2	0						0	
Queuing Penalty (veh)			5	0						0	

Intersection: 12: Shoal Creek Dr & Ted Williams Pkwy

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	TR	L	TR
Maximum Queue (ft)	116	345	298	221	238	611	573	485	267	381	125	294
Average Queue (ft)	47	214	172	90	176	335	303	246	140	183	53	134
95th Queue (ft)	102	308	273	197	276	548	497	425	244	368	118	240
Link Distance (ft)	884	884	884	884		1343	1343	1343	667	667		342
Upstream Blk Time (%)												0
Queuing Penalty (veh)												0
Storage Bay Dist (ft)					213						100	
Storage Blk Time (%)					5	21					1	19
Queuing Penalty (veh)					31	41					3	13

Intersection: 24: I-15 NB Ramp & Carmel Mountain Rd

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	T	T	T	R	L	LT	R	R
Maximum Queue (ft)	222	230	183	193	214	680	670	366	129	112	362	356
Average Queue (ft)	121	136	111	116	122	399	396	120	54	46	242	207
95th Queue (ft)	193	209	169	178	196	742	735	361	104	96	339	317
Link Distance (ft)			595	595	595	965	965	965		958		
Upstream Blk Time (%)						1	1	1				
Queuing Penalty (veh)						0	0	0				
Storage Bay Dist (ft)	300	300							340		550	550
Storage Blk Time (%)		0										
Queuing Penalty (veh)		0										

Intersection: 25: I-15 SB Ramp & Carmel Mountain Rd

Movement	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	L	LTR	R
Maximum Queue (ft)	390	378	401	260	292	70	91	199	228	188
Average Queue (ft)	311	288	322	175	191	21	36	103	138	68
95th Queue (ft)	419	441	463	225	254	54	80	173	204	163
Link Distance (ft)	353	353	353		595	595	595		1301	
Upstream Blk Time (%)	11	10	41							
Queuing Penalty (veh)	0	0	0							
Storage Bay Dist (ft)				265				930		320
Storage Blk Time (%)				0	1					
Queuing Penalty (veh)				0	2					

Network Summary

Network wide Queuing Penalty: 111

Intersection: 8: I-15 NB Ramps & Ted Williams Pkwy.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	R	R	T	T	R	L	LT	R	R
Maximum Queue (ft)	215	236	231	73	94	805	886	799	396	738	680	466
Average Queue (ft)	133	150	139	30	46	585	637	256	261	317	309	261
95th Queue (ft)	193	213	215	63	79	919	976	870	371	521	494	397
Link Distance (ft)		629	629	629		858	858	858	1031	1031	1031	
Upstream Blk Time (%)						4	15	10		0	0	
Queuing Penalty (veh)						0	0	0		0	0	
Storage Bay Dist (ft)	580				430							570
Storage Blk Time (%)											0	0
Queuing Penalty (veh)											0	0

Intersection: 9: Ted Williams Pkwy. & I-15 SB Ramps

Movement	EB	EB	EB	EB	WB	WB	SB	SB
Directions Served	T	T	T	R	T	T	L	LT
Maximum Queue (ft)	510	669	675	552	258	252	198	243
Average Queue (ft)	163	467	524	326	153	167	61	138
95th Queue (ft)	374	824	796	650	237	244	154	215
Link Distance (ft)	634	634	634		629	629		1473
Upstream Blk Time (%)		5	10					
Queuing Penalty (veh)		0	0					
Storage Bay Dist (ft)				527			230	
Storage Blk Time (%)			7	0			0	1
Queuing Penalty (veh)			42	3			0	1

Intersection: 10: Rancho Carmel Dr. & Ted Williams Pkwy. (N)

Movement	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	L	L	T	T	T	T	R	R
Maximum Queue (ft)	172	84	222	242	180	172	195	156	252	192
Average Queue (ft)	82	31	121	151	81	70	102	35	119	36
95th Queue (ft)	146	65	199	223	153	142	169	102	202	125
Link Distance (ft)	779		231	231	231	231	535	535		
Upstream Blk Time (%)			0	1		0				
Queuing Penalty (veh)			0	1		0				
Storage Bay Dist (ft)		200							240	240
Storage Blk Time (%)	0	0							0	0
Queuing Penalty (veh)	0	0							0	0

Intersection: 11: Rancho Carmel Dr. & Ted Williams Pkwy. (S)

Movement	EB	EB	EB	EB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	R	T	T	T	TR	L	T	T
Maximum Queue (ft)	209	291	243	194	79	142	160	203	77	154	127
Average Queue (ft)	43	161	128	57	9	59	66	72	26	70	57
95th Queue (ft)	155	259	215	163	46	116	135	157	63	132	113
Link Distance (ft)		617	617				656	656		231	231
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	430			230	310	310			140		
Storage Blk Time (%)			0	0						1	
Queuing Penalty (veh)			1	0						0	

Intersection: 12: Shoal Creek Dr & Ted Williams Pkwy

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	TR	L	TR
Maximum Queue (ft)	288	552	530	500	228	312	290	220	109	182	109	144
Average Queue (ft)	159	304	288	247	107	175	148	95	43	78	48	53
95th Queue (ft)	252	497	480	440	197	278	251	199	90	158	94	106
Link Distance (ft)	1789	1789	1789	1789		1343	1343	1343	667	667		341
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)					213						100	
Storage Blk Time (%)					0	4					1	2
Queuing Penalty (veh)					1	5					1	1

Intersection: 24: I-15 NB Ramp & Carmel Mountain Rd

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	T	T	T	R	L	LT	R	R
Maximum Queue (ft)	198	219	81	47	48	1017	1015	1016	277	640	614	576
Average Queue (ft)	106	124	16	8	5	960	967	919	149	261	420	379
95th Queue (ft)	183	202	53	33	26	1113	1103	1299	244	697	673	623
Link Distance (ft)			595	595	595	965	965	965		958		
Upstream Blk Time (%)						36	63	50		2		
Queuing Penalty (veh)						0	0	0		0		
Storage Bay Dist (ft)	300	300							340		550	550
Storage Blk Time (%)										0	8	2
Queuing Penalty (veh)										0	35	7

Intersection: 25: I-15 SB Ramp & Carmel Mountain Rd

Movement	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	L	LTR	R
Maximum Queue (ft)	394	365	245	290	619	214	259	357	398	345
Average Queue (ft)	341	261	116	281	478	114	138	215	258	201
95th Queue (ft)	416	364	202	316	656	193	227	311	353	319
Link Distance (ft)	353	353	353		595	595	595		1301	
Upstream Blk Time (%)	12	1			2					
Queuing Penalty (veh)	0	0			15					
Storage Bay Dist (ft)				265				930		320
Storage Blk Time (%)				5	21				2	0
Queuing Penalty (veh)				27	106				7	0

Network Summary

Network wide Queuing Penalty: 255

Intersection: 8: I-15 NB Ramps & Ted Williams Pkwy.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	R	R	T	T	R	L	LT	R	R
Maximum Queue (ft)	133	154	135	82	84	878	910	910	449	503	248	212
Average Queue (ft)	51	83	50	36	35	745	882	878	266	319	144	99
95th Queue (ft)	109	139	109	67	73	962	903	964	420	499	227	205
Link Distance (ft)		629	629	629		858	858	858	1031	1031	1031	
Upstream Blk Time (%)						2	55	38				
Queuing Penalty (veh)						0	0	0				
Storage Bay Dist (ft)	580				430							570
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 9: Ted Williams Pkwy. & I-15 SB Ramps

Movement	EB	EB	EB	EB	WB	WB	SB	SB
Directions Served	T	T	T	R	T	T	L	LT
Maximum Queue (ft)	249	612	660	516	224	230	270	324
Average Queue (ft)	101	173	345	258	138	152	100	187
95th Queue (ft)	194	497	606	442	206	215	231	283
Link Distance (ft)	634	634	634		629	629		1473
Upstream Blk Time (%)		0	1					
Queuing Penalty (veh)		0	0					
Storage Bay Dist (ft)				527			230	
Storage Blk Time (%)			1	0			0	6
Queuing Penalty (veh)			5	1			0	7

Intersection: 10: Rancho Carmel Dr. & Ted Williams Pkwy. (N)

Movement	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	L	L	T	T	T	T	R	R
Maximum Queue (ft)	263	139	199	221	114	98	172	96	199	149
Average Queue (ft)	123	28	84	120	41	28	83	19	97	22
95th Queue (ft)	211	75	162	186	92	74	140	60	166	85
Link Distance (ft)	779		231	231	231	231	535	535		
Upstream Blk Time (%)			0	0						
Queuing Penalty (veh)			0	0						
Storage Bay Dist (ft)		200							240	240
Storage Blk Time (%)	1	0							0	
Queuing Penalty (veh)	1	0							0	

Intersection: 11: Rancho Carmel Dr. & Ted Williams Pkwy. (S)

Movement	EB	EB	EB	EB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	R	T	T	T	TR	L	T	T
Maximum Queue (ft)	83	172	329	273	78	147	118	131	83	158	150
Average Queue (ft)	6	80	179	116	7	53	42	40	23	73	54
95th Queue (ft)	41	145	281	247	44	114	92	98	60	129	118
Link Distance (ft)		617	617				656	656		231	231
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	430			230	310	310			140		
Storage Blk Time (%)			3	0						1	
Queuing Penalty (veh)			6	0						0	

Intersection: 12: Shoal Creek Dr & Ted Williams Pkwy

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	TR	L	TR
Maximum Queue (ft)	225	291	270	240	238	1098	1054	941	343	422	125	339
Average Queue (ft)	108	186	164	112	204	688	644	566	166	225	72	175
95th Queue (ft)	220	266	251	211	295	1173	1121	1008	332	450	142	309
Link Distance (ft)	1895	1895	1895	1895		1343	1343	1343	667	667		342
Upstream Blk Time (%)						0			0	1		1
Queuing Penalty (veh)						0			0	0		0
Storage Bay Dist (ft)					213						100	
Storage Blk Time (%)					9	44					3	26
Queuing Penalty (veh)					55	89					7	26

Intersection: 24: I-15 NB Ramp & Carmel Mountain Rd

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	T	T	T	R	L	LT	R	R
Maximum Queue (ft)	191	201	184	191	213	731	736	442	133	133	362	309
Average Queue (ft)	112	123	111	117	126	459	449	133	58	48	234	194
95th Queue (ft)	173	183	173	180	200	818	811	407	113	104	328	292
Link Distance (ft)			595	595	595	965	965	965		958		
Upstream Blk Time (%)						2	2	1				
Queuing Penalty (veh)						0	0	0				
Storage Bay Dist (ft)	300	300							340		550	550
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 25: I-15 SB Ramp & Carmel Mountain Rd

Movement	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	L	LTR	R
Maximum Queue (ft)	392	378	401	259	280	78	99	199	240	213
Average Queue (ft)	309	291	342	178	194	22	38	99	145	81
95th Queue (ft)	419	440	454	229	251	57	85	174	216	188
Link Distance (ft)	353	353	353		595	595	595		1301	
Upstream Blk Time (%)	10	9	42							
Queuing Penalty (veh)	0	0	0							
Storage Bay Dist (ft)				265				930		320
Storage Blk Time (%)				0	0					
Queuing Penalty (veh)				0	1					

Network Summary

Network wide Queuing Penalty: 199

Intersection: 8: I-15 NB Ramps & Ted Williams Pkwy.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	R	R	T	T	R	L	LT	R	R
Maximum Queue (ft)	211	243	247	72	88	898	908	902	426	812	890	551
Average Queue (ft)	146	160	153	29	45	751	790	590	268	338	409	349
95th Queue (ft)	206	225	227	60	80	1040	1063	1251	395	580	708	551
Link Distance (ft)		629	629	629		858	858	858	1031	1031	1031	
Upstream Blk Time (%)						11	47	36		0	0	
Queuing Penalty (veh)						0	0	0		0	0	
Storage Bay Dist (ft)	580				430							570
Storage Blk Time (%)											3	1
Queuing Penalty (veh)											15	4

Intersection: 9: Ted Williams Pkwy. & I-15 SB Ramps

Movement	EB	EB	EB	EB	WB	WB	SB	SB
Directions Served	T	T	T	R	T	T	L	LT
Maximum Queue (ft)	522	663	674	552	250	270	208	252
Average Queue (ft)	192	448	514	300	162	171	78	154
95th Queue (ft)	418	810	780	622	235	248	176	232
Link Distance (ft)	634	634	634		629	629		1473
Upstream Blk Time (%)	0	4	9					
Queuing Penalty (veh)	0	0	0					
Storage Bay Dist (ft)				527			230	
Storage Blk Time (%)			6	0			0	1
Queuing Penalty (veh)			37	2			0	1

Intersection: 10: Rancho Carmel Dr. & Ted Williams Pkwy. (N)

Movement	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	L	L	T	T	T	T	R	R
Maximum Queue (ft)	176	76	223	239	186	181	206	165	254	200
Average Queue (ft)	84	30	118	149	88	80	105	36	121	42
95th Queue (ft)	148	58	197	219	159	156	171	103	214	144
Link Distance (ft)	779		231	231	231	231	535	535		
Upstream Blk Time (%)			0	0	0	0				
Queuing Penalty (veh)			0	1	0	0				
Storage Bay Dist (ft)		200							240	240
Storage Blk Time (%)	0								0	0
Queuing Penalty (veh)	0								1	0

Intersection: 11: Rancho Carmel Dr. & Ted Williams Pkwy. (S)

Movement	EB	EB	EB	EB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	R	T	T	T	TR	L	T	T
Maximum Queue (ft)	263	337	229	182	79	151	168	198	96	160	148
Average Queue (ft)	59	192	124	54	8	57	74	77	29	72	59
95th Queue (ft)	190	301	200	157	42	118	141	165	69	132	125
Link Distance (ft)		617	617				656	656		231	231
Upstream Blk Time (%)										0	
Queuing Penalty (veh)										0	
Storage Bay Dist (ft)	430			230	310	310			140		
Storage Blk Time (%)			0	0						1	
Queuing Penalty (veh)			0	0						0	

Intersection: 12: Shoal Creek Dr & Ted Williams Pkwy

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	TR	L	TR
Maximum Queue (ft)	656	541	537	492	238	404	363	289	123	214	119	150
Average Queue (ft)	386	328	312	276	118	219	189	135	47	96	55	58
95th Queue (ft)	714	523	511	469	223	340	298	250	101	198	105	119
Link Distance (ft)	1919	1919	1919	1919		1343	1343	1343	667	667		341
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)					213						100	
Storage Blk Time (%)					1	9					3	2
Queuing Penalty (veh)					3	11					3	2

Intersection: 24: I-15 NB Ramp & Carmel Mountain Rd

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	T	T	T	R	L	LT	R	R
Maximum Queue (ft)	209	222	69	55	64	1017	1014	1011	269	751	660	602
Average Queue (ft)	98	119	16	7	8	957	962	896	144	309	474	424
95th Queue (ft)	177	199	47	32	37	1101	1100	1313	242	816	719	660
Link Distance (ft)			595	595	595	965	965	965		958		
Upstream Blk Time (%)						34	61	48		4		
Queuing Penalty (veh)						0	0	0		0		
Storage Bay Dist (ft)	300	300							340		550	550
Storage Blk Time (%)	0	0									11	3
Queuing Penalty (veh)	0	0									54	16

Intersection: 25: I-15 SB Ramp & Carmel Mountain Rd

Movement	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	L	LTR	R
Maximum Queue (ft)	389	368	231	290	619	214	262	334	398	364
Average Queue (ft)	334	254	121	281	471	116	141	218	266	209
95th Queue (ft)	414	351	205	320	655	195	226	308	362	322
Link Distance (ft)	353	353	353		595	595	595		1301	
Upstream Blk Time (%)	10	1			2					
Queuing Penalty (veh)	0	0			15					
Storage Bay Dist (ft)				265				930		320
Storage Blk Time (%)				5	21				2	0
Queuing Penalty (veh)				26	103				8	1

Network Summary

Network wide Queuing Penalty: 302

Intersection: 12: Shoal Creek Dr & Ted Williams Pkwy

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	TR	L	TR
Maximum Queue (ft)	90	332	312	211	238	460	441	398	282	334	125	334
Average Queue (ft)	31	206	166	83	183	350	283	208	125	140	62	146
95th Queue (ft)	71	300	271	186	277	512	438	372	241	295	126	275
Link Distance (ft)	884	884	884	884		422	422	422	670	670		342
Upstream Blk Time (%)						9	2	1				1
Queuing Penalty (veh)						0	0	0				0
Storage Bay Dist (ft)					213						100	
Storage Blk Time (%)					5	23					2	19
Queuing Penalty (veh)					26	46					5	17

Intersection: 22: Ted Williams Pkwy & Carmel Ridge Rd

Movement	EB	EB	EB	EB	WB	WB	WB	SB
Directions Served	L	T	T	T	T	T	TR	LR
Maximum Queue (ft)	71	159	111	66	221	222	189	195
Average Queue (ft)	29	70	44	16	112	99	56	89
95th Queue (ft)	61	126	92	46	188	177	134	158
Link Distance (ft)		810	810	810	1923	1923	1923	264
Upstream Blk Time (%)								0
Queuing Penalty (veh)								0
Storage Bay Dist (ft)	200							
Storage Blk Time (%)		0						
Queuing Penalty (veh)		0						

Network Summary

Network wide Queuing Penalty: 94

Intersection: 12: Shoal Creek Dr & Ted Williams Pkwy

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	TR	L	TR
Maximum Queue (ft)	296	492	454	424	238	396	307	238	104	169	119	164
Average Queue (ft)	158	266	249	203	121	210	160	81	35	74	50	56
95th Queue (ft)	255	443	428	385	230	347	282	184	84	147	100	119
Link Distance (ft)	1911	1911	1911	1911		422	422	422	670	670		341
Upstream Blk Time (%)						0						
Queuing Penalty (veh)						0						
Storage Bay Dist (ft)					213						100	
Storage Blk Time (%)					1	8					2	3
Queuing Penalty (veh)					3	11					2	2

Intersection: 22: Ted Williams Pkwy & Carmel Ridge Rd

Movement	EB	EB	EB	EB	WB	WB	WB	SB
Directions Served	L	T	T	T	T	T	TR	LR
Maximum Queue (ft)	121	144	130	78	141	132	89	103
Average Queue (ft)	62	50	37	18	74	56	28	47
95th Queue (ft)	109	115	92	57	125	108	66	82
Link Distance (ft)		810	810	810	1923	1923	1923	264
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	200							
Storage Blk Time (%)		0						
Queuing Penalty (veh)		0						

Network Summary

Network wide Queuing Penalty: 17

Intersection: 12: Shoal Creek Dr & Ted Williams Pkwy

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	TR	L	TR
Maximum Queue (ft)	97	317	297	251	238	465	456	463	287	392	124	321
Average Queue (ft)	36	198	178	125	193	406	368	307	144	198	66	162
95th Queue (ft)	81	282	264	231	287	520	511	497	266	415	131	288
Link Distance (ft)	1908	1908	1908	1908		422	422	422	670	670		341
Upstream Blk Time (%)						22	13	11		0		0
Queuing Penalty (veh)						0	0	0		0		0
Storage Bay Dist (ft)					213						100	
Storage Blk Time (%)					8	34					2	23
Queuing Penalty (veh)					51	69					6	22

Intersection: 22: Ted Williams Pkwy & Carmel Ridge Rd

Movement	EB	EB	EB	EB	WB	WB	WB	SB
Directions Served	L	T	T	T	T	T	TR	LR
Maximum Queue (ft)	78	142	127	60	227	213	176	190
Average Queue (ft)	29	74	48	18	128	114	73	93
95th Queue (ft)	61	124	96	50	209	191	152	154
Link Distance (ft)		810	810	810	1923	1923	1923	264
Upstream Blk Time (%)								0
Queuing Penalty (veh)								0
Storage Bay Dist (ft)	200							
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty: 148

Intersection: 12: Shoal Creek Dr & Ted Williams Pkwy

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	TR	L	TR
Maximum Queue (ft)	278	661	662	638	238	430	356	273	131	192	116	152
Average Queue (ft)	159	357	351	323	138	259	195	114	47	82	54	55
95th Queue (ft)	246	617	614	582	255	413	327	233	103	154	101	113
Link Distance (ft)	2405	2405	2405	2405		422	422	422	670	670		341
Upstream Blk Time (%)						1	0					
Queuing Penalty (veh)						0	0					
Storage Bay Dist (ft)					213						100	
Storage Blk Time (%)					3	13					1	2
Queuing Penalty (veh)					11	17					1	2

Intersection: 22: Ted Williams Pkwy & Carmel Ridge Rd

Movement	EB	EB	EB	EB	WB	WB	WB	SB
Directions Served	L	T	T	T	T	T	TR	LR
Maximum Queue (ft)	130	127	116	79	150	141	100	95
Average Queue (ft)	63	46	35	20	76	56	33	45
95th Queue (ft)	111	109	89	60	128	112	75	78
Link Distance (ft)		810	810	810	1923	1923	1923	264
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	200							
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty: 31

Appendix E: Detailed Project Trip Distribution and Assignment

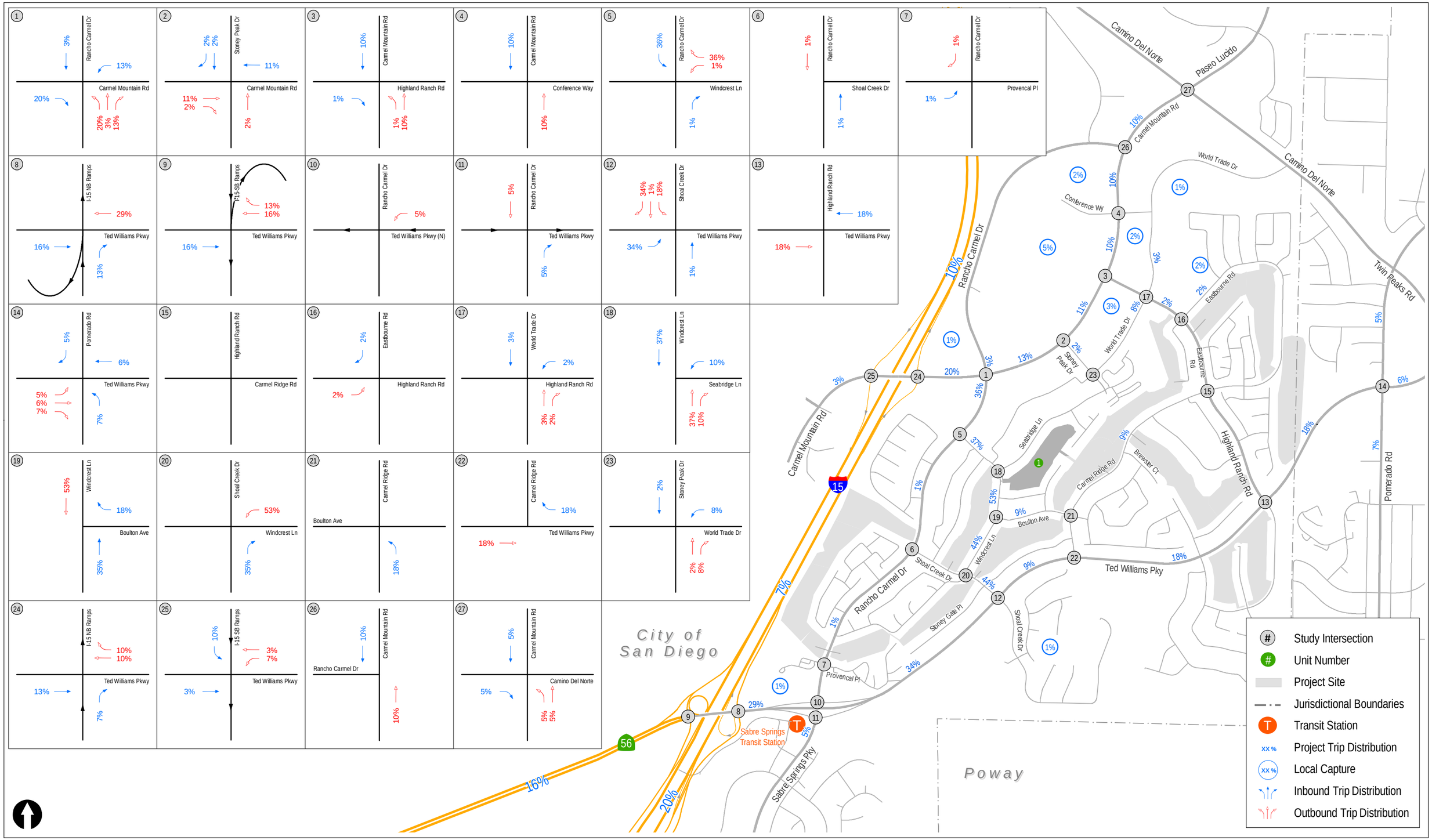


Figure 6-1a

Unit 1 Project Distribution

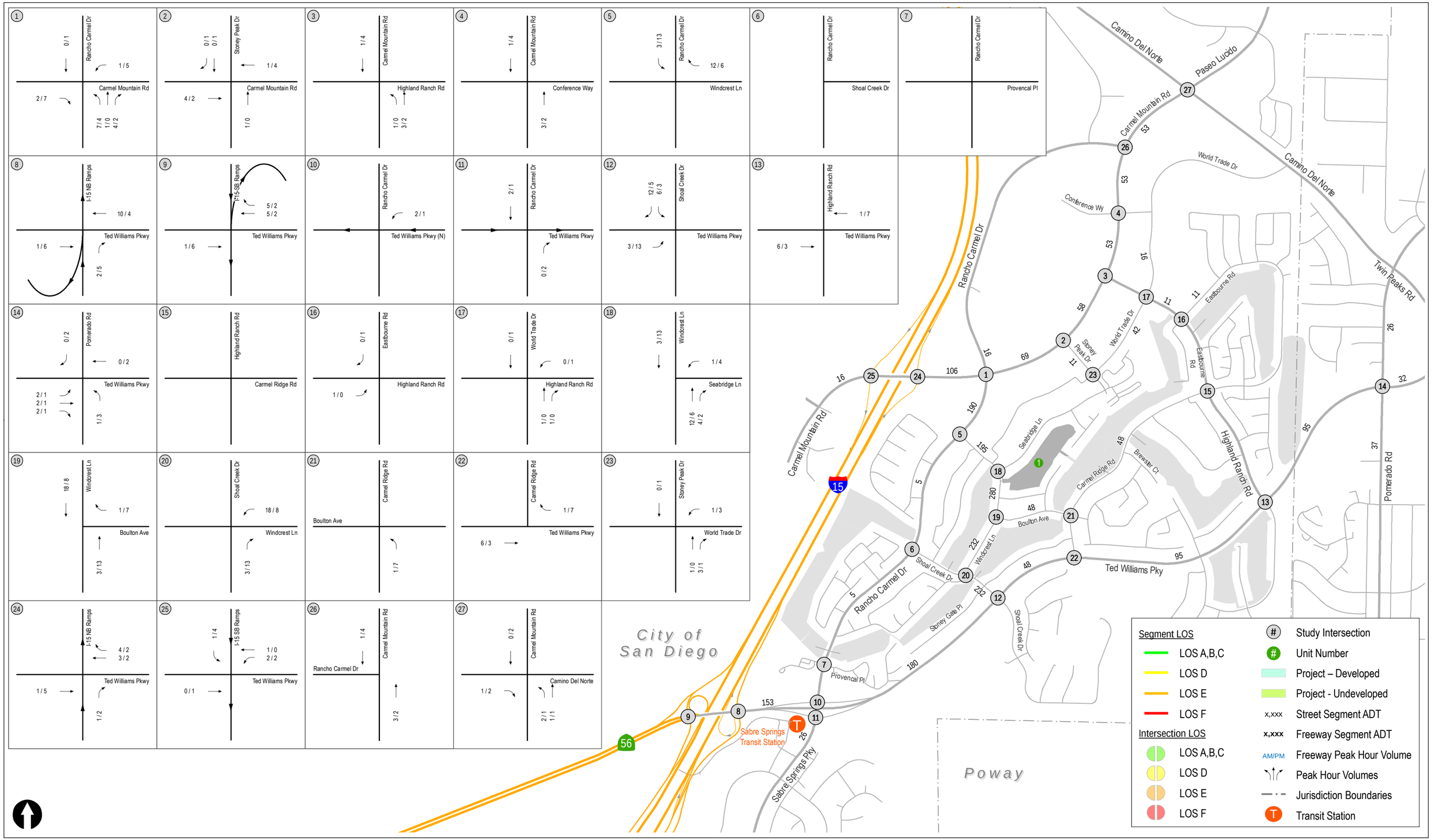


Figure 6-1b

Unit 1 Project Assignment

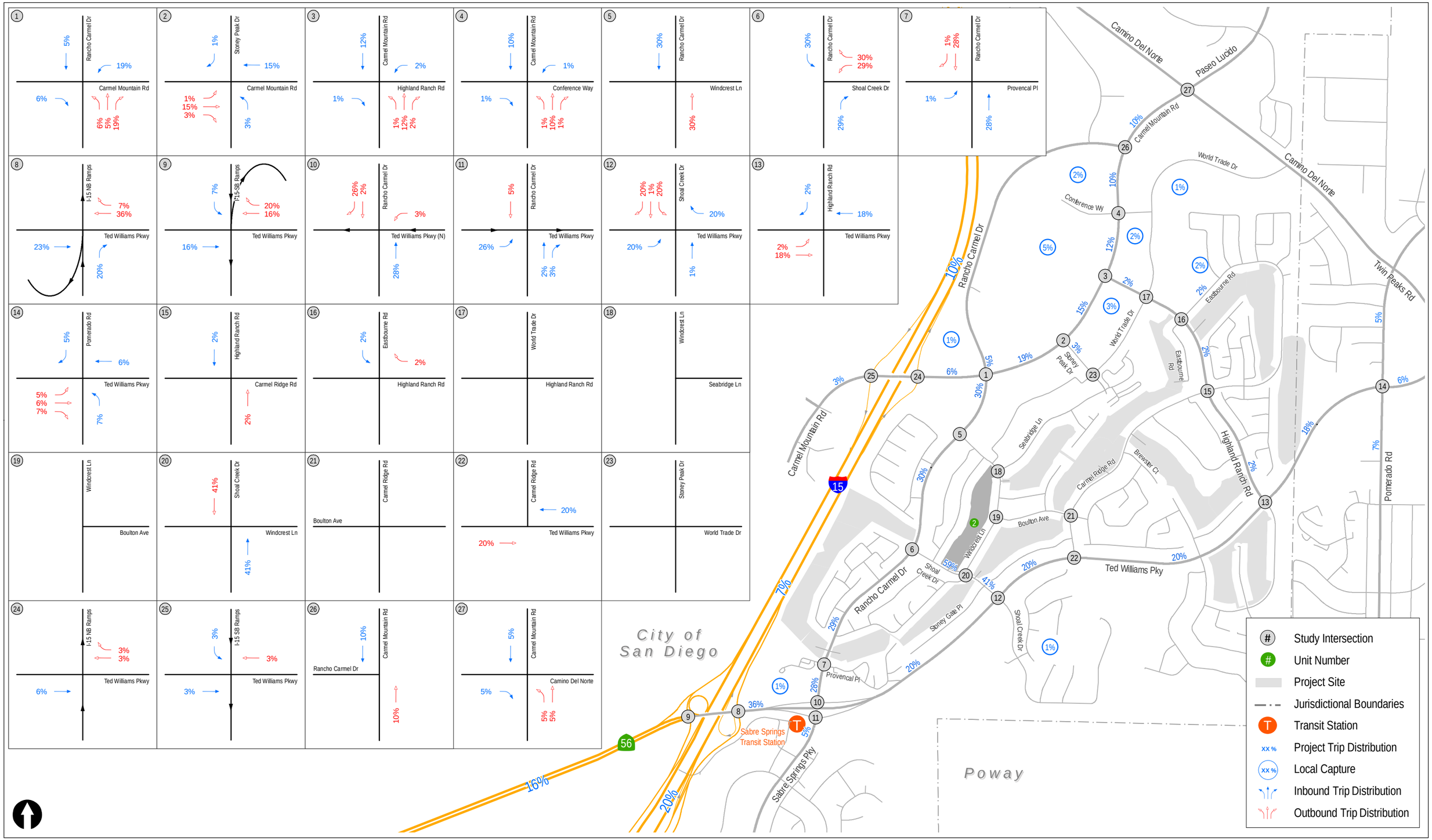


Figure 6-2a

Unit 2 Project Distribution

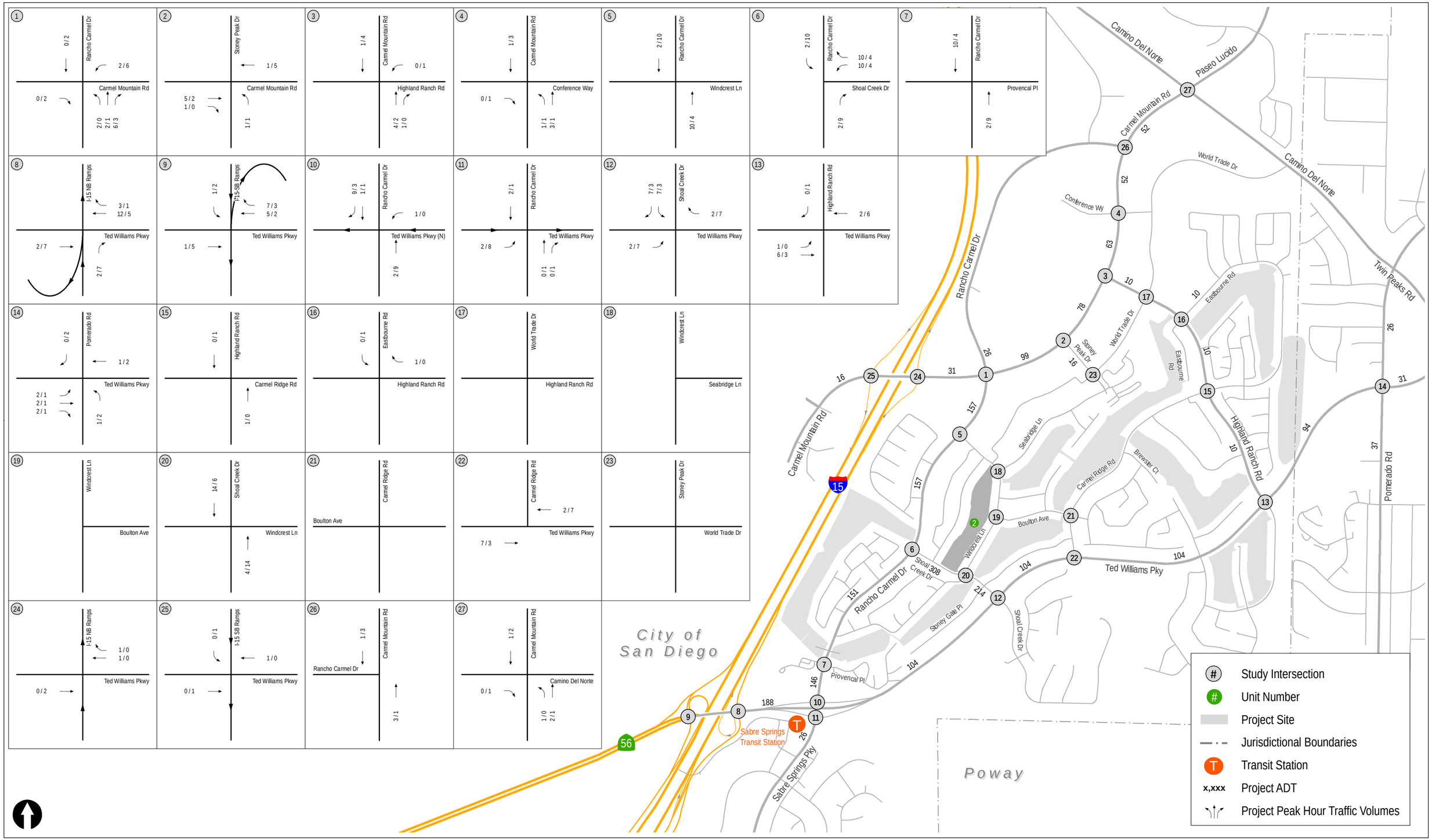


Figure 6-2b

Unit 2 Project Assignment

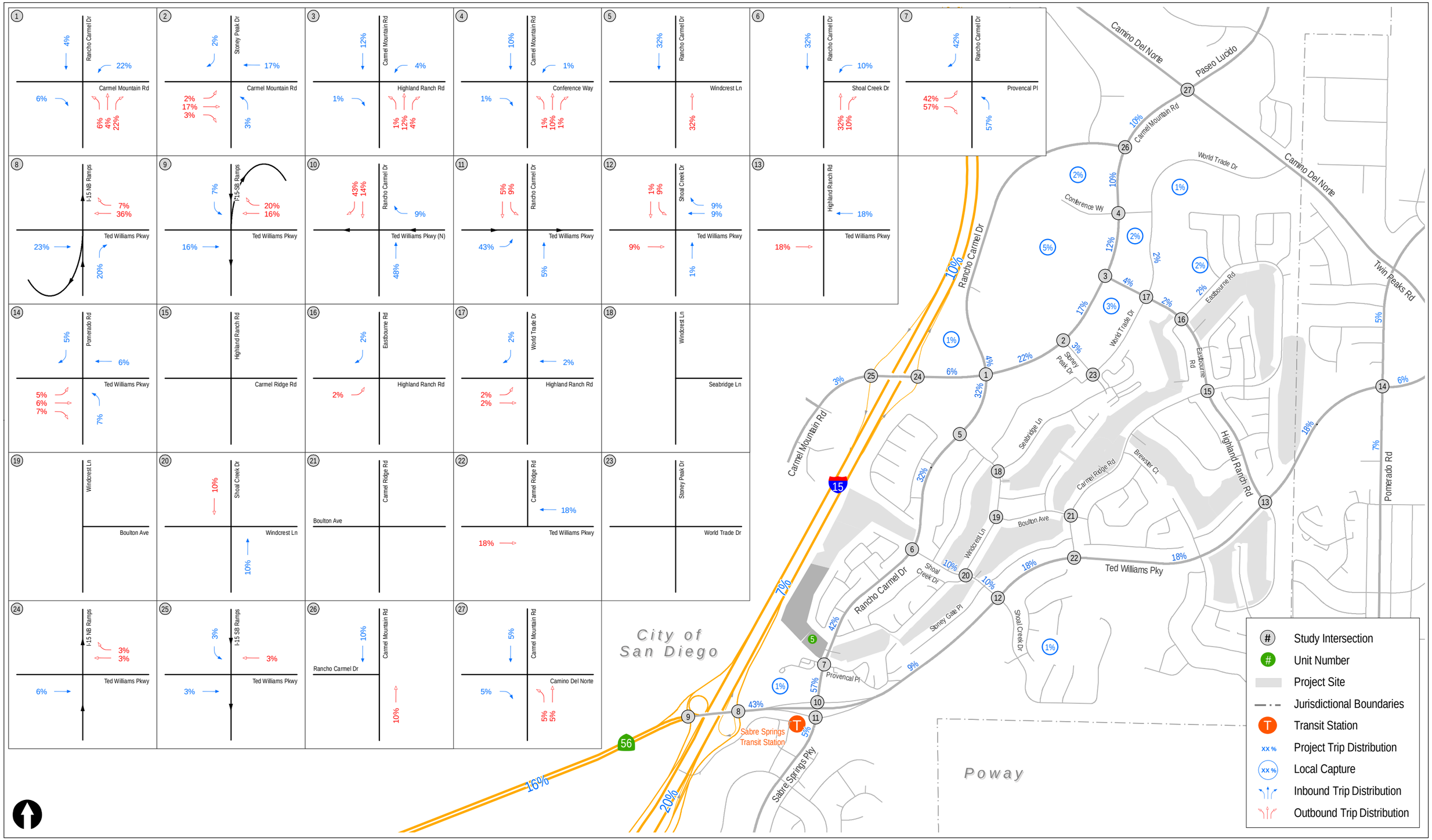


Figure 6-3a

Unit 5 Project Distribution

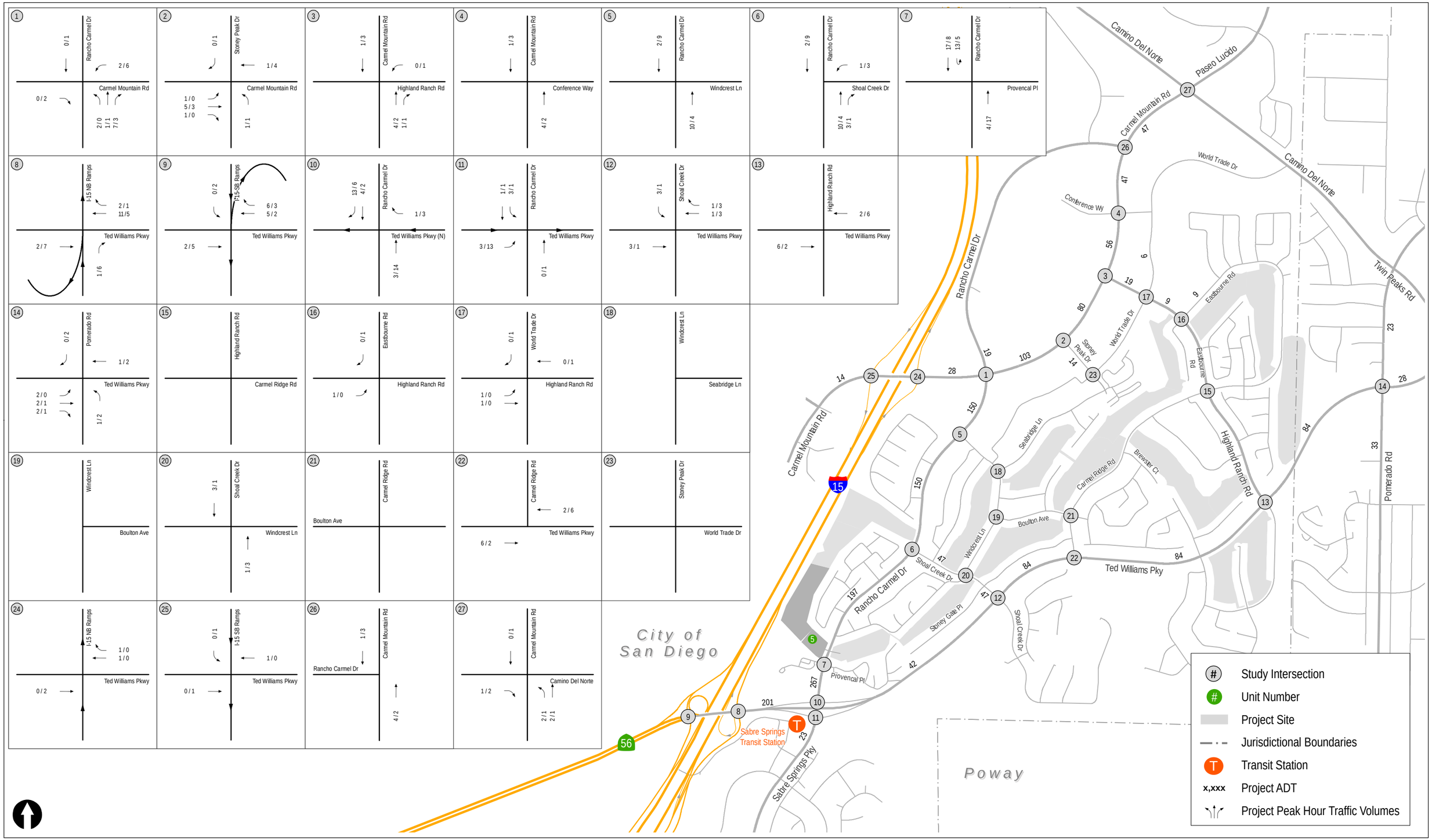


Figure 6-3b

Unit 5 Project Assignment

The Trails at Carmel Mountain Ranch

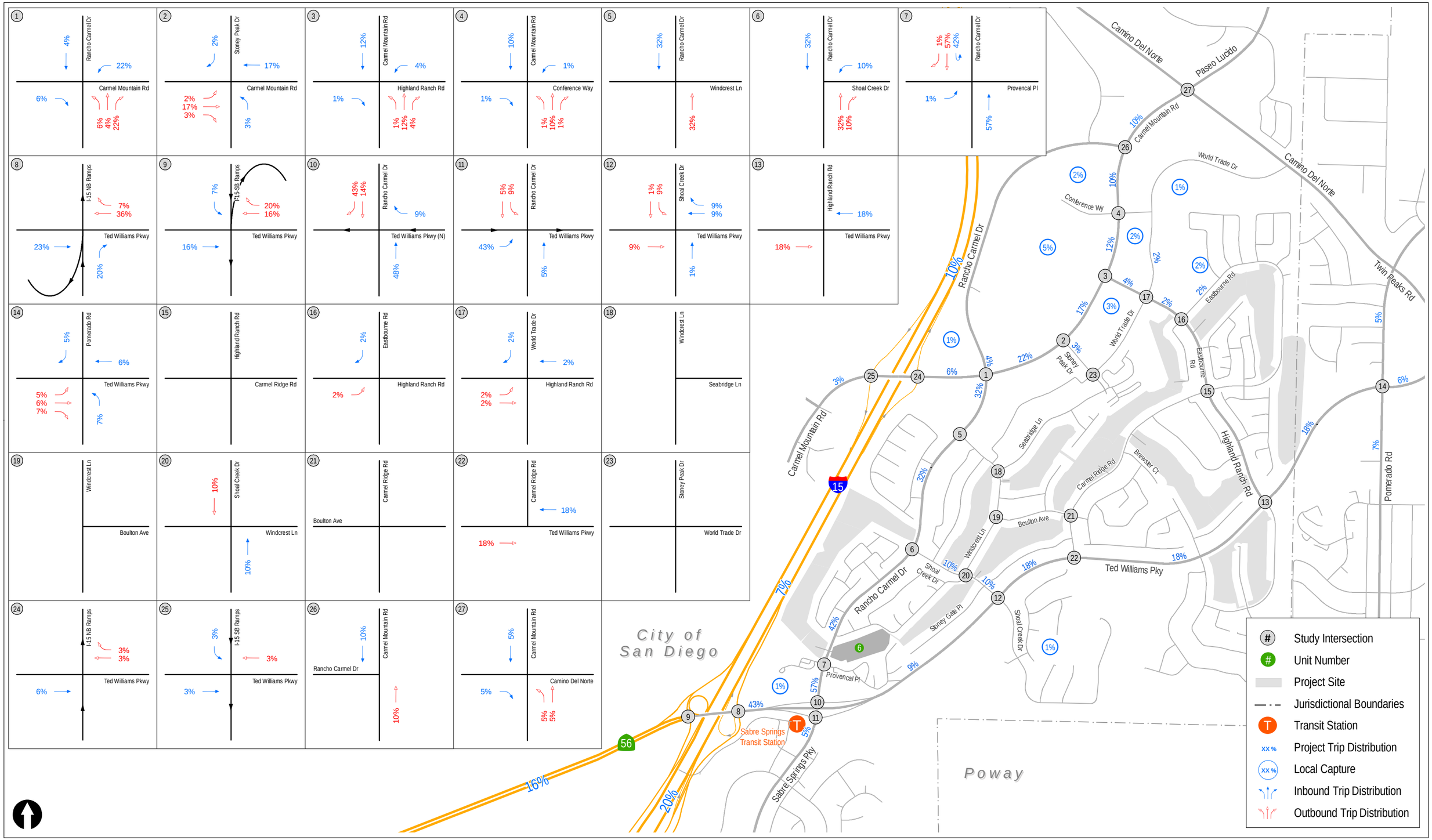


Figure 6-4a

Unit 6 Project Distribution

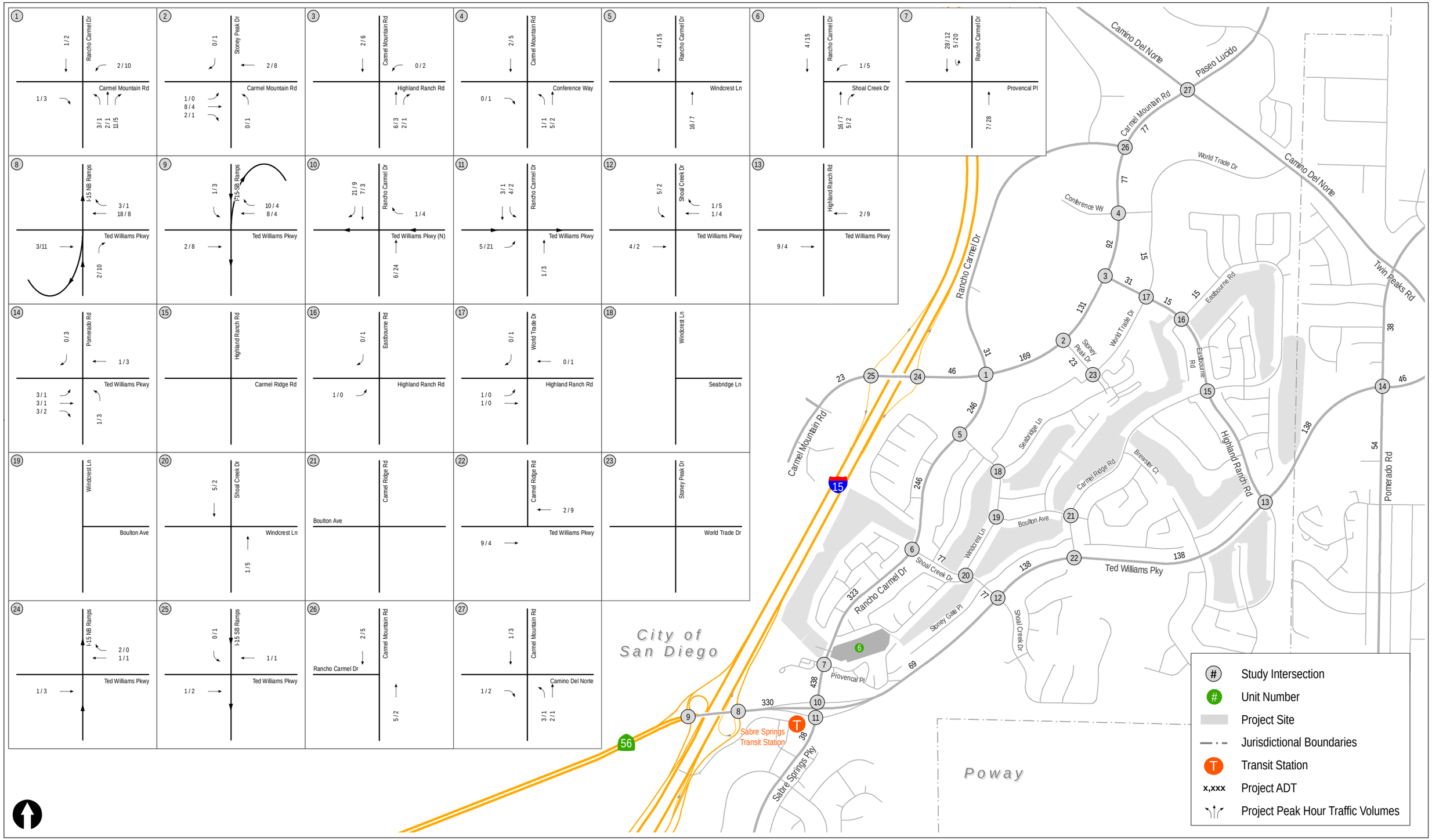


Figure 6-4b

Unit 6 Project Assignment

THE TRAILS AT CARMEL MOUNTAIN RANCH

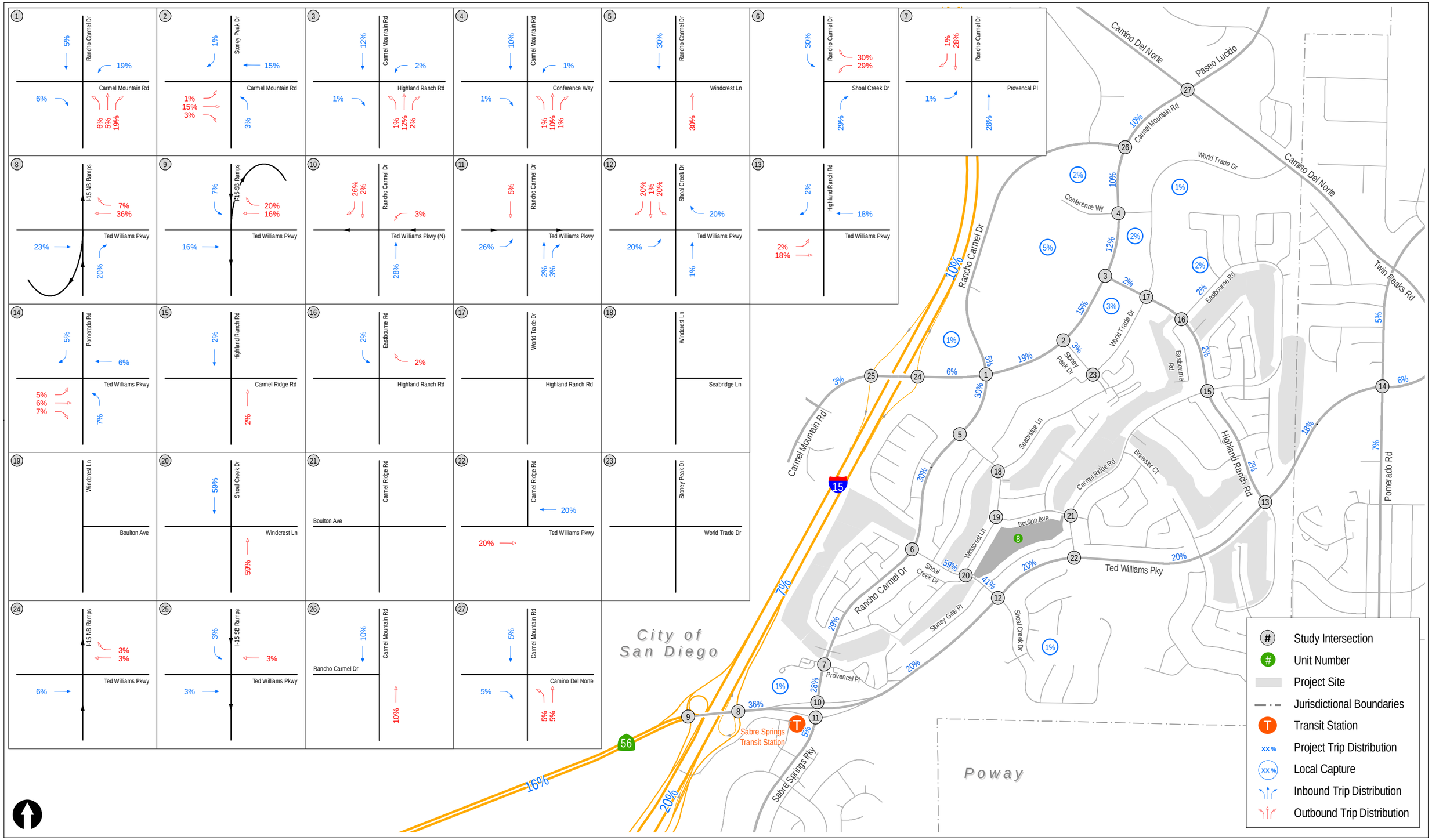


Figure 6-5a

Unit 8 Project Distribution

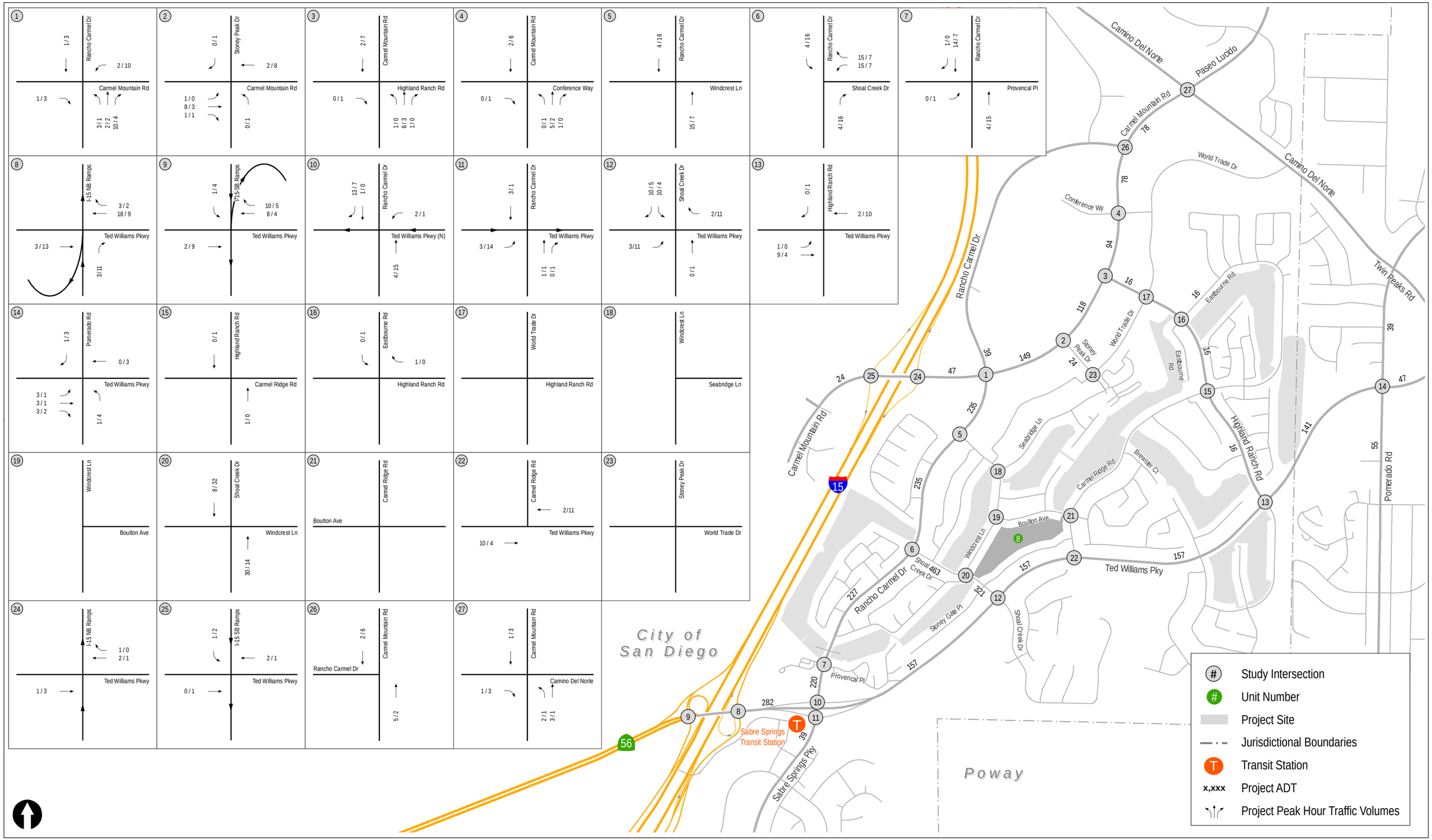


Figure 6-5b

Unit 8 Project Assignment

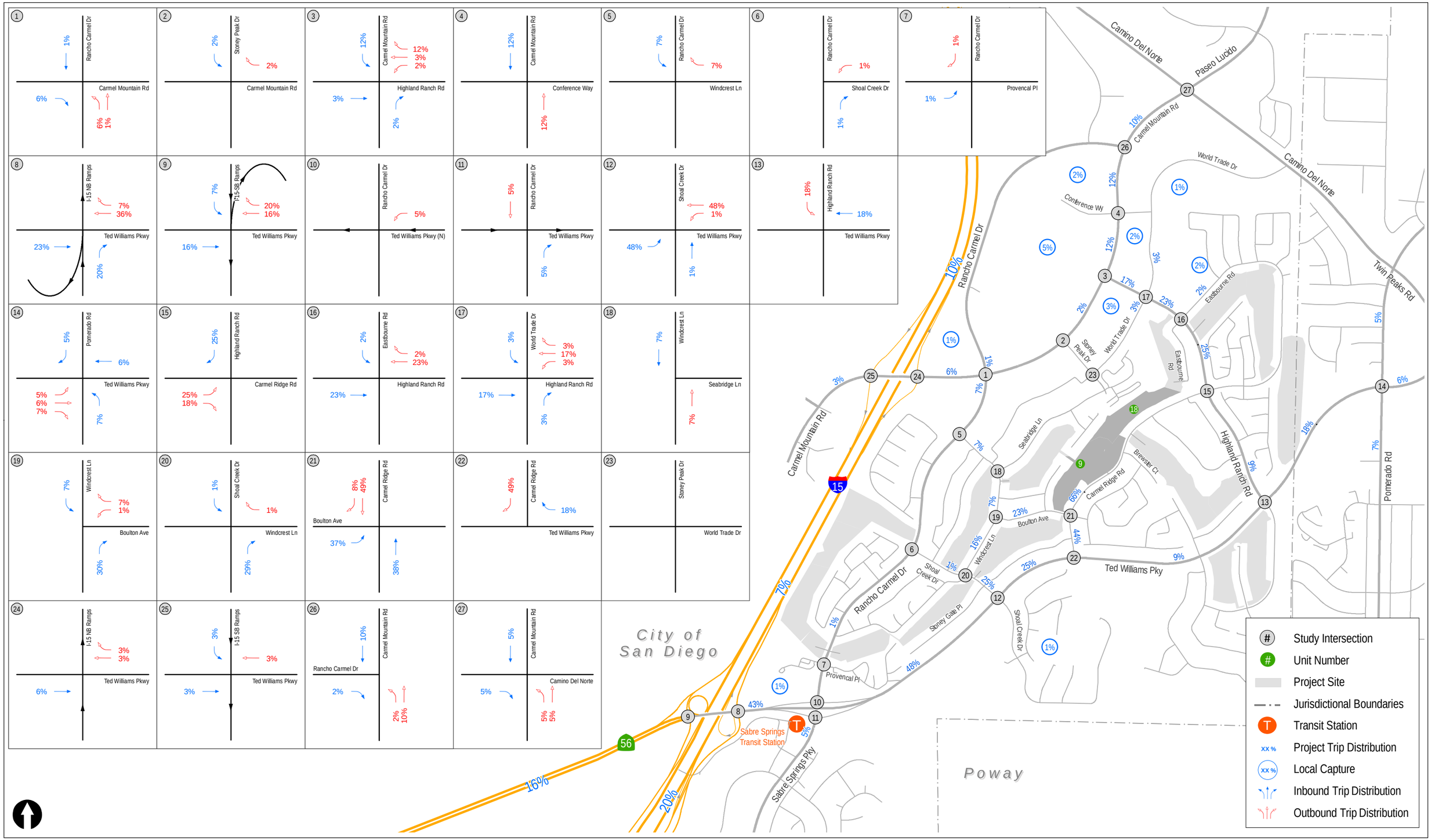


Figure 6-6a

Unit 9 Project Distribution

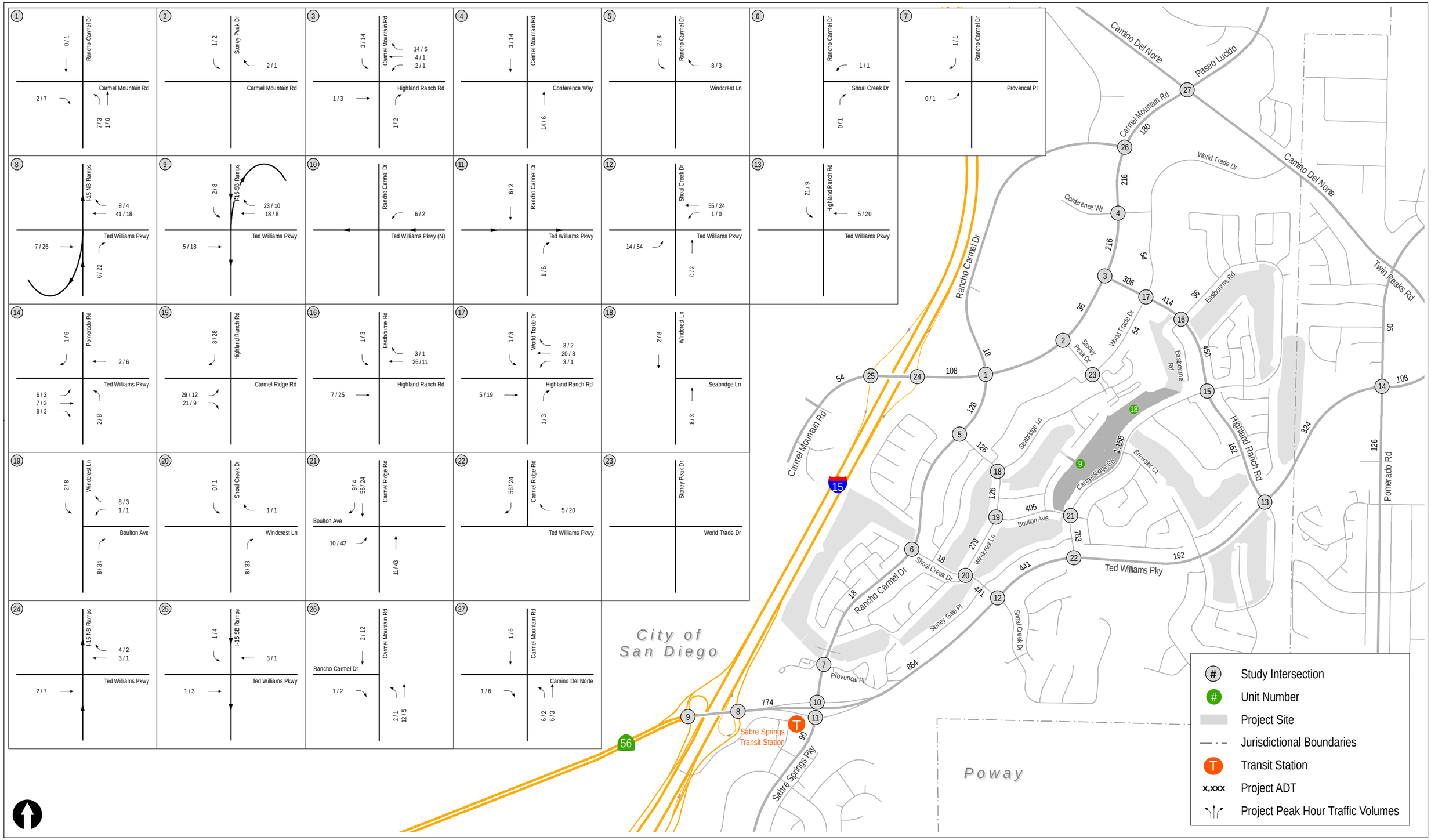


Figure 6-6b

Unit 9 Project Assignment

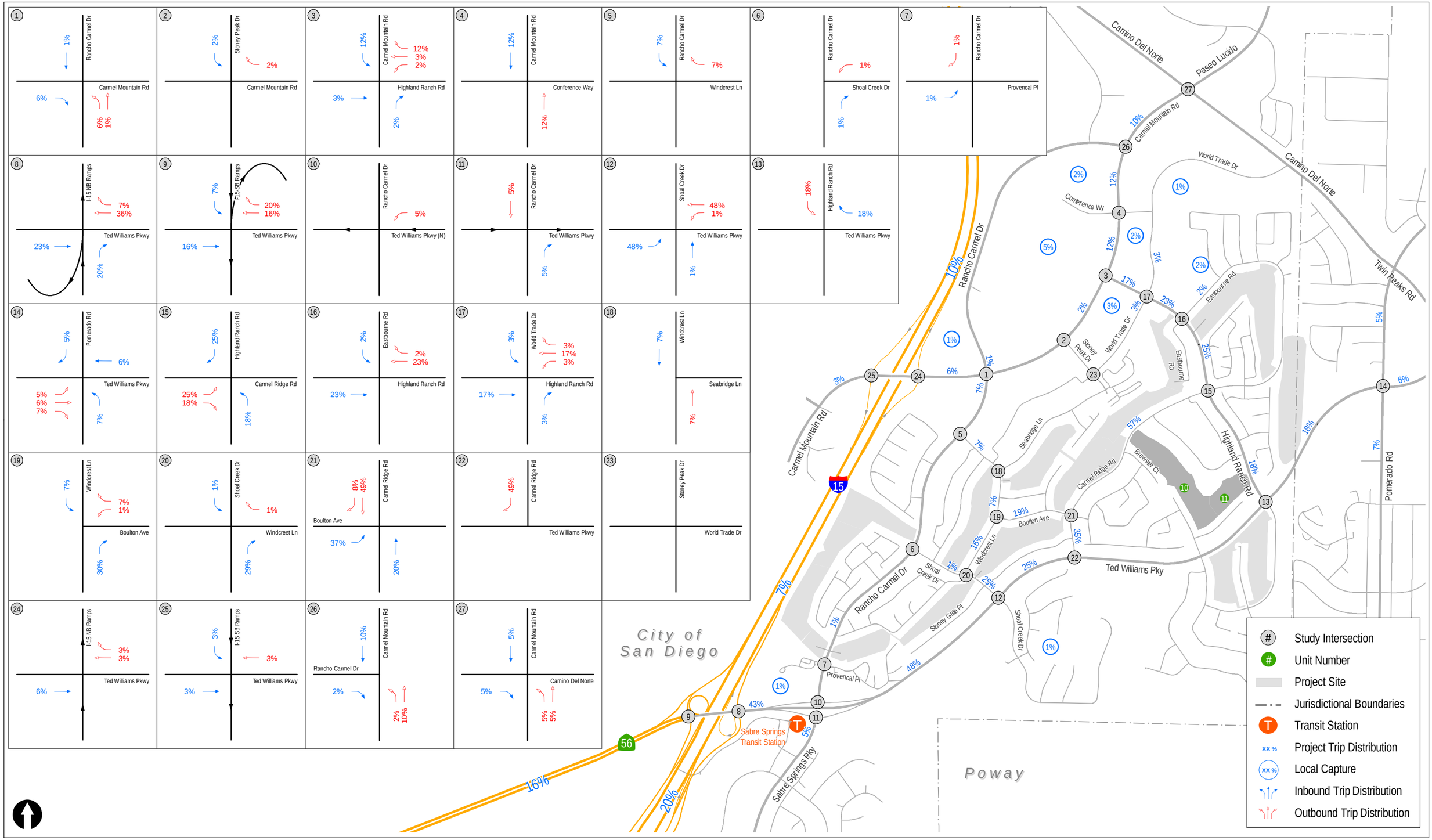


Figure 6-7a

Unit 10 Project Distribution

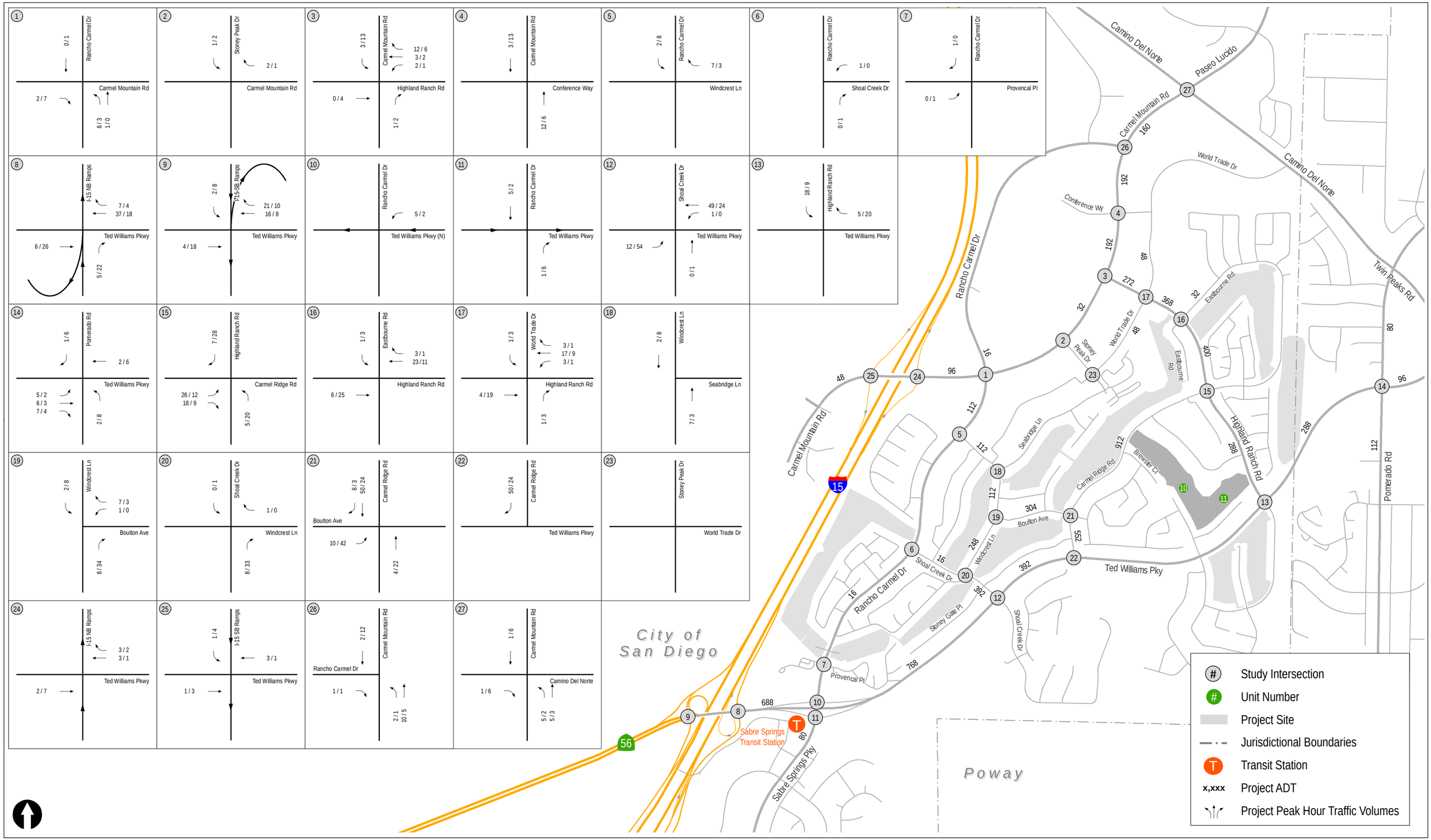


Figure 6-7b

Unit 10 Project Assignment

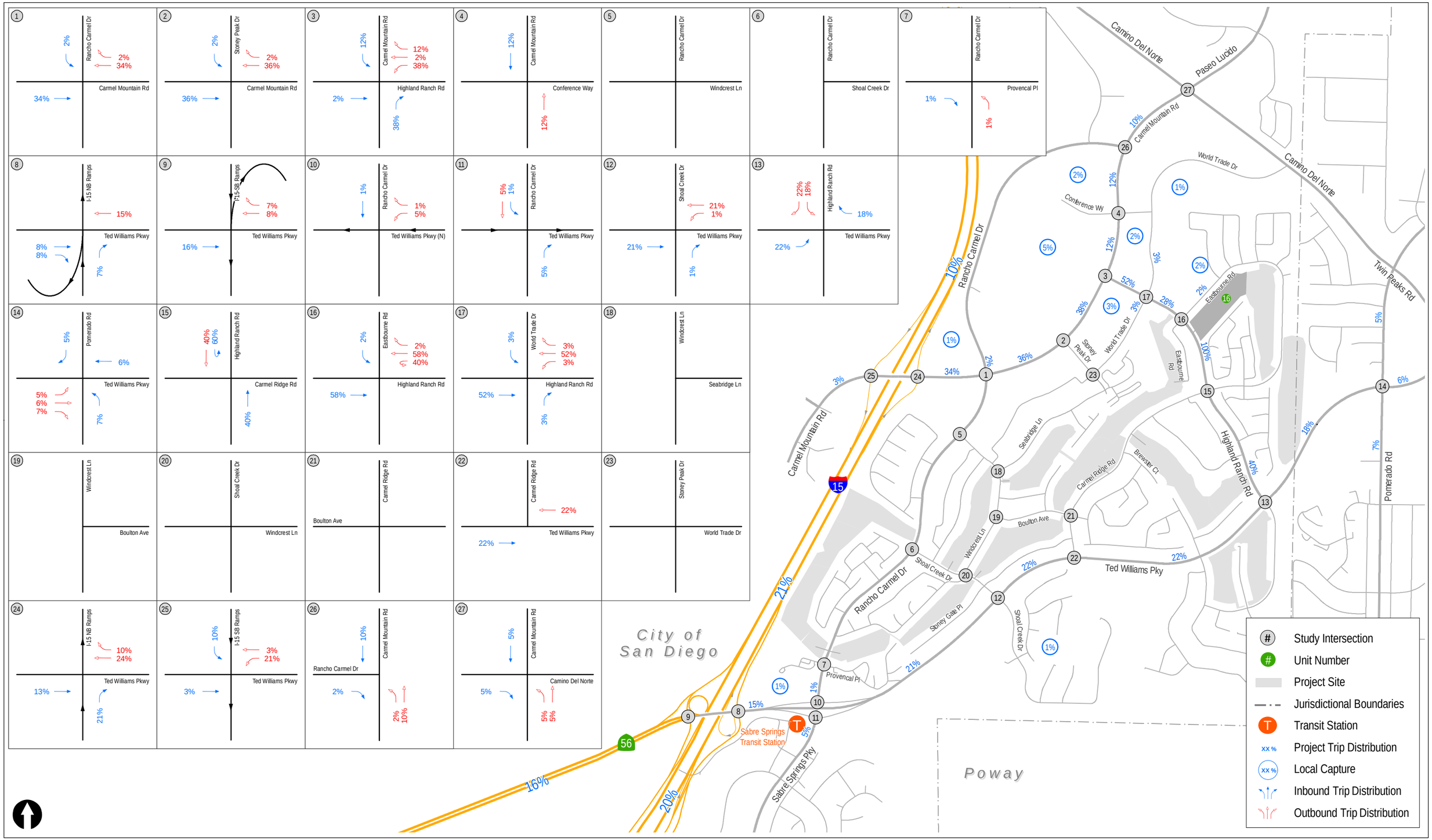


Figure 6-8a

Unit 16 Project Distribution

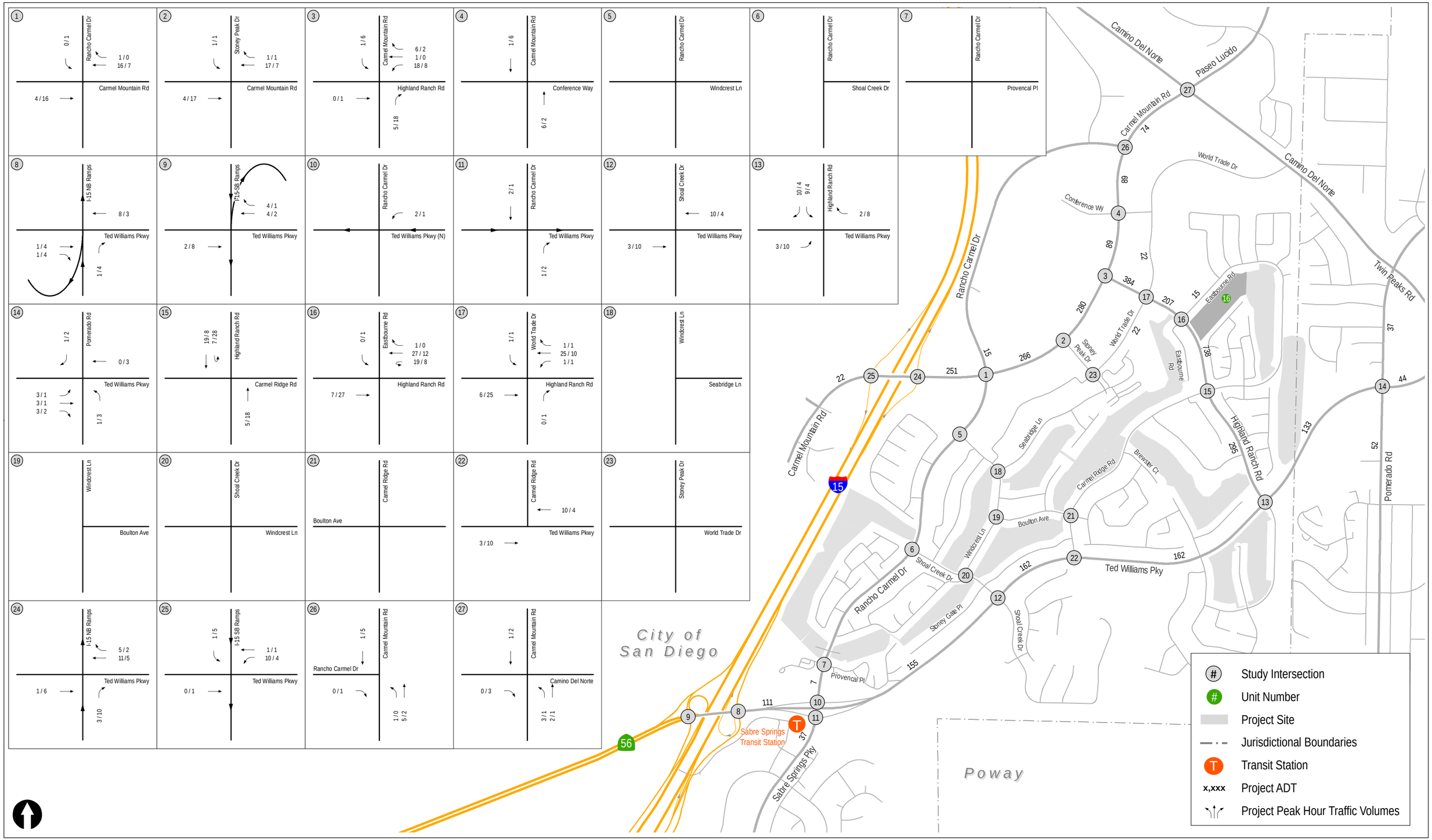


Figure 6-8b

Unit 16 Project Assignment

The Trails at Carmel Mountain Ranch

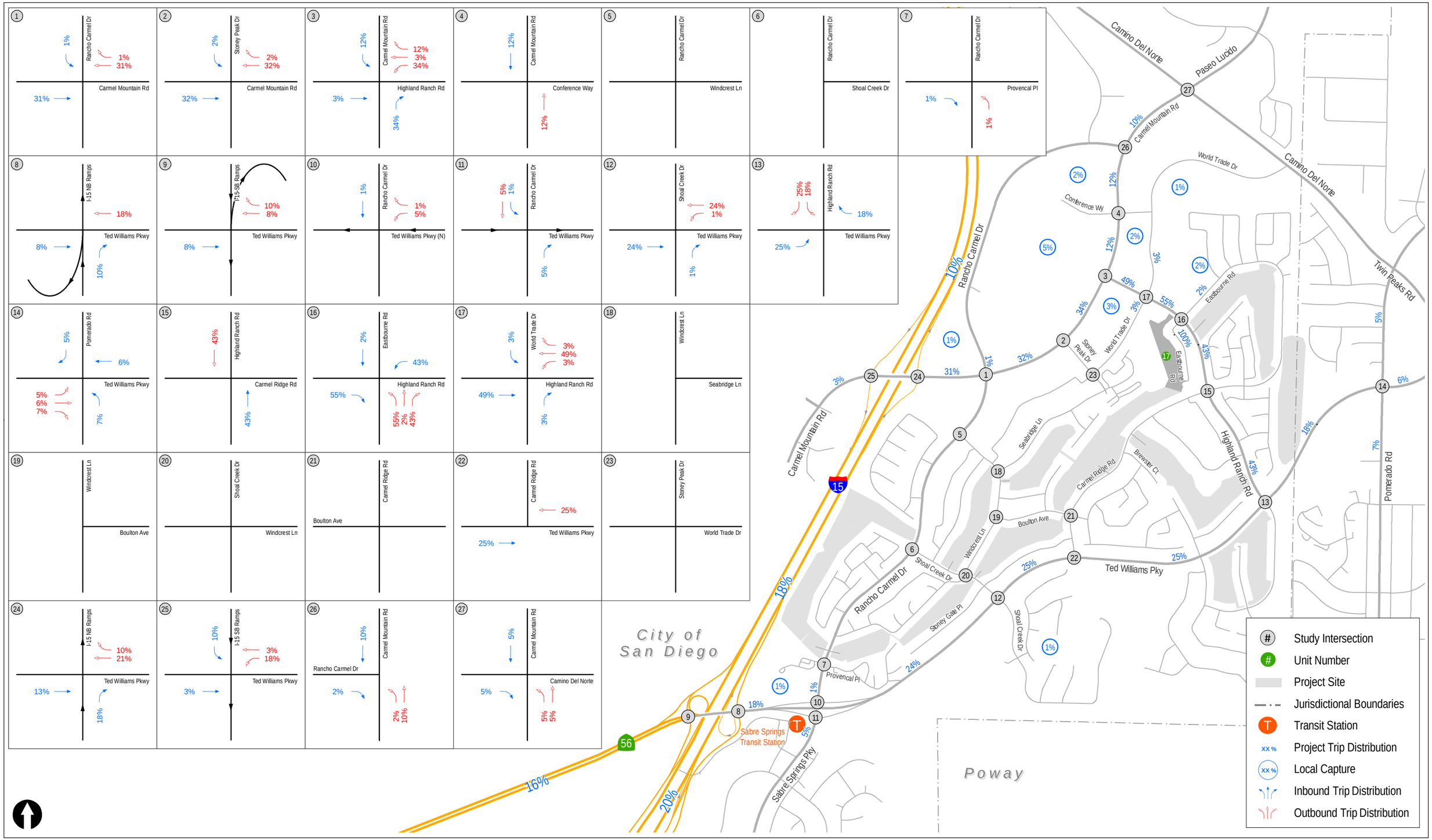


Figure 6-9a

Unit 17 Project Distribution

Figure 6-9b

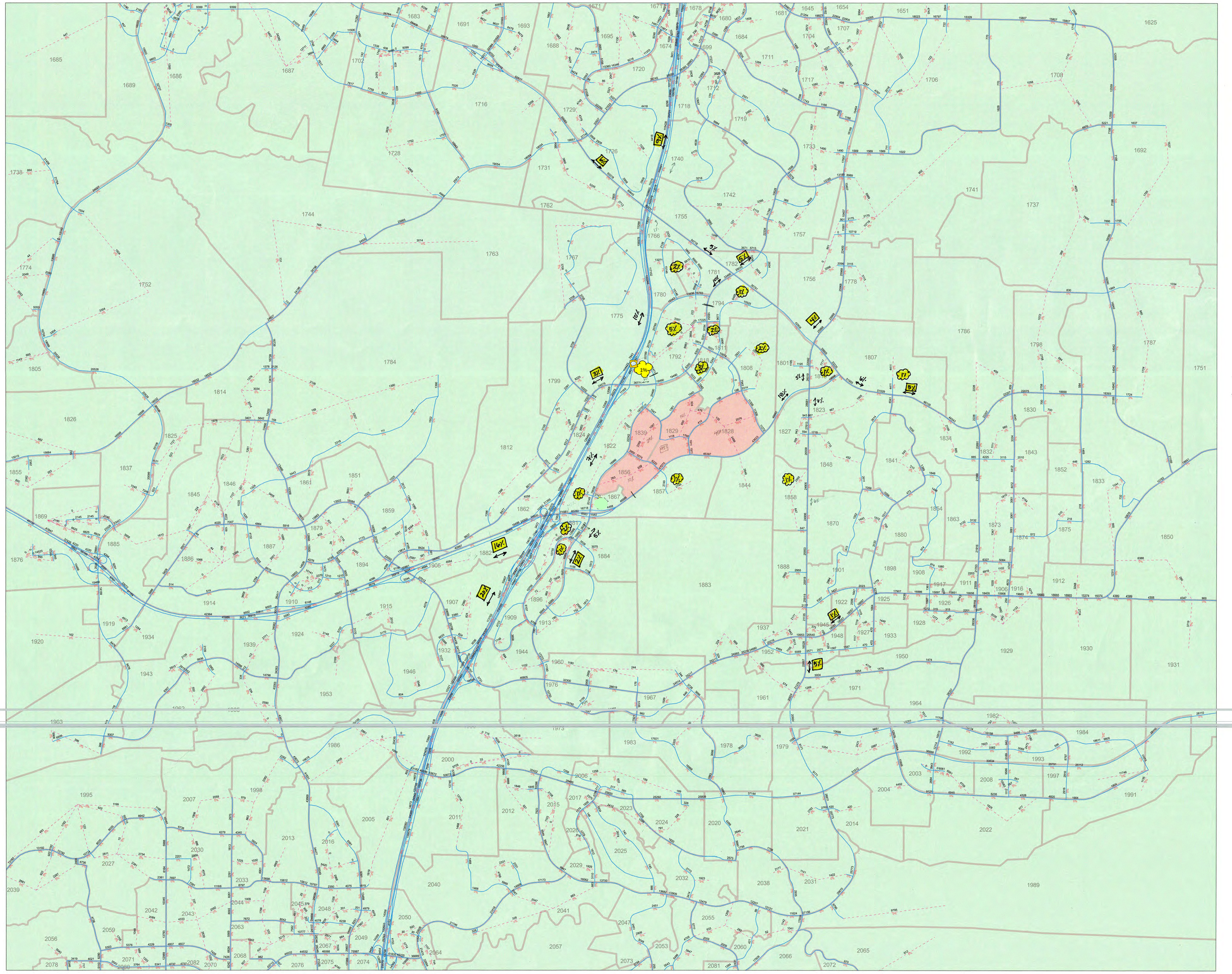
Unit 17 Project Assignment

SANDAG
Series13
version13_3_2
Scenario ID 991

2020rc

Select Zone Run

TAZ 1828,1829
1839,1856



ifc

10

1; 2; 3; 4; 5; 6; 7; 8; 9

Selected Zone(s)

Select Zone Vol and % >0

Model Estimated ADT

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SAN DIEGO ASSOCIATION OF GOVERNMENTS
401 B STREET, SUITE 800
SAN DIEGO, CALIFORNIA 92101 USA
(619) 699-1900
E-mail: sandag@sandag.org
Web site: www.sandag.org

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Date: August 21, 2019

Appendix F: Descriptions of Nearby Development Projects

City of San Diego

Pacific Village (PTS#470158) proposes the redevelopment of an existing 41-acre, 332-unit, one and two bedroom apartment rental complex known as Peñasquitos Village. The project is located west of Interstate 15 (I-15), east of Carmel Mountain Road, and south of the Peñasquitos Drive Shopping Center. Pacific Village proposes 99 single-family cluster homes, 105 multi-family tri-plex units, and 120 row homes, for a total of 324 units. In addition, the northern portion of the site will be entitled for 276 apartments for rent. The total allowable development is 600 dwelling units. The project discretionary permit application was approved by City Council on March 5, 2018 and is currently under construction (Vesting Tentative Map Approval #1669785). The proposed Pacific Village project was included in both the near-term (Opening Year 2025) and horizon year (Year 2050) analyses. Subtracting the existing site trip generation from the proposed Project, the net new trips expected on the street system with redevelopment of the site is 1,796 net new ADT with 144 net new trips during the AM peak hour (29 inbound / 115 outbound) and 163 net new trips during the PM peak hour (114 inbound / 49 outbound). Trip generation, distribution and assignment taken from the Approved Pacific Village EIR Traffic Impact Study, prepared by LLG Engineers, dated November 7, 2017.

The Junipers (PTS#586670) proposes the redevelopment of the defunct golf course (closed permanently in March 2015), as well as the demolition of the existing operational tennis courts serving the Hotel Karlan. with an age-qualified (55+) residential neighborhood featuring 455 attached and detached, for-sale multi-family housing units and 81 multi-family, for-rent affordable housing units for a total of 536 housing units. The project requires a Community Plan Amendment and currently has a discretionary permit application into the City. The proposed Junipers project was included in both the near-term (Opening Year 2025) and horizon year (Year 2050) analysis. The project is calculated to generate approximately 2,144 ADT with 43 inbound and 64 outbound trips in the AM peak hour, and 90 inbound and 60 outbound trips in the PM peak hour. Trip generation, distribution and assignment taken from the Junipers EIR Traffic Impact Study, currently being prepared by LLG Engineers, most recently dated February 28, 2019.

24-Hour Fitness (PTS# 610554) proposes a 33,618 SF fitness center to occupy the currently vacant Office Depot in the shopping center within the southwest quadrant of the Carmel Mountain Road/ I-15 interchange. The project required a Site Development Permit and Condition Use Permit. The project was approved on June 5, 2019. Based on field observations, the conversion process is currently in progress. The proposed 24-Hour Fitness project was included in the near-term (Opening Year 2025) analysis. The 24-Hour Fitness is calculated to generate approximately 1,345 ADT with 32 inbound and 22 outbound trips in the AM peak hour, and 73 inbound and 48 outbound trips in the PM peak hour. Trip generation, distribution and assignment estimated using City of San Diego trip rates and professional engineering judgement.

Park & Ride Parking Structure Redevelopment (PTS# 648597) proposes 50 multi-family units located at the existing Park & Ride parking structure at the northeast corner of Rancho Carmel Drive and Provencal Place. A Community Plan Amendment was initiated at Planning Commission on August 8, 2019 to rezone the residential density allowed on the site. The proposed Park & Ride Parking Structure Redevelopment

project was included in both the near-term (Opening Year 2025) and horizon year (Year 2050) analysis given its close proximity to the Project site. The project is calculated to generate approximately 300 ADT with 5 inbound and 19 outbound trips in the AM peak hour, and 19 inbound and 8 outbound trips in the PM peak hour. Trip generation, distribution and assignment estimated using City of San Diego trip rates and professional engineering judgement.

Black Mountain Ranch North Village (Subarea I) represents Phase II-B of Black Mountain Ranch. The design of the North Village, which is approximately 640 acres in size, is the product of community-based planning by the property owner, the City, the surrounding communities and environmental organizations. The tentative map for the North Village was approved by the San Diego City Council on November 27, 2001. Per the Black Mountain Ranch Subarea Plan, the North Village projected development consists of 2,902 residential units with 590,000 SF of non-residential uses. A modification to the Black Mountain Ranch Specific Plan was made in 2008 to reallocate land uses within the North Village and thus increase traffic generation. Per the Black Mountain Ranch – North Village Proposed Project traffic letter prepared by KOA Corporation, dated July 30, 2008, a total of 27,330 ADT was projected to be generated by the North Village. Since that time, the majority of the North Village has been constructed and is currently occupied. Based on LLG's best efforts to determine the amount of development remaining to be constructed, approximately 80% of the North Village was assumed to be constructed and generating traffic. Research on currently pending/approved projects within the North Village indicate that Black Mountain Ranch North Village No. 14224, PTS#550005 proposes to construct 119 condominium units in Block F and 94 row homes in Block G. By the near-term (Opening Year 2025) scenario, it was assumed trips would be generated by the 119 condominium units and 94 row homes. The remaining 20% of the North Village buildout was assumed to be operational by the horizon year (Year 2050) condition. The Block F & G projects within North Village are calculated to generate approximately 1,892 ADT with 39 inbound and 114 outbound trips in the AM peak hour, and 134 inbound and 56 outbound trips in the PM peak hour. Trip generation, distribution and assignment estimated using City of San Diego trip rates and professional engineering judgement. Given the project's distance from the proposed Project, no trips were assumed to traverse the study area.

City of Poway

The City of Poway projects listed below are identified as reasonably foreseeable near-term cumulative projects. However, all of these projects are located almost two (2) miles away, driving distance, from the Project study area. Thus, no trips were assumed to traverse the study area street system.

The Farm in Poway proposes to develop the former Stonebridge Golf Course and Country Club with 160 residential units and non-residential uses primarily site-serving agricultural and social land uses. The project is currently in the review process at the City of Poway. The trips generated by the project are approximately 2,524 ADT with 62 inbound and 107 outbound trips in the AM peak hour, and 159 inbound and 78 outbound trips in the PM peak hour. Trip generation, distribution and assignment obtained from The Farm in Poway Transportation Impact Study, LLG October 2019 (draft).

Aria Estates proposes seven (7) market rate single-family housing units. The proposed residential project is located near the northeast quadrant of the Poway Road/Pomerado Road intersection on a vacant

parcel. The permit application was submitted on March 15, 2018 per the Annual Report – Implementation of the General Plan in 2018. The project is calculated to generate approximately 70 ADT with 2 inbound and 4 outbound trips in the AM peak hour, and 5 inbound and 2 outbound trips in the PM peak hour. Trip generation estimated using SANDAG trip rates.

Villa de Vida proposes an affordable housing project, approved by City Council in 2017, that would provide rental units to low- and moderate-income disabled adults. The proposed two-story, 54-unit complex is located at 12341 Oak Knoll Road, adjacent to Poway Creek. Construction is expected to commence in 2019 per the Annual Report – Implementation of the General Plan in 2018. The project is calculated to generate approximately 432 ADT. with 7 inbound and 28 outbound trips in the AM peak hour, and 31 inbound and 13 outbound trips in the PM peak hour. Trip generation estimated using SANDAG trip rates.

Outpost proposes three (3) mixed-use buildings consisting of commercial/retail, restaurant, residential, and fitness land uses. Building one consists of a 30-foot-tall, two-story structure with the 20,000-square-foot food hall on the first and second floor and a 6,500-square-foot patio on the upper floor. Building two consists of a three-story, 30-foot-tall residential building with four (4) two-bedroom live/work units and two (2) two-story lofts. Building three consists of a three-story, 38-foot-tall structure with the 20,225-square-foot fitness center, 33 two-bedroom apartments, 10 one-bedroom apartments and four (4) two-bedroom units. The proposed project is located at 13247 Poway Road, near Community Road. The project is currently under construction, commencing in August 2018, with completion expected in Fall 2019. The project is calculated to generate approximately 4,196 ADT with 99 inbound and 87 outbound trips in the AM peak hour, and 221 inbound and 193 outbound trips in the PM peak hour. Trip generation estimated using SANDAG trip rates.

Chick-fil-A proposes to redevelopment the former Cocos restaurant site with a Chick-fil-A restaurant. The proposed project will demolish the vacant 6,500 SF restaurant and replace it with a 4,584 SF fast food restaurant with a double drive through order lane. The project is calculated to generate approximately 1,107 net new ADT with 35 inbound and 35 outbound trips in the AM peak hour, and 35 inbound and 35 outbound trips in the PM peak hour. A timeframe for completion of this Project is currently unknown. Trip generation taken from the approved Traffic & Parking Analysis prepared by TJW Engineering, Inc. February 22, 2017.

Poway Commons proposes to develop a mixed-use project consisting of residential and commercial/retail uses. The development proposes 98 for-sale, market rate, attached housing units, approximately 25,000 SF of commercial retail space, and 44 affordable senior housing units. The affordable unit component will consist of 36 one-bedroom units, eight (8) two-bedroom units, a 2,750 SF community room, and a manager's office. The project was approved at City Council in March 2019 and is expected to take up to 15 months to construct. The project is located on Poway Road near the intersection of Tarascan Drive and Civic Center Drive. The project is calculated to generate approximately 4,136 ADT with 91 inbound and 120 outbound trips in the AM peak hour, and 230 inbound and 184 outbound trips in the PM peak hour. Trip generation estimated using SANDAG trip rates.

Appendix G: Horizon Year Forecasting Calculations

INTERSECTION	DIRECTION	LEG	EXISTING TRAFFIC VOLUMES						CALCULATED			EXISTING ADT	2008	2050 ADT	ANNUAL GROWTH	FINAL 2050
									AM	PM	AVGERAGE					
			Ram	Rpm	Tam	Tpm	Lam	Lpm	8%	8%		SELECTED	SELECTED	SELECTED	FACTOR	SELECTED
1. Carmel Mountain Rd/ Rancho Carmel Dr	Sb	North	198	893	77	330	29	121	15912.5	25950	20931.25	20900	23100	30300	0.7%	26300
	Wb	East	41	68	681	953	123	285	20862.5	33887.5	27375	27400	34400	44400	0.7%	34000
	Nb	South	91	234	189	237	201	146	9950	17425	13687.5	13700	16500	20500	0.6%	16400
	Eb	West	115	162	704	1050	739	427	32975	45387.5	39181.25	39200	42500	51100	0.5%	45500
2. Carmel Mountain Rd (e/w) / Stoney Peak Dr (n/s)	Sb	North	7	120	10	73	19	107	1237.5	7750	4493.75	4500	5000	5700	0.3%	5000
	Wb	East	22	76	535	738	20	42	15987.5	24175	20081.25	20100	33600	42900	0.7%	24700
	Nb	South	32	28	5	45	272	353	5587.5	10025	7806.25	7800	6800	7600	0.3%	8600
	Eb	West	108	261	651	943	36	199	20112.5	32675	26393.75	26400	34400	44400	0.7%	32700
3. Carmel Mountain Rd (n/s) / Highland Ranch Rd (e/w)	Sb	North	14	116	354	587	284	340	17700	25887.5	21793.75	21800	29900	38300	0.7%	26900
	Wb	East	224	184	13	18	170	212	9837.5	12087.5	10962.5	11000	9500	11800	0.6%	13200
	Nb	South	93	134	533	754	26	144	14900	23775	19337.5	19300	33600	42900	0.7%	23700
	Eb	West	16	71	3	79	7	90	987.5	6475	3731.25	3700	23400	27100	0.4%	4200
4. Carmel Mountain Rd (n/s) / Conference Way (e/w)	Sb	North	18	31	511	772	49	144	15775	23025	19400	19400	20600	26900	0.7%	24300
	Wb	East	75	101	23	60	25	57	3362.5	5387.5	4375	4400	5300	5500	0.1%	4600
	Nb	South	70	19	555	672	157	221	17900	23600	20750	20800	26900	35000	0.7%	26000
	Eb	West	114	147	27	50	54	122	4912.5	7887.5	6400	6400	6400	6800	0.1%	6800
5. Rancho Carmel Dr (n/s) / Windcrest Ln (e/w)	Sb	North	6	19	264	587	38	110	10175	16712.5	13443.75	13400	16500	20000	0.5%	15700
	Wb	East	129	64	15	19	60	34	3300	3950	3625	3600	3700	3750	0.0%	3700
	Nb	South	13	53	322	518	60	27	9462.5	16087.5	12775	12800	10100	12100	0.5%	14900
	Eb	West	38	68	9	36	55	39	2287.5	2600	2443.75	2400	6400	6450	0.0%	2500
6. Rancho Carmel Dr (n/s) / Shoal Creek Dr (e/w)	Sb	North	0	0	341	599	66	82	9525	16687.5	13106.25	13100	10300	12300	0.5%	15200
	Wb	East	100	77	0	0	70	36	3437.5	3062.5	3250	3300	3800	3850	0.0%	3400
	Nb	South	39	50	255	577	0	0	8812.5	15775	12293.75	12300	15100	18500	0.5%	14600
	Eb	West	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!	#DIV/0!
7. Rancho Carmel Dr / Provencal Pl	Sb	North	2	19	389	574	19	40	8537.5	15862.5	12200	12200	15500	19000	0.5%	14500
	Wb	East	22	25	0	1	121	49	2237.5	2162.5	2200	2200	5000	5500	0.2%	2400
	Nb	South	17	55	249	599	4	18	9762.5	16487.5	13125	13100	16400	20000	0.5%	15400
	Eb	West	1	24	0	3	2	12	112.5	962.5	537.5	500	600	600	0.0%	500
8 Ted Williams Parkway / I-15 Northbound Ramps	Sb	North	0	0	0	0	0	0	2100	3025	2562.5	2600	5100	7500	1.1%	3700
	Wb	East	147	139	1855	1428	0	0	41050	47750	44400	44400	36200	48000	0.8%	56500
	Nb	South	402	894	21	103	541	793	26450	38525	32487.5	32500	24100	26400	0.2%	34900
	Eb	West	1152	1292	880	1359	0	0	55350	60900	58125	58100	45900	60100	0.7%	73000
9 Ted Williams Parkway / I-15 Southbound Ramps	Sb	North	0	0	50	10	172	178	15175	8975	12075	12100	13000	18000	0.9%	16100
	Wb	East	992	530	1596	1550	0	0	56175	56487.5	56331.25	56300	45900	60100	0.7%	70700
	Nb	South	0	0	0	0	0	0	9625	7700	8662.5	8700	14200	15100	0.2%	9200
	Eb	West	720	606	1734	2261	0	0	50625	55212.5	52918.75	52900	54400	67200	0.6%	63000

INTERSECTION	DIRECTION	LEG	EXISTING TRAFFIC VOLUMES						CALCULATED			EXISTING ADT	2008	2050 ADT	ANNUAL GROWTH	FINAL 2050
									AM	PM	AVGERAGE					
			Ram	Rpm	Tam	Tpm	Lam	Lpm	8%	8%		SELECTED	SELECTED	SELECTED	FACTOR	SELECTED
10 Ted Williams Parkway / Rancho Carmel Drive (North)	Sb	North	293	366	235	313	0	0	10850	17587.5	14218.75	14200	16400	23100	1.0%	19200
	Wb	East	39	55	3	6	152	103	2425	2050	2237.5	2200	1800	2200	0.5%	2600
	Nb	South	0	0	301	673	286	392	12175	18512.5	15343.75	15300	15600	16000	0.1%	15600
	Eb	West	0	0	0	0	0	0	7275	9550	8412.5	8400	12200	15800	0.7%	10500
11 Ted Williams Parkway / Rancho Carmel Drive (South)	Sb	North	0	0	311	269	15	21	11925	15738	13831	13800	15600	16000	0.1%	14100
	Wb	East	0	0	0	0	0	0	1687.5	2087.5	1887.5	1900	1300	1400	0.2%	2000
	Nb	South	114	146	469	634	0	0	16138	16375	16256.25	16300	18000	19200	0.2%	17100
	Eb	West	397	261	6	0	159	335	7025	7450	7237.5	7200	7000	8500	0.5%	8400
12. Ted Williams Pkwy (e/w) / Shoal Creek Dr (n/s)	Sb	North	72	49	135	37	58	65	6262.5	6137.5	6200	6200	5200	5250	0.0%	6300
	Wb	East	94	66	1471	840	195	124	32262.5	34975	33618.75	33600	24900	28300	0.3%	37200
	Nb	South	81	40	99	46	156	46	9450	4575	7012.5	7000	2900	2950	0.0%	7100
	Eb	West	90	73	682	1663	43	228	31425	36237.5	33831.25	33800	25400	32200	0.6%	41200
13. Ted Williams Pkwy (e/w) / Highland Ranch Rd (n/s)	Sb	North	211	211	17	30	199	275	10137.5	14775	12456.25	12500	11100	13300	0.5%	14500
	Wb	East	168	279	1235	783	27	46	30337.5	35362.5	32850	32900	30400	37200	0.5%	38800
	Nb	South	27	23	26	27	113	30	2712.5	2225	2468.75	2500	2500	2550	0.0%	2600
	Eb	West	7	22	771	1423	190	360	31587.5	35362.5	33475	33500	23700	26700	0.3%	36800
14 Ted Williams Parkway / Pomerado Road	Sb	North	405	328	655	622	7	12	25962.5	28775	27368.75	27400	30600	37100	0.5%	32100
	Wb	East	17	18	509	365	90	207	12412.5	17800	15106.25	15100	13600	15400	0.3%	16700
	Nb	South	48	60	620	809	325	344	25987.5	30075	28031.25	28000	29200	35500	0.5%	32900
	Eb	West	341	364	322	762	373	513	28437.5	33450	30943.75	30900	30400	37200	0.5%	36500
15 Highland Ranch Road / Carmel Ridge Road	Sb	North	36	88	250	468	99	43	10075	15025	12550	12600	12500	15000	0.5%	14600
	Wb	East	62	23	29	6	97	22	4512.5	1800	3156.25	3200	3200	3250	0.0%	3300
	Nb	South	65	47	261	518	20	49	9000	14025	11512.5	11500	10700	12900	0.5%	13400
	Eb	West	27	18	9	3	98	62	2737.5	2825	2781.25	2800	1200	1250	0.1%	2900
16. Highland Ranch Rd (e/w) / Eastbourne Rd (n/s)	Sb	North	328	128	1	2	102	38	9800	4750	7275	7300	6600	6650	0.0%	7400
	Wb	East	57	73	349	504	7	15	9212.5	14287.5	11750	11800	12500	15000	0.5%	13700
	Nb	South	8	6	6	1	23	4	750	450	600	600	600	650	0.2%	700
	Eb	West	15	8	214	507	290	138	15237.5	16112.5	15675	15700	14100	17000	0.5%	18300
17. Highland Ranch Rd (e/w) / World Trade Dr (n/s)	Sb	North	16	50	82	201	148	179	7987.5	11562.5	9775	9800	8700	10700	0.5%	11700
	Wb	East	249	179	354	228	92	168	14937.5	14937.5	14937.5	14900	14100	17000	0.5%	17400
	Nb	South	96	153	103	155	25	33	5187.5	9300	7243.75	7200	5700	7100	0.6%	8700
	Eb	West	17	34	256	288	41	161	8862.5	9925	9393.75	9400	9500	11800	0.6%	11300
18. Windcrest (n/s)/ Seabridge (e/w)	Sb	North	0	0	42	48	18	43	1687.5	2237.5	1962.5	2000	3700	3750	0.0%	2100
	Wb	East	26	41	0	0	45	43	1400	2187.5	1793.75	1800	2400	2450	0.0%	1900
	Nb	South	23	48	49	47	0	0	1987.5	2325	2156.25	2200	300	350	0.4%	2500
	Eb	West	0	0	0	0	0	0	0	0	0	0	0		#DIV/0!	#DIV/0!

INTERSECTION	DIRECTION	LEG	EXISTING TRAFFIC VOLUMES						CALCULATED			EXISTING ADT	2008	2050 ADT	ANNUAL GROWTH	FINAL 2050
									AM	PM	AVGERAGE					
			Ram	Rpm	Tam	Tpm	Lam	Lpm	8%	8%		SELECTED	SELECTED	SELECTED	FACTOR	SELECTED
19. Windcrest (n/s)/ Boulton (e/w)	Sb	North	0	0	70	56	10	45	1700	2387.5	2043.75	2000	300	350	0.4%	2300
	Wb	East	23	11	0	0	14	11	737.5	1387.5	1062.5	1100	300	350	0.4%	1300
	Nb	South	12	44	33	79	0	0	1612.5	2375	1993.75	2000	2000	2050	0.1%	2100
	Eb	West	0	0	0	0	0	0	0	0	0	0	0		#DIV/0!	#DIV/0!
20. Shoal Creek (n/s)/ Windcrest (e/w)	Sb	North	8	13	140	92	2	16	3700	3312.5	3506.25	3500	3800	3850	0.0%	3600
	Wb	East	14	11	1	11	80	44	1762.5	2462.5	2112.5	2100	2100	2150	0.1%	2200
	Nb	South	43	114	127	127	12	15	5287.5	5037.5	5162.5	5200	5200	5250	0.0%	5300
	Eb	West	21	11	1	1	5	6	600	712.5	656.25	700	1100	1150	0.1%	800
21. Boulton (e/w)/ Carmel Ridge (n/s)	Sb	North	16	5	79	42	1	6	1650	1250	1450	1500	300	350	0.4%	1700
	Wb	East	12	7	20	8	61	11	1487.5	1037.5	1262.5	1300	1300	1350	0.1%	1400
	Nb	South	11	21	15	22	10	9	2312.5	1400	1856.25	1900	1900	1950	0.1%	2000
	Eb	West	9	7	14	30	9	18	975	962.5	968.75	1000	300	350	0.4%	1200
22. Carmel Ridge/ Ted Williams (RIRO)	Sb	North	161	48	0	0	0	0	2175	812.5	1493.75	1500	1500	1550	0.1%	1600
	Wb	East	13	17	1490	966	0	0	31512.5	33975	32743.75	32700	24900	28300	0.3%	36200
	Nb	South	0	0	0	0	0	0	0	0	0	0	0		#DIV/0!	#DIV/0!
	Eb	West	0	0	1018	1735	0	0	33362.5	34362.5	33862.5	33900	24900	28300	0.3%	37500
23. Stoney Peak (n/s)/ World Trade (e/w)	Sb	North	5	13	17	71	93	129	3937.5	5187.5	4562.5	4600	6800	7600	0.3%	5100
	Wb	East	95	151	6	21	27	89	3787.5	5812.5	4800	4800	4900	6400	0.7%	6100
	Nb	South	67	66	78	40	3	2	2425	3350	2887.5	2900	5500	6400	0.4%	3300
	Eb	West	2	0	15	9	27	11	725	700	712.5	700	800	1000	0.6%	900
24. Carmel Mtn Rd/ I-15 NB Ramps	Sb	North	0	0	0	0	0	0	8175	9712.5	8943.75	8900	7200	8300	0.4%	10000
	Wb	East	326	538	749	1453	0	0	33875	46925	40400	40400	42500	51100	0.5%	46900
	Nb	South	1021	890	3	4	161	358	14812.5	15650	15231.25	15200	12200	15000	0.5%	18000
	Eb	West	0	0	614	873	325	235	23112.5	36487.5	29800	29800	35200	41200	0.4%	33800
25. Carmel Mtn Rd/ I-15 SB Ramps	Sb	North	234	293	1	1	263	446	6225	9250	7737.5	7700	6900	7800	0.3%	8500
	Wb	East	0	0	382	883	528	928	23112.5	36487.5	29800	29800	35200	41200	0.4%	33800
	Nb	South	0	0	0	0	0	0	13975	14562.5	14268.75	14300	14700	15500	0.1%	14900
	Eb	West	589	236	676	662	0	0	23512.5	25925	24718.75	24700	27800	33100	0.5%	28500
26. Carmel Mountain Rd (n/s)/ Rancho Carmel Dr North (e/w)	Sb	North	780	393	719	1027	0	0	27725	39325	33525	33500	34900	45000	0.7%	41500
	Wb	East	0	0	0	0	0	0	0	0	0	1	1	1	0.0%	100
	Nb	South	0	0	528	910	170	149	18087.5	28487.5	23287.5	23300	20600	26900	0.7%	29200
	Eb	West	30	193	0	0	191	816	14637.5	19387.5	17012.5	17000	12200	16000	0.7%	21400
27. Carmel Mountain Rd (n/s)/ Camino Del Norte (e/w)	Sb	North	397	168	559	390	304	171	27112.5	26562.5	26837.5	26800	33000	35500	0.2%	28400
	Wb	East	251	224	1112	1159	246	283	36175	39750	37962.5	38000	31500	40900	0.7%	47400
	Nb	South	64	279	385	774	286	632	26150	37037.5	31593.75	31600	34900	45000	0.7%	39100
	Eb	West	552	605	917	1064	273	398	44212.5	50325	47268.75	47300	44900	58100	0.7%	58800

INTERSECTION	DIRECTION	LEG	EXISTING TRAFFIC VOLUMES						2050 APROACH TRAFFIC VOLUMES						2050 DEPARTURE TRAFFIC VOLUMES						2050 WEIGHTED AVERAGE TRAFFIC VOLUMES						2050 ROUNDED TRAFFIC VOLUMES						FINAL Year 2050					
			Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm
1. Carmel Mountain Rd/ Rancho Carmel Dr	Sb	North	198	893	77	330	29	121	249	1,124	97	415	36	152	230	1037	92	395	36	150	242	1093	94	403	36	151	240	1090	90	400	40	150	240	1090	90	400	40	150
	Wb	East	41	68	681	953	123	285	51	84	845	1,183	153	354	52	86	790	1106	147	341	51	85	823	1151	149	345	50	90	820	1150	150	350	50	90	790	1150	150	350
	Nb	South	91	234	189	237	201	146	109	280	226	284	241	175	113	290	238	298	233	169	110	284	231	289	239	173	110	280	230	290	240	170	120	280	230	290	230	170
	Eb	West	115	162	704	1050	739	427	133	188	817	1,219	858	496	138	194	874	1303	930	537	137	192	850	1268	905	523	140	190	850	1270	900	520	140	190	850	1270	900	520
2. Carmel Mountain Rd (e/w) / Stoney Peak Dr (n/s)	Sb	North	7	120	10	73	19	107	8	133	11	81	21	119	9	149	11	80	23	131	8	136	11	81	22	121	10	140	10	80	20	120	15	140	15	85	20	120
	Wb	East	22	76	535	738	20	42	27	93	657	907	25	52	24	84	663	914	22	46	25	86	660	910	23	48	20	90	660	910	20	50	25	90	660	910	20	50
	Nb	South	32	28	5	45	272	353	35	31	6	50	300	389	39	34	6	50	337	437	36	32	6	50	308	400	40	30	10	50	310	400	40	30	10	50	310	400
	Eb	West	108	261	651	943	36	199	134	323	806	1,168	45	246	119	288	800	1159	40	221	122	296	803	1163	41	225	120	300	800	1160	40	220	120	300	800	1160	55	220
3. Carmel Mountain Rd (n/s) / Highland Ranch Rd (e/w)	Sb	North	14	116	354	587	284	340	17	143	437	724	350	420	16	132	435	721	341	408	16	133	436	722	344	412	20	130	440	720	340	410	20	130	440	720	340	410
	Wb	East	224	184	13	18	170	212	269	221	16	22	204	254	276	227	15	20	209	260	271	223	15	21	206	257	270	220	10	20	210	260	270	220	20	20	210	260
	Nb	South	93	134	533	754	26	144	114	165	655	926	32	177	112	161	658	930	30	163	113	162	656	928	30	166	110	160	660	930	30	170	130	160	660	930	40	170
	Eb	West	16	71	3	79	7	90	18	81	3	90	8	102	20	87	4	95	9	111	18	82	3	91	8	103	20	80	0	90	10	100	30	90	10	90	10	100
4. Carmel Mountain Rd (n/s) / Conference Way (e/w)	Sb	North	18	31	511	772	49	144	23	39	640	967	61	180	19	33	639	965	51	151	20	34	639	966	53	156	20	30	640	970	50	160	20	40	640	970	50	160
	Wb	East	75	101	23	60	25	57	78	106	24	63	26	60	94	127	24	64	31	71	81	109	24	63	27	62	80	110	20	60	30	60	80	110	30	60	30	60
	Nb	South	70	19	555	672	157	221	88	24	694	840	196	276	73	20	695	842	167	235	76	21	694	841	174	245	80	20	690	840	170	240	90	20	690	840	170	240
	Eb	West	114	147	27	50	54	122	121	156	29	53	57	130	143	184	28	52	68	153	126	163	28	53	60	135	130	160	30	50	60	140	130	160	30	50	60	140
5. Rancho Carmel Dr (n/s) / Windcrest Ln (e/w)	Sb	North	6	19	264	587	38	110	7	22	309	688	45	129	6	20	307	683	39	113	6	20	308	685	40	116	10	20	310	690	40	120	10	20	310	690	40	120
	Wb	East	129	64	15	19	60	34	133	66	15	20	62	35	151	75	16	20	70	40	137	68	16	20	63	36	140	70	20	20	60	40	140	70	20	20	60	40
	Nb	South	13	53	322	518	60	27	15	62	375	603	70	31	13	54	377	607	63	28	14	56	376	605	64	29	10	60	380	600	60	30	15	65	380	600	60	30
	Eb	West	38	68	9	36	55	39	40	71	9	38	57	41	44	79	9	37	64	46	40	72	9	37	58	41	40	70	10	40	60	40	40	70	10	40	60	40
6. Rancho Carmel Dr (n/s) / Shoal Creek Dr (e/w)	Sb	North	0	0	341	599	66	82	0	0	396	695	77	95	#####	####	405	711	68	84	0	0	400	703	70	87	0	0	400	700	70	90	0	0	400	700	70	90
	Wb	East	100	77	0	0	70	36	103	79	0	0	72	37	116	89	####	####	83	43	106	81	0	0	74	38	110	80	0	0	70	40	110	80	0	0	75	40
	Nb	South	39	50	255	577	0	0	46	59	303	685	0	0	40	52	296	669	#####	####	41	53	299	677	0	0	40	50	300	680	0	0	45	55	300	680	0	0
	Eb	West	0	0	0	0	0	0	#####	#####	#####	#####	#####	#####	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7. Rancho Carmel Dr / Provencal Pl	Sb	North	2	19	389	574	19	40	2	23	462	682	23	48	2	19	457	675	21	44	2	19	460	679	21	44	0	20	460	680	20	40	5	20	460	680	25	50
	Wb	East	22	25	0	1	121	49	24	27	0	1	132	53	26	30	0	1	142	58	24	28	0	1	133	54	20	30	0	0	130	50	35	30	5	5	140	60
	Nb	South	17	55	249	599	4	18	20	65	293	704	5	21	19	60	296	712	4	18	19	61	294	708	4	18	20	60	290	710	0	20	25	70	290	710	5	20
	Eb	West	1	24	0	3	2	12	1	24	0	3	2	12	1	28	0	3	2	14	1	24	0	3	2	12	0	20	0	0	0	10	5	25	0	5	5	15
8 Ted Williams Parkway / I-15 Northbound Ramps	Sb	North	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Wb	East	147	139	1855	1428	0	0	187	177	2,361	1,817	0	0	209	198	2331	1794	0	0	208	197	2348	1807	0	0	210	200	2350	1810	0	0	210	200	2350	1690	0	0
	Nb	South	402	894	21	103	541	793	432	960	23	111	581	852	512	1138	30	147	680	996	465	1035	29	144	616	904	470	1040	30	140	620	900	470	1040	30	140	620	900
	Eb	West	1152	1292	880	1359	0	0	1,447	1,623	1,106	1,708	0	0	1237	1387	1120	1729	0	0	1313	1472	1114	1720	0	0	1310	1470	1110	1720	0	0	1270	1420	1080	1570	0	0
9 Ted Williams Parkway / I-15 Southbound Ramps	Sb	North	0	0	50	10	172	178	0	0	67	13	229	237	0	0	53	11	216	224	0	0	59	12	227	234	0	0	60	10	230	230	0	0	60	10	230	230
	Wb	East	992	530	1596	1550	0	0	1,246	666	2,004	1,946	0	0	1320	705	1901	1846	0	0	1307	698	1951	1895	0	0	1310	700	1950	1890	0	0	1160	700	1810	1890	0	0
	Nb	South	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Eb	West	720	606	1734	2261	0	0	857	722	2,065	2,693	0	0	761	641	2178	2839	0	0	775	652	2120	2764	0	0	770	650	2120	2760	0	0	770	650	2120	2760	0	0

INTERSECTION	DIRECTION	LEG	EXISTING TRAFFIC VOLUMES						2050 APROACH TRAFFIC VOLUMES						2050 DEPARTURE TRAFFIC VOLUMES						2050 WEIGHTED AVERAGE TRAFFIC VOLUMES						2050 ROUNDED TRAFFIC VOLUMES						FINAL Year 2050					
			Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm
10 Ted Williams Parkway / Rancho Carmel Drive (North)	Sb	North	293	366	235	313	0	0	396	495	318	423	0	0	366	458	240	319	0	0	377	471	280	373	0	0	380	470	280	370	0	0	380	470	280	370	0	0
	Wb	East	39	55	3	6	152	103	46	65	4	7	180	122	53	74	4	8	155	105	47	66	4	7	177	120	50	70	0	10	180	120	50	70	5	10	180	120
	Nb	South	0	0	301	673	286	392	0	0	307	686	292	400	0	0	407	910	358	490	0	0	359	802	334	458	0	0	360	800	330	460	0	0	360	800	330	460
	Eb	West	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 Ted Williams Parkway / Rancho Carmel Drive (South)	Sb	North	0	0	311	269	15	21	0	0	318	275	15	21	0	0	326	282	16	22	0	0	322	278	16	22	0	0	320	280	20	20	0	0	330	280	20	30
	Wb	East	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Nb	South	114	146	469	634	0	0	120	153	492	665	0	0	120	154	479	648	0	0	120	154	485	656	0	0	120	150	490	660	0	0	120	160	490	660	0	0
	Eb	West	397	261	6	0	159	335	463	305	7	0	186	391	416	274	6	0	162	342	449	295	6	0	178	374	450	300	10	0	180	370	450	300	10	0	180	380
12. Ted Williams Pkwy (e/w) / Shoal Creek Dr (n/s)	Sb	North	72	49	135	37	58	65	73	50	137	38	59	66	88	60	137	38	64	72	75	51	137	38	60	67	80	50	140	40	60	70	85	50	140	40	70	70
	Wb	East	94	66	1471	840	195	124	104	73	1,629	930	216	137	96	67	1793	1024	198	126	97	68	1711	977	201	128	100	70	1710	980	200	130	100	80	1710	980	200	130
	Nb	South	81	40	99	46	156	46	82	41	100	47	158	47	90	44	101	47	190	56	83	41	101	47	164	48	80	40	100	50	160	50	85	40	100	50	160	50
	Eb	West	90	73	682	1663	43	228	110	89	831	2,027	52	278	91	74	755	1841	44	232	94	77	793	1934	45	239	90	80	790	1930	50	240	90	80	790	1930	50	240
13. Ted Williams Pkwy (e/w) / Highland Ranch Rd (n/s)	Sb	North	211	211	17	30	199	275	245	245	20	35	231	319	232	232	18	31	235	324	241	241	18	32	232	320	240	240	20	30	230	320	240	240	20	30	230	320
	Wb	East	168	279	1235	783	27	46	198	329	1,456	923	32	54	195	324	1357	860	28	48	196	325	1407	892	28	48	200	330	1410	890	30	50	200	330	1410	890	30	50
	Nb	South	27	23	26	27	113	30	28	24	27	28	118	31	32	27	30	31	124	33	28	24	28	29	118	31	30	20	30	30	120	30	30	25	30	30	125	30
	Eb	West	7	22	771	1423	190	360	8	24	847	1,563	209	395	7	23	909	1678	220	418	7	23	878	1621	217	412	10	20	880	1620	220	410	10	25	880	1620	220	410
14 Ted Williams Parkway / Pomerado Road	Sb	North	405	328	655	622	7	12	474	384	767	729	8	14	478	387	770	731	8	13	476	386	768	730	8	14	480	390	770	730	10	10	480	390	770	730	10	15
	Wb	East	17	18	509	365	90	207	19	20	563	404	100	229	20	21	601	431	106	243	19	20	576	413	102	234	20	20	580	410	100	230	20	20	580	410	100	230
	Nb	South	48	60	620	809	325	344	56	71	729	951	382	404	53	66	726	948	384	406	54	68	727	949	383	405	50	70	730	950	380	410	50	70	730	950	380	410
	Eb	West	341	364	322	762	373	513	403	430	380	900	441	606	401	428	356	843	437	601	402	429	364	862	439	603	400	430	360	860	440	600	400	430	360	860	440	600
15 Highland Ranch Road / Carmel Ridge Road	Sb	North	36	88	250	468	99	43	42	102	290	542	115	50	37	91	291	545	102	44	38	93	291	544	105	45	40	90	290	540	100	50	40	90	290	540	100	50
	Wb	East	62	23	29	6	97	22	64	24	30	6	100	23	72	27	30	6	113	26	66	24	30	6	103	23	70	20	30	10	100	20	70	25	30	10	100	25
	Nb	South	65	47	261	518	20	49	76	55	304	604	23	57	67	48	302	600	21	51	69	50	303	602	21	52	70	50	300	600	20	50	70	50	300	600	20	50
	Eb	West	27	18	9	3	98	62	28	19	9	3	102	64	31	21	9	3	114	72	29	19	9	3	104	66	30	20	10	0	100	70	30	20	10	5	100	70
16. Highland Ranch Rd (e/w) / Eastbourne Rd (n/s)	Sb	North	328	128	1	2	102	38	332	130	1	2	103	39	382	149	1	2	118	44	348	136	1	2	109	41	350	140	0	0	110	40	350	140	5	5	110	40
	Wb	East	57	73	349	504	7	15	66	85	405	585	8	17	58	74	407	587	8	18	61	78	406	586	8	17	60	80	410	590	10	20	60	80	410	590	10	20
	Nb	South	8	6	6	1	23	4	9	7	7	1	27	5	9	7	6	1	27	5	9	7	7	1	27	5	10	10	10	0	30	0	10	10	10	5	30	5
	Eb	West	15	8	214	507	290	138	17	9	249	591	338	161	18	9	248	589	294	140	17	9	249	590	308	147	20	10	250	590	310	150	20	10	250	590	310	150
17. Highland Ranch Rd (e/w) / World Trade Dr (n/s)	Sb	North	16	50	82	201	148	179	19	60	98	240	177	214	19	60	99	243	173	209	19	60	99	242	175	212	20	60	100	240	180	210	20	60	100	240	180	210
	Wb	East	249	179	354	228	92	168	291	209	413	266	107	196	297	214	426	274	111	203	295	212	421	271	110	201	290	210	420	270	110	200	290	210	420	270	110	200
	Nb	South	96	153	103	155	25	33	116	185	124	187	30	40	112	179	123	185	30	40	115	183	124	186	30	40	110	180	120	190	30	40	110	180	120	190	30	40
	Eb	West	17	34	256	288	41	161	20	41	308	346	49	194	21	41	299	336	49	192	20	41	304	342	49	193	20	40	300	340	50	190	20	40	300	340	50	190
18. Windcrest (n/s)/ Seabridge (e/w)	Sb	North	0	0	42	48	18	43	0	0	44	50	19	45	#####	####	48	55	19	45	0	0	46	52	19	45	0	0	50	50	20	50	0	0	50	50	20	50
	Wb	East	26	41	0	0	45	43	27	43	0	0	48	45	27	43	####	####	51	49	27	43	0	0	49	47	30	40	0	0	50	50	30	45	0	0	50	50
	Nb	South	23	48	49	47	0	0	26	55	56	53	0	0	24	51	51	49	#####	####	25	52	53	51	0	0	30	50	50	50	0	0	30	50	50	50	0	0
	Eb	West	0	0	0	0	0	0	#####	#####	#####	#####	#####	#####	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

INTERSECTION	DIRECTION	LEG	EXISTING TRAFFIC VOLUMES						2050 APROACH TRAFFIC VOLUMES						2050 DEPARTURE TRAFFIC VOLUMES						2050 WEIGHTED AVERAGE TRAFFIC VOLUMES						2050 ROUNDED TRAFFIC VOLUMES						FINAL Year 2050					
			Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm
19. Windcrest (n/s)/ Boulton (e/w)	Sb	North	0	0	70	56	10	45	0	0	81	64	12	52	#####	####	74	59	12	53	0	0	77	62	12	53	0	0	80	60	10	50	0	0	80	60	10	50
	Wb	East	23	11	0	0	14	11	27	13	0	0	17	13	26	13	####	####	15	12	27	13	0	0	16	12	30	10	0	0	20	10	30	15	0	0	20	15
	Nb	South	12	44	33	79	0	0	13	46	35	83	0	0	14	52	38	91	#####	####	14	50	36	87	0	0	10	50	40	90	0	0	15	50	40	90	0	0
	Eb	West	0	0	0	0	0	0	#####	#####	#####	#####	#####	#####	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. Shoal Creek (n/s)/ Windcrest (e/w)	Sb	North	8	13	140	92	2	16	8	13	144	95	2	16	9	15	143	94	2	17	9	15	143	94	2	17	10	10	140	90	0	20	10	15	155	100	5	20
	Wb	East	14	11	1	11	80	44	15	12	1	12	84	46	14	11	1	13	82	45	15	11	1	12	83	46	10	10	0	10	80	50	15	15	5	15	80	50
	Nb	South	43	114	127	127	12	15	44	116	129	129	12	15	45	119	131	131	14	17	45	118	130	130	14	17	40	120	130	130	10	20	45	120	130	140	15	20
	Eb	West	21	11	1	1	5	6	24	13	1	1	6	7	21	11	1	1	5	6	24	12	1	1	6	7	20	10	0	0	10	10	25	15	5	5	10	10
21. Boulton (e/w)/ Carmel Ridge (n/s)	Sb	North	16	5	79	42	1	6	18	6	90	48	1	7	19	6	83	44	1	6	19	6	87	46	1	7	20	10	90	50	0	10	20	10	90	50	5	10
	Wb	East	12	7	20	8	61	11	13	8	22	9	66	12	14	8	24	10	64	12	13	8	23	9	65	12	10	10	20	10	70	10	15	10	20	10	70	15
	Nb	South	11	21	15	22	10	9	12	22	16	23	11	9	12	23	17	25	12	11	12	22	16	24	11	10	10	20	20	20	10	10	15	25	20	25	10	10
	Eb	West	9	7	14	30	9	18	11	8	17	36	11	22	9	7	15	32	10	20	10	8	16	34	11	21	10	10	20	30	10	20	10	10	20	30	10	20
22. Carmel Ridge/ Ted Williams (RIRO)	Sb	North	161	48	0	0	0	0	172	51	0	0	0	0	178	53	####	####	0	0	172	51	0	0	0	0	170	50	0	0	0	0	170	50	0	0	0	0
	Wb	East	13	17	1490	966	0	0	14	19	1,649	1,069	0	0	14	18	1648	1069	#####	####	14	18	1649	1069	0	0	10	20	1650	1070	0	0	15	20	1650	1070	0	0
	Nb	South	0	0	0	0	0	0	#####	#####	#####	#####	#####	#####	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Eb	West	0	0	1018	1735	0	0	0	0	1,126	1,919	0	0	#####	####	1127	1921	0	0	0	0	1127	1920	0	0	0	0	1130	1920	0	0	0	0	1130	1920	0	0
23. Stoney Peak (n/s)/ World Trade (e/w)	Sb	North	5	13	17	71	93	129	6	14	19	79	103	143	6	17	19	81	118	164	6	16	19	80	110	153	10	20	20	80	110	150	10	20	20	80	110	150
	Wb	East	95	151	6	21	27	89	121	192	8	27	34	113	105	167	8	27	31	101	113	179	8	27	32	106	110	180	10	30	30	110	110	180	10	30	30	110
	Nb	South	67	66	78	40	3	2	76	75	89	46	3	2	85	84	86	44	4	3	80	78	88	45	4	3	80	80	90	50	0	0	80	80	90	50	5	5
	Eb	West	2	0	15	9	27	11	3	0	19	12	35	14	2	0	19	11	30	12	3	0	19	12	34	14	0	0	20	10	30	10	5	0	20	10	30	15
24. Carmel Mtn Rd/ I-15 NB Ramps	Sb	North	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Wb	East	326	538	749	1453	0	0	378	625	870	1,687	0	0	366	604	850	1648	0	0	368	608	858	1664	0	0	370	610	860	1660	0	0	370	610	860	1660	0	0
	Nb	South	1021	890	3	4	161	358	1,209	1,054	4	5	191	424	1185	1033	3	4	183	406	1203	1048	3	5	188	418	1200	1050	0	0	190	420	1200	1050	5	5	210	460
	Eb	West	0	0	614	873	325	235	0	0	696	990	369	267	0	0	713	1013	365	264	0	0	703	1000	366	265	0	0	700	1000	370	260	0	0	700	1000	370	280
25. Carmel Mtn Rd/ I-15 SB Ramps	Sb	North	234	293	1	1	263	446	258	323	1	1	290	492	270	338	1	1	298	506	261	327	1	1	292	495	260	330	0	0	290	500	260	360	5	5	290	500
	Wb	East	0	0	382	883	528	928	0	0	433	1,002	599	1,053	0	0	441	1019	550	967	0	0	437	1011	566	995	0	0	440	1010	570	990	0	0	490	1130	590	990
	Nb	South	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Eb	West	589	236	676	662	0	0	680	272	780	764	0	0	614	246	767	751	0	0	638	256	774	758	0	0	640	260	770	760	0	0	660	300	790	780	0	0
26. Carmel Mountain Rd (n/s)/ Rancho Carmel Dr North (e/w)	Sb	North	780	393	719	1027	0	0	966	487	891	1,272	0	0	982	495	901	1287	0	0	977	492	897	1281	0	0	980	490	900	1280	0	0	930	490	860	1200	0	0
	Wb	East	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Nb	South	0	0	528	910	170	149	0	0	662	1,140	213	187	0	0	654	1127	214	188	0	0	659	1135	214	187	0	0	660	1140	210	190	0	0	630	1040	210	190
	Eb	West	30	193	0	0	191	816	38	243	0	0	240	1,027	38	242	0	0	237	1011	38	242	0	0	239	1022	40	240	0	0	240	1020	40	240	0	0	240	1020
27. Carmel Mountain Rd (n/s)/ Camino Del Norte (e/w)	Sb	North	397	168	559	390	304	171	421	178	592	413	322	181	494	209	692	483	379	213	447	189	638	445	346	194	450	190	640	450	350	190	450	190	640	450	350	190
	Wb	East	251	224	1112	1159	246	283	313	279	1,387	1,446	307	353	266	237	1382	1441	304	350	285	255	1385	1444	306	351	290	250	1380	1440	310	350	290	250	1380	1440	310	350
	Nb	South	64	279	385	774	286	632	79	345	476	958	354	782	80	348	408	820	356	786	79	346	439	883	355	783	80	350	440	880	350	780	80	350	440	880	350	780
	Eb	West	552	605	917	1064	273	398	686	752	1,140	1,323	339	495	683	749	1144	1327	289	422	684	750	1142	1325	307	448	680	750	1140	1330	310	450	680	750	1140	1330	310	450

INTERSECTION	DIRECTION	LEG	EXISTING TRAFFIC VOLUMES						2050 APROACH TRAFFIC VOLUMES						2050 DEPARTURE TRAFFIC VOLUMES						2050 WEIGHTED AVERAGE TRAFFIC VOLUMES						2050 ROUNDED TRAFFIC VOLUMES						FINAL Year 2050					
			Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm
1. Carmel Mountain Rd/ Rancho Carmel Dr	Sb	North	198	893	77	330	29	121	249	1,124	97	415	36	152	230	1037	92	395	36	150	242	1093	94	403	36	151	240	1090	90	400	40	150	240	1090	90	400	40	150
	Wb	East	41	68	681	953	123	285	51	84	845	1,183	153	354	52	86	790	1106	147	341	51	85	823	1151	149	345	50	90	820	1150	150	350	50	90	790	1150	150	350
	Nb	South	91	234	189	237	201	146	109	280	226	284	241	175	113	290	238	298	233	169	110	284	231	289	239	173	110	280	230	290	240	170	120	280	230	290	230	170
	Eb	West	115	162	704	1050	739	427	133	188	817	1,219	858	496	138	194	874	1303	930	537	137	192	850	1268	905	523	140	190	850	1270	900	520	140	190	850	1270	900	520
2. Carmel Mountain Rd (e/w) / Stoney Peak Dr (n/s)	Sb	North	7	120	10	73	19	107	8	133	11	81	21	119	9	149	11	80	23	131	8	136	11	81	22	121	10	140	10	80	20	120	15	140	15	85	20	120
	Wb	East	22	76	535	738	20	42	27	93	657	907	25	52	24	84	663	914	22	46	25	86	660	910	23	48	20	90	660	910	20	50	25	90	660	910	20	50
	Nb	South	32	28	5	45	272	353	35	31	6	50	300	389	39	34	6	50	337	437	36	32	6	50	308	400	40	30	10	50	310	400	40	30	10	50	310	400
	Eb	West	108	261	651	943	36	199	134	323	806	1,168	45	246	119	288	800	1159	40	221	122	296	803	1163	41	225	120	300	800	1160	40	220	120	300	800	1160	55	220
3. Carmel Mountain Rd (n/s) / Highland Ranch Rd (e/w)	Sb	North	14	116	354	587	284	340	17	143	437	724	350	420	16	132	435	721	341	408	16	133	436	722	344	412	20	130	440	720	340	410	20	130	440	720	340	410
	Wb	East	224	184	13	18	170	212	269	221	16	22	204	254	276	227	15	20	209	260	271	223	15	21	206	257	270	220	10	20	210	260	270	220	20	20	210	260
	Nb	South	93	134	533	754	26	144	114	165	655	926	32	177	112	161	658	930	30	163	113	162	656	928	30	166	110	160	660	930	30	170	130	160	660	930	40	170
	Eb	West	16	71	3	79	7	90	18	81	3	90	8	102	20	87	4	95	9	111	18	82	3	91	8	103	20	80	0	90	10	100	30	90	10	90	10	100
4. Carmel Mountain Rd (n/s) / Conference Way (e/w)	Sb	North	18	31	511	772	49	144	23	39	640	967	61	180	19	33	639	965	51	151	20	34	639	966	53	156	20	30	640	970	50	160	20	40	640	970	50	160
	Wb	East	75	101	23	60	25	57	78	106	24	63	26	60	94	127	24	64	31	71	81	109	24	63	27	62	80	110	20	60	30	60	80	110	30	60	30	60
	Nb	South	70	19	555	672	157	221	88	24	694	840	196	276	73	20	695	842	167	235	76	21	694	841	174	245	80	20	690	840	170	240	90	20	690	840	170	240
	Eb	West	114	147	27	50	54	122	121	156	29	53	57	130	143	184	28	52	68	153	126	163	28	53	60	135	130	160	30	50	60	140	130	160	30	50	60	140
5. Rancho Carmel Dr (n/s) / Windcrest Ln (e/w)	Sb	North	6	19	264	587	38	110	7	22	309	688	45	129	6	20	307	683	39	113	6	20	308	685	40	116	10	20	310	690	40	120	10	20	310	690	40	120
	Wb	East	129	64	15	19	60	34	133	66	15	20	62	35	151	75	16	20	70	40	137	68	16	20	63	36	140	70	20	20	60	40	140	70	20	20	60	40
	Nb	South	13	53	322	518	60	27	15	62	375	603	70	31	13	54	377	607	63	28	14	56	376	605	64	29	10	60	380	600	60	30	15	65	380	600	60	30
	Eb	West	38	68	9	36	55	39	40	71	9	38	57	41	44	79	9	37	64	46	40	72	9	37	58	41	40	70	10	40	60	40	40	70	10	40	60	40
6. Rancho Carmel Dr (n/s) / Shoal Creek Dr (e/w)	Sb	North	0	0	341	599	66	82	0	0	396	695	77	95	#####	####	405	711	68	84	0	0	400	703	70	87	0	0	400	700	70	90	0	0	400	700	70	90
	Wb	East	100	77	0	0	70	36	103	79	0	0	72	37	116	89	####	####	83	43	106	81	0	0	74	38	110	80	0	0	70	40	110	80	0	0	75	40
	Nb	South	39	50	255	577	0	0	46	59	303	685	0	0	40	52	296	669	#####	####	41	53	299	677	0	0	40	50	300	680	0	0	45	55	300	680	0	0
	Eb	West	0	0	0	0	0	0	#####	#####	#####	#####	#####	#####	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7. Rancho Carmel Dr / Provencal Pl	Sb	North	2	19	389	574	19	40	2	23	462	682	23	48	2	19	457	675	21	44	2	19	460	679	21	44	0	20	460	680	20	40	5	20	460	680	25	50
	Wb	East	22	25	0	1	121	49	24	27	0	1	132	53	26	30	0	1	142	58	24	28	0	1	133	54	20	30	0	0	130	50	35	30	5	5	140	60
	Nb	South	17	55	249	599	4	18	20	65	293	704	5	21	19	60	296	712	4	18	19	61	294	708	4	18	20	60	290	710	0	20	25	70	290	710	5	20
	Eb	West	1	24	0	3	2	12	1	24	0	3	2	12	1	28	0	3	2	14	1	24	0	3	2	12	0	20	0	0	0	10	5	25	0	5	5	15
8 Ted Williams Parkway / I-15 Northbound Ramps	Sb	North	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Wb	East	147	139	1855	1428	0	0	187	177	2,361	1,817	0	0	209	198	2331	1794	0	0	208	197	2348	1807	0	0	210	200	2350	1810	0	0	210	200	2350	1690	0	0
	Nb	South	402	894	21	103	541	793	432	960	23	111	581	852	512	1138	30	147	680	996	465	1035	29	144	616	904	470	1040	30	140	620	900	470	1040	30	140	620	900
	Eb	West	1152	1292	880	1359	0	0	1,447	1,623	1,106	1,708	0	0	1237	1387	1120	1729	0	0	1313	1472	1114	1720	0	0	1310	1470	1110	1720	0	0	1270	1420	1080	1570	0	0
9 Ted Williams Parkway / I-15 Southbound Ramps	Sb	North	0	0	50	10	172	178	0	0	67	13	229	237	0	0	53	11	216	224	0	0	59	12	227	234	0	0	60	10	230	230	0	0	60	10	230	230
	Wb	East	992	530	1596	1550	0	0	1,246	666	2,004	1,946	0	0	1320	705	1901	1846	0	0	1307	698	1951	1895	0	0	1310	700	1950	1890	0	0	1160	700	1810	1890	0	0
	Nb	South	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Eb	West	720	606	1734	2261	0	0	857	722	2,065	2,693	0	0	761	641	2178	2839	0	0	775	652	2120	2764	0	0	770	650	2120	2760	0	0	770	650	2120	2760	0	0

INTERSECTION	DIRECTION	LEG	EXISTING TRAFFIC VOLUMES						2050 APROACH TRAFFIC VOLUMES						2050 DEPARTURE TRAFFIC VOLUMES						2050 WEIGHTED AVERAGE TRAFFIC VOLUMES						2050 ROUNDED TRAFFIC VOLUMES						FINAL Year 2050					
			Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm
10 Ted Williams Parkway / Rancho Carmel Drive (North)	Sb	North	293	366	235	313	0	0	396	495	318	423	0	0	366	458	240	319	0	0	377	471	280	373	0	0	380	470	280	370	0	0	380	470	280	370	0	0
	Wb	East	39	55	3	6	152	103	46	65	4	7	180	122	53	74	4	8	155	105	47	66	4	7	177	120	50	70	0	10	180	120	50	70	5	10	180	120
	Nb	South	0	0	301	673	286	392	0	0	307	686	292	400	0	0	407	910	358	490	0	0	359	802	334	458	0	0	360	800	330	460	0	0	360	800	330	460
	Eb	West	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 Ted Williams Parkway / Rancho Carmel Drive (South)	Sb	North	0	0	469	634	114	146	0	0	478	646	116	149	0	0	494	668	126	161	0	0	486	657	125	160	0	0	490	660	120	160	0	0	490	660	125	160
	Wb	East	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Nb	South	15	21	311	296	0	0	16	22	328	312	0	0	17	23	317	302	0	0	16	23	322	307	0	0	20	20	320	310	0	0	20	25	320	310	0	0
	Eb	West	397	261	6	0	159	335	469	308	7	0	188	395	418	275	7	0	162	342	452	297	7	0	180	378	450	300	10	0	180	380	450	300	10	0	180	390
12. Ted Williams Pkwy (e/w) / Shoal Creek Dr (n/s)	Sb	North	72	49	135	37	58	65	73	50	137	38	59	66	88	60	137	38	64	72	75	51	137	38	60	67	80	50	140	40	60	70	85	50	140	40	70	70
	Wb	East	94	66	1471	840	195	124	104	73	1,629	930	216	137	96	67	1793	1024	198	126	97	68	1711	977	201	128	100	70	1710	980	200	130	100	80	1710	980	200	130
	Nb	South	81	40	99	46	156	46	82	41	100	47	158	47	90	44	101	47	190	56	83	41	101	47	164	48	80	40	100	50	160	50	85	40	100	50	160	50
	Eb	West	90	73	682	1663	43	228	110	89	831	2,027	52	278	91	74	755	1841	44	232	94	77	793	1934	45	239	90	80	790	1930	50	240	90	80	790	1930	50	240
13. Ted Williams Pkwy (e/w) / Highland Ranch Rd (n/s)	Sb	North	211	211	17	30	199	275	245	245	20	35	231	319	232	232	18	31	235	324	241	241	18	32	232	320	240	240	20	30	230	320	240	240	20	30	230	320
	Wb	East	168	279	1235	783	27	46	198	329	1,456	923	32	54	195	324	1357	860	28	48	196	325	1407	892	28	48	200	330	1410	890	30	50	200	330	1410	890	30	50
	Nb	South	27	23	26	27	113	30	28	24	27	28	118	31	32	27	30	31	124	33	28	24	28	29	118	31	30	20	30	30	120	30	30	25	30	30	125	30
	Eb	West	7	22	771	1423	190	360	8	24	847	1,563	209	395	7	23	909	1678	220	418	7	23	878	1621	217	412	10	20	880	1620	220	410	10	25	880	1620	220	410
14 Ted Williams Parkway / Pomerado Road	Sb	North	405	328	655	622	7	12	474	384	767	729	8	14	478	387	770	731	8	13	476	386	768	730	8	14	480	390	770	730	10	10	480	390	770	730	10	15
	Wb	East	17	18	509	365	90	207	19	20	563	404	100	229	20	21	601	431	106	243	19	20	576	413	102	234	20	20	580	410	100	230	20	20	580	410	100	230
	Nb	South	48	60	620	809	325	344	56	71	729	951	382	404	53	66	726	948	384	406	54	68	727	949	383	405	50	70	730	950	380	410	50	70	730	950	380	410
	Eb	West	341	364	322	762	373	513	403	430	380	900	441	606	401	428	356	843	437	601	402	429	364	862	439	603	400	430	360	860	440	600	400	430	360	860	440	600
15 Highland Ranch Road / Carmel Ridge Road	Sb	North	36	88	250	468	99	43	42	102	290	542	115	50	37	91	291	545	102	44	38	93	291	544	105	45	40	90	290	540	100	50	40	90	290	540	100	50
	Wb	East	62	23	29	6	97	22	64	24	30	6	100	23	72	27	30	6	113	26	66	24	30	6	103	23	70	20	30	10	100	20	70	25	30	10	100	25
	Nb	South	65	47	261	518	20	49	76	55	304	604	23	57	67	48	302	600	21	51	69	50	303	602	21	52	70	50	300	600	20	50	70	50	300	600	20	50
	Eb	West	27	18	9	3	98	62	28	19	9	3	102	64	31	21	9	3	114	72	29	19	9	3	104	66	30	20	10	0	100	70	30	20	10	5	100	70
16. Highland Ranch Rd (e/w) / Eastbourne Rd (n/s)	Sb	North	328	128	1	2	102	38	332	130	1	2	103	39	382	149	1	2	118	44	348	136	1	2	109	41	350	140	0	0	110	40	350	140	5	5	110	40
	Wb	East	57	73	349	504	7	15	66	85	405	585	8	17	58	74	407	587	8	18	61	78	406	586	8	17	60	80	410	590	10	20	60	80	410	590	10	20
	Nb	South	8	6	6	1	23	4	9	7	7	1	27	5	9	7	6	1	27	5	9	7	7	1	27	5	10	10	10	0	30	0	10	10	10	5	30	5
	Eb	West	15	8	214	507	290	138	17	9	249	591	338	161	18	9	248	589	294	140	17	9	249	590	308	147	20	10	250	590	310	150	20	10	250	590	310	150
17. Highland Ranch Rd (e/w) / World Trade Dr (n/s)	Sb	North	16	50	82	201	148	179	19	60	98	240	177	214	19	60	99	243	173	209	19	60	99	242	175	212	20	60	100	240	180	210	20	60	100	240	180	210
	Wb	East	249	179	354	228	92	168	291	209	413	266	107	196	297	214	426	274	111	203	295	212	421	271	110	201	290	210	420	270	110	200	290	210	420	270	110	200
	Nb	South	96	153	103	155	25	33	116	185	124	187	30	40	112	179	123	185	30	40	115	183	124	186	30	40	110	180	120	190	30	40	110	180	120	190	30	40
	Eb	West	17	34	256	288	41	161	20	41	308	346	49	194	21	41	299	336	49	192	20	41	304	342	49	193	20	40	300	340	50	190	20	40	300	340	50	190
18. Windcrest (n/s)/ Seabridge (e/w)	Sb	North	0	0	42	48	18	43	0	0	44	50	19	45	#####	####	48	55	19	45	0	0	46	52	19	45	0	0	50	50	20	50	0	0	50	50	20	50
	Wb	East	26	41	0	0	45	43	27	43	0	0	48	45	27	43	####	####	51	49	27	43	0	0	49	47	30	40	0	0	50	50	30	45	0	0	50	50
	Nb	South	23	48	49	47	0	0	26	55	56	53	0	0	24	51	51	49	#####	####	25	52	53	51	0	0	30	50	50	50	0	0	30	50	50	50	0	0
	Eb	West	0	0	0	0	0	0	#####	#####	#####	#####	#####	#####	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

INTERSECTION	DIRECTION	LEG	EXISTING TRAFFIC VOLUMES						2050 APROACH TRAFFIC VOLUMES						2050 DEPARTURE TRAFFIC VOLUMES						2050 WEIGHTED AVERAGE TRAFFIC VOLUMES						2050 ROUNDED TRAFFIC VOLUMES						FINAL Year 2050					
			Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm
19. Windcrest (n/s)/ Boulton (e/w)	Sb	North	0	0	70	56	10	45	0	0	81	64	12	52	#####	####	74	59	12	53	0	0	77	62	12	53	0	0	80	60	10	50	0	0	80	60	10	50
	Wb	East	23	11	0	0	14	11	27	13	0	0	17	13	26	13	####	####	15	12	27	13	0	0	16	12	30	10	0	0	20	10	30	15	0	0	20	15
	Nb	South	12	44	33	79	0	0	13	46	35	83	0	0	14	52	38	91	#####	####	14	50	36	87	0	0	10	50	40	90	0	0	15	50	40	90	0	0
	Eb	West	0	0	0	0	0	0	#####	#####	#####	#####	#####	#####	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. Shoal Creek (n/s)/ Windcrest (e/w)	Sb	North	8	13	140	92	2	16	8	13	144	95	2	16	9	15	143	94	2	17	9	15	143	94	2	17	10	10	140	90	0	20	10	15	155	100	5	20
	Wb	East	14	11	1	11	80	44	15	12	1	12	84	46	14	11	1	13	82	45	15	11	1	12	83	46	10	10	0	10	80	50	15	15	5	15	80	50
	Nb	South	43	114	127	127	12	15	44	116	129	129	12	15	45	119	131	131	14	17	45	118	130	130	14	17	40	120	130	130	10	20	45	120	130	140	15	20
	Eb	West	21	11	1	1	5	6	24	13	1	1	6	7	21	11	1	1	5	6	24	12	1	1	6	7	20	10	0	0	10	10	25	15	5	5	10	10
21. Boulton (e/w)/ Carmel Ridge (n/s)	Sb	North	16	5	79	42	1	6	18	6	90	48	1	7	19	6	83	44	1	6	19	6	87	46	1	7	20	10	90	50	0	10	20	10	90	50	5	10
	Wb	East	12	7	20	8	61	11	13	8	22	9	66	12	14	8	24	10	64	12	13	8	23	9	65	12	10	10	20	10	70	10	15	10	20	10	70	15
	Nb	South	11	21	15	22	10	9	12	22	16	23	11	9	12	23	17	25	12	11	12	22	16	24	11	10	10	20	20	20	10	10	15	25	20	25	10	10
	Eb	West	9	7	14	30	9	18	11	8	17	36	11	22	9	7	15	32	10	20	10	8	16	34	11	21	10	10	20	30	10	20	10	10	20	30	10	20
22. Carmel Ridge/ Ted Williams (RIRO)	Sb	North	161	48	0	0	0	0	172	51	0	0	0	0	178	53	####	####	0	0	172	51	0	0	0	0	170	50	0	0	0	0	170	50	0	0	0	0
	Wb	East	13	17	1490	966	0	0	14	19	1,649	1,069	0	0	14	18	1648	1069	#####	####	14	18	1649	1069	0	0	10	20	1650	1070	0	0	15	20	1650	1070	0	0
	Nb	South	0	0	0	0	0	0	#####	#####	#####	#####	#####	#####	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Eb	West	0	0	1018	1735	0	0	0	0	1,126	1,919	0	0	#####	####	1127	1921	0	0	0	0	1127	1920	0	0	0	0	1130	1920	0	0	0	0	1130	1920	0	0
23. Stoney Peak (n/s)/ World Trade (e/w)	Sb	North	5	13	17	71	93	129	6	14	19	79	103	143	6	17	19	81	118	164	6	16	19	80	110	153	10	20	20	80	110	150	10	20	20	80	110	150
	Wb	East	95	151	6	21	27	89	121	192	8	27	34	113	105	167	8	27	31	101	113	179	8	27	32	106	110	180	10	30	30	110	110	180	10	30	30	110
	Nb	South	67	66	78	40	3	2	76	75	89	46	3	2	85	84	86	44	4	3	80	78	88	45	4	3	80	80	90	50	0	0	80	80	90	50	5	5
	Eb	West	2	0	15	9	27	11	3	0	19	12	35	14	2	0	19	11	30	12	3	0	19	12	34	14	0	0	20	10	30	10	5	0	20	10	30	15
24. Carmel Mtn Rd/ I-15 NB Ramps	Sb	North	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Wb	East	326	538	749	1453	0	0	378	625	870	1,687	0	0	366	604	850	1648	0	0	368	608	858	1664	0	0	370	610	860	1660	0	0	370	610	860	1660	0	0
	Nb	South	1021	890	3	4	161	358	1,209	1,054	4	5	191	424	1185	1033	3	4	183	406	1203	1048	3	5	188	418	1200	1050	0	0	190	420	1200	1050	5	5	210	460
	Eb	West	0	0	614	873	325	235	0	0	696	990	369	267	0	0	713	1013	365	264	0	0	703	1000	366	265	0	0	700	1000	370	260	0	0	700	1000	370	280
25. Carmel Mtn Rd/ I-15 SB Ramps	Sb	North	234	293	1	1	263	446	258	323	1	1	290	492	270	338	1	1	298	506	261	327	1	1	292	495	260	330	0	0	290	500	260	360	5	5	290	500
	Wb	East	0	0	382	883	528	928	0	0	433	1,002	599	1,053	0	0	441	1019	550	967	0	0	437	1011	566	995	0	0	440	1010	570	990	0	0	490	1130	590	990
	Nb	South	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Eb	West	589	236	676	662	0	0	680	272	780	764	0	0	614	246	767	751	0	0	638	256	774	758	0	0	640	260	770	760	0	0	660	300	790	780	0	0
26. Carmel Mountain Rd (n/s)/ Rancho Carmel Dr North (e/w)	Sb	North	780	393	719	1027	0	0	966	487	891	1,272	0	0	982	495	901	1287	0	0	977	492	897	1281	0	0	980	490	900	1280	0	0	930	490	860	1200	0	0
	Wb	East	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Nb	South	0	0	528	910	170	149	0	0	662	1,140	213	187	0	0	654	1127	214	188	0	0	659	1135	214	187	0	0	660	1140	210	190	0	0	630	1040	210	190
	Eb	West	30	193	0	0	191	816	38	243	0	0	240	1,027	38	242	0	0	237	1011	38	242	0	0	239	1022	40	240	0	0	240	1020	40	240	0	0	240	1020
27. Carmel Mountain Rd (n/s)/ Camino Del Norte (e/w)	Sb	North	397	168	559	390	304	171	421	178	592	413	322	181	494	209	692	483	379	213	447	189	638	445	346	194	450	190	640	450	350	190	450	190	640	450	350	190
	Wb	East	251	224	1112	1159	246	283	313	279	1,387	1,446	307	353	266	237	1382	1441	304	350	285	255	1385	1444	306	351	290	250	1380	1440	310	350	290	250	1380	1440	310	350
	Nb	South	64	279	385	774	286	632	79	345	476	958	354	782	80	348	408	820	356	786	79	346	439	883	355	783	80	350	440	880	350	780	80	350	440	880	350	780
	Eb	West	552	605	917	1064	273	398	686	752	1,140	1,323	339	495	683	749	1144	1327	289	422	684	750	1142	1325	307	448	680	750	1140	1330	310	450	680	750	1140	1330	310	450

Formulas for ADT Calculations

INTERSECTION	DIRECTION	LEG	EXISTING TRAFFIC VOLUMES						AM[1]	PM	AVGERAGE	EXISTING ADT	2008	2050 ADT	ANNUAL GROWTH	FINAL 2050
			Ram	Rpm	Tam	Tpm	Lam	Lpm	8%	8%		SELECTED	SELECTED	SELECTED	FACTOR[2]	SELECTED[3]
11 Ted Williams	Sb	North	0	0	311	269	15	21	11925	15737.5	13831	13800	15600	16000	0.10%	14100
Parkway / Rancho	Wb	East	0	0	0	0	0	0	1687.5	2087.5	1887.5	1900	1300	1400	0.20%	2000
Carmel Drive (South)	Nb	South	114	146	469	634	0	0	16137.5	16375	16256.25	16300	18000	19200	0.20%	17100
	Eb	West	397	261	6	0	159	335	7025	7450	7237.5	7200	7000	8500	0.50%	8400

[1]ADT based on AM turning movements on North leg = Sum of AM turning movements to and from the North leg / 0.08

[2]Annual Growth Factor = (2050 ADT/2008 ADT)^(1/42)-1

[3]2050 ADT = 2019 ADT*(1+Annual Growth Factor)^31

INTERSECTION	DIRECTION	LEG	EXISTING TRAFFIC VOLUMES						2050 APPROACH TRAFFIC VOLUMES[1]						2050 DEPARTURE TRAFFIC VOLUMES[2]					
			Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm
11 Ted Williams	Sb	North	0	0	311	269	15	21	0	0	318	275	15	21	0	0	326	282	16	22
Parkway / Rancho	Wb	East	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carmel Drive (South)	Nb	South	114	146	469	634	0	0	120	153	492	665	0	0	120	154	479	648	0	0
	Eb	West	397	261	6	0	159	335	463	305	7	0	186	391	416	274	6	0	162	342

[1]2050 Turning Movement Forecast Based on Approach ADT = 2050 AV = 2050 ADT for approach leg of turning movement * existing turning movement / Existing ADT for approach leg of turning movement

[2]2050 Turning Movement Forecast Based on Departure ADT = 2050 DV = 2050 ADT for departure leg of turning movement * existing turning movement / Existing ADT for departure leg of turning movement

INTERSECTION	DIRECTION	LEG	2050 WEIGHTED AVERAGE TRAFFIC VOLUMES[3]						2050 ROUNDED TRAFFIC VOLUMES						FINAL Year 2050					
			Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm	Ram	Rpm	Tam	Tpm	Lam	Lpm
11 Ted Williams	Sb	North	0	0	322	278	16	22	0	0	320	280	20	20	0	0	330	280	20	30
Parkway / Rancho	Wb	East	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carmel Drive (South)	Nb	South	120	154	485	656	0	0	120	150	490	660	0	0	120	160	490	660	0	0
	Eb	West	449	295	6	0	178	374	450	300	10	0	180	370	450	300	10	0	180	380

[3]Weighted Average Turning Movement Volume

Arrival Weight AW = Existing turning movement volume / Existing ADT for approach leg of turning movement

Departure Weight DW = Existing turning movement volume / Existing ADT for departure leg of turning movement

Weighted Average turning movement volume = (AW*2050 AV+DW*2050 DV) / (AW+DW)

Appendix H: Signal Warrants

FEHR PEERS

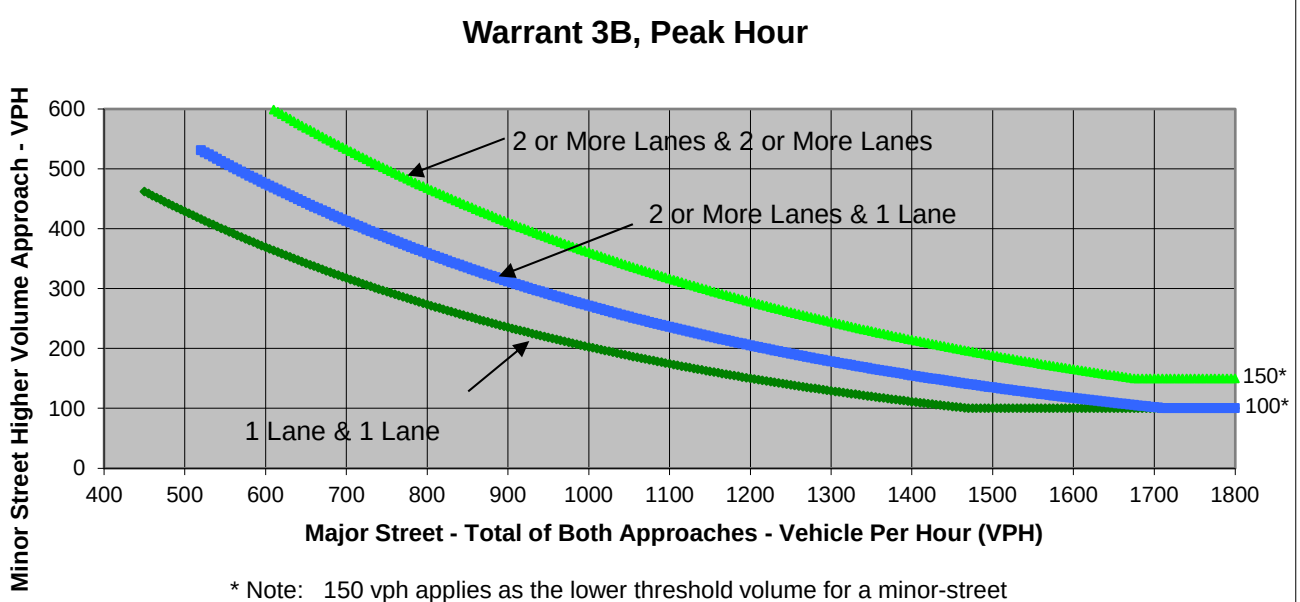
Major Street	Ted Williams Parkway	Project	The Trails at Carmel Mountain Ranch
Minor Street	Carmel Ridge Road	Scenario	Near Term + Project
		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	0	0
Through	0	0	1,064	1,521
Right	0	267	0	19
Total	0	267	1,064	1,540

Major Street Direction

	North/South
x	East/West



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

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Ted Williams Parkway	Carmel Ridge Road	
Number of Approach Lanes	**3**	**1**	**YES**
Traffic Volume (VPH) *	**2,604**	**267**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Major Street	Ted Williams Parkway
Minor Street	Carmel Ridge Road

Project	The Trails at Carmel Mountain Ranch
Scenario	Near Term + Project
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	0	0
Through	0	0	1,064	1,521
Right	0	267	0	19
Total	0	267	1,064	1,540

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

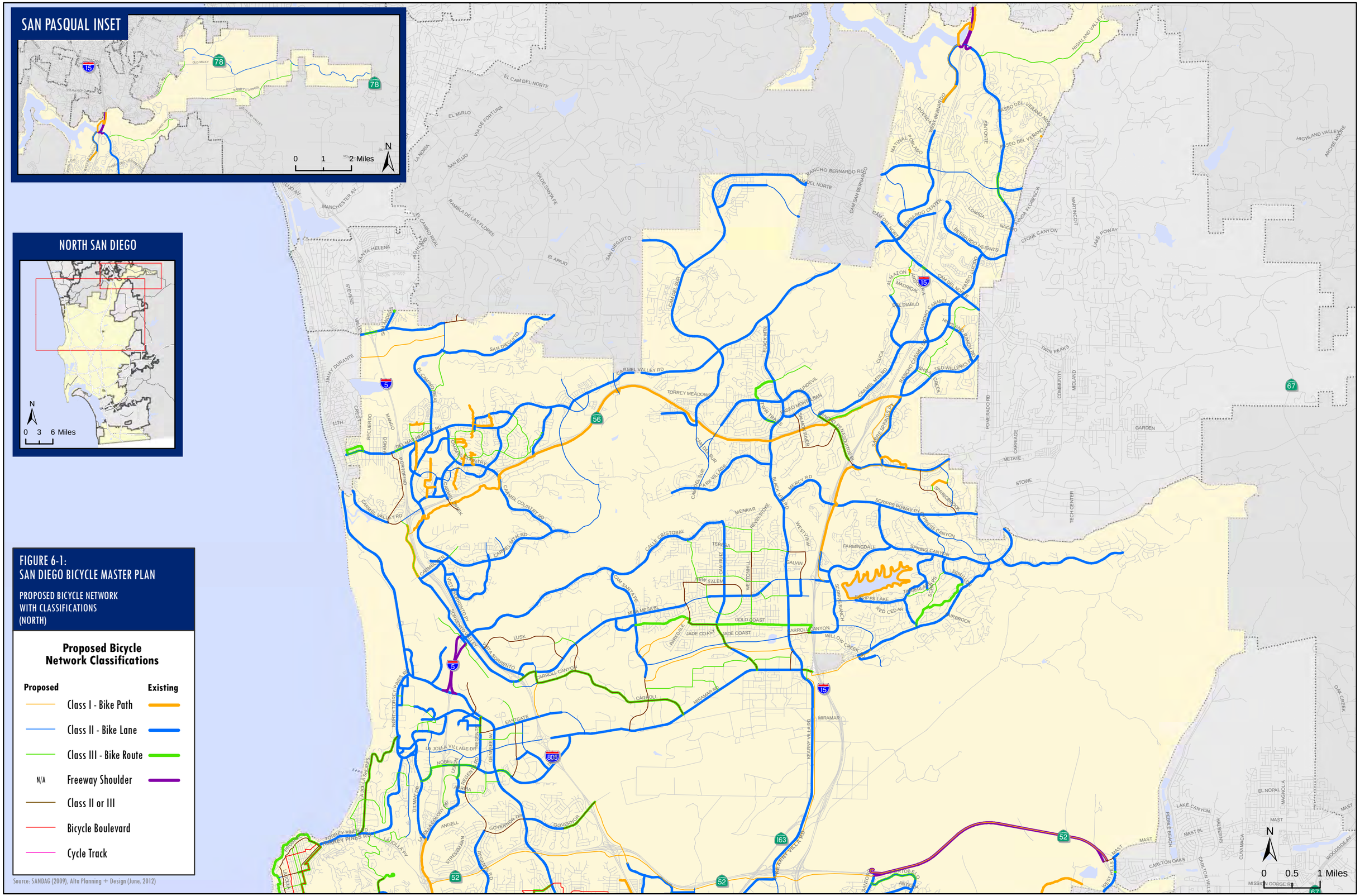
Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	178.6
Approach with Worst Case Delay	SB
Total Vehicles on Approach	267

Warrant 3A, Peak Hour

	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Serviced (vph)
Near Term + Project	**13.2**	**267**	**2,871**
Limiting Value	**4**	**100**	**650**
Condition Satisfied?	**Met**	**Met**	**Met**
Warrant Met	**YES**		

Appendix I: San Diego Bicycle Master Plan North San Diego Map


SAN PASQUAL INSET
0 1 2 Miles
N
NORTH SAN DIEGO
0 3 6 Miles
N
FIGURE 6-1:
SAN DIEGO BICYCLE MASTER PLAN
PROPOSED BICYCLE NETWORK
WITH CLASSIFICATIONS
(NORTH)
Proposed Bicycle
Network Classifications
Proposed
Existing
Class I - Bike Path
Class II - Bike Lane
Class III - Bike Route
N/A
Freeway Shoulder
Class II or III
Bicycle Boulevard
Cycle Track
Source: SANDAG (2009), Alta Planning + Design (June, 2012)
0 0.5 1 Miles
N

Appendix J: Project Driveway Operations

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	16	95	4	4	104
Future Vol, veh/h	18	16	95	4	4	104
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	17	103	4	4	113

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	226	105	0	0	107	0
Stage 1	105	-	-	-	-	-
Stage 2	121	-	-	-	-	-
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	949	-	-	1484	-
Stage 1	919	-	-	-	-	-
Stage 2	904	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	760	949	-	-	1484	-
Mov Cap-2 Maneuver	760	-	-	-	-	-
Stage 1	916	-	-	-	-	-
Stage 2	904	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	839	1484	-
HCM Lane V/C Ratio	-	-	0.044	0.003	-
HCM Control Delay (s)	-	-	9.5	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	186	189	4	14	20
Future Vol, veh/h	4	186	189	4	14	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	202	205	4	15	22

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	209	0	-	0	417	207
Stage 1	-	-	-	-	207	-
Stage 2	-	-	-	-	210	-
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	1362	-	-	-	592	833
Stage 1	-	-	-	-	828	-
Stage 2	-	-	-	-	825	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1362	-	-	-	590	833
Mov Cap-2 Maneuver	-	-	-	-	590	-
Stage 1	-	-	-	-	826	-
Stage 2	-	-	-	-	825	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1362	-	-	-	712
HCM Lane V/C Ratio	0.003	-	-	-	0.052
HCM Control Delay (s)	7.7	0	-	-	10.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	30	0	365	550	7
Future Vol, veh/h	0	30	0	365	550	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	33	0	397	598	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	303	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	693	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	693	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	693	-	-
HCM Lane V/C Ratio	-	0.047	-	-
HCM Control Delay (s)	-	10.5	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	49	353	12	0	557
Future Vol, veh/h	0	49	353	12	0	557
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	53	384	13	0	605

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	199	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	809	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	809	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	809	-
HCM Lane V/C Ratio	-	-	0.066	-
HCM Control Delay (s)	-	-	9.8	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0.2	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	300	215	5	20	30
Future Vol, veh/h	8	300	215	5	20	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	326	234	5	22	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	239	0	-	0	581	237
Stage 1	-	-	-	-	237	-
Stage 2	-	-	-	-	344	-
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	1328	-	-	-	476	802
Stage 1	-	-	-	-	802	-
Stage 2	-	-	-	-	718	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1328	-	-	-	472	802
Mov Cap-2 Maneuver	-	-	-	-	472	-
Stage 1	-	-	-	-	796	-
Stage 2	-	-	-	-	718	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1328	-	-	-	627
HCM Lane V/C Ratio	0.007	-	-	-	0.087
HCM Control Delay (s)	7.7	0	-	-	11.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	21	59	173	8	50	65
Future Vol, veh/h	21	59	173	8	50	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	64	188	9	54	71

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	197	0	-	0	303	193
Stage 1	-	-	-	-	193	-
Stage 2	-	-	-	-	110	-
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	1376	-	-	-	689	849
Stage 1	-	-	-	-	840	-
Stage 2	-	-	-	-	915	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1376	-	-	-	677	849
Mov Cap-2 Maneuver	-	-	-	-	677	-
Stage 1	-	-	-	-	826	-
Stage 2	-	-	-	-	915	-

Approach	EB	WB	SB
HCM Control Delay, s	2	0	10.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1376	-	-	-	765
HCM Lane V/C Ratio	0.017	-	-	-	0.163
HCM Control Delay (s)	7.7	0	-	-	10.6
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6

Intersection	
Int Delay, s/veh	2.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	190	14	12	98	58	44
Future Vol, veh/h	190	14	12	98	58	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	207	15	13	107	63	48

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	222	0	348	215
Stage 1	-	-	-	-	215	-
Stage 2	-	-	-	-	133	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1347	-	649	825
Stage 1	-	-	-	-	821	-
Stage 2	-	-	-	-	893	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1347	-	643	825
Mov Cap-2 Maneuver	-	-	-	-	643	-
Stage 1	-	-	-	-	813	-
Stage 2	-	-	-	-	893	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	11
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	711	-	-	1347	-
HCM Lane V/C Ratio	0.156	-	-	0.01	-
HCM Control Delay (s)	11	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	47	542	12	0	431
Future Vol, veh/h	0	47	542	12	0	431
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	51	589	13	0	468

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	301	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	593	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	593	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	593	-
HCM Lane V/C Ratio	-	-	0.086	-
HCM Control Delay (s)	-	-	11.6	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.3	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	25	38	364	500	4
Future Vol, veh/h	15	25	38	364	500	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	250	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	27	41	396	543	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	825	274	547	0	-	0
Stage 1	545	-	-	-	-	-
Stage 2	280	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	311	724	1018	-	-	-
Stage 1	545	-	-	-	-	-
Stage 2	742	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	299	724	1018	-	-	-
Mov Cap-2 Maneuver	299	-	-	-	-	-
Stage 1	523	-	-	-	-	-
Stage 2	742	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.4	0.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1018	-	472	-	-
HCM Lane V/C Ratio	0.041	-	0.092	-	-
HCM Control Delay (s)	8.7	-	13.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	8	106	20	17	116
Future Vol, veh/h	8	8	106	20	17	116
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	9	115	22	18	126

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	288	126	0	0	137	0
Stage 1	126	-	-	-	-	-
Stage 2	162	-	-	-	-	-
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	702	924	-	-	1447	-
Stage 1	900	-	-	-	-	-
Stage 2	867	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	693	924	-	-	1447	-
Mov Cap-2 Maneuver	693	-	-	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	867	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.6	0	1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	792	1447	-
HCM Lane V/C Ratio	-	-	0.022	0.013	-
HCM Control Delay (s)	-	-	9.6	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	19	172	188	14	6	8
Future Vol, veh/h	19	172	188	14	6	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	187	204	15	7	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	219	0	-	0	441	212
Stage 1	-	-	-	-	212	-
Stage 2	-	-	-	-	229	-
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	1350	-	-	-	574	828
Stage 1	-	-	-	-	823	-
Stage 2	-	-	-	-	809	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1350	-	-	-	564	828
Mov Cap-2 Maneuver	-	-	-	-	564	-
Stage 1	-	-	-	-	809	-
Stage 2	-	-	-	-	809	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1350	-	-	-	690
HCM Lane V/C Ratio	0.015	-	-	-	0.022
HCM Control Delay (s)	7.7	0	-	-	10.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	13	0	852	794	29
Future Vol, veh/h	0	13	0	852	794	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	14	0	926	863	32

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	448	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	558	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	558	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	558	-	-
HCM Lane V/C Ratio	-	0.025	-	-
HCM Control Delay (s)	-	11.6	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	21	804	48	0	801
Future Vol, veh/h	0	21	804	48	0	801
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	23	874	52	0	871

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	463	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	546	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	546	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	546	-
HCM Lane V/C Ratio	-	-	0.042	-
HCM Control Delay (s)	-	-	11.9	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	32	182	381	23	9	14
Future Vol, veh/h	32	182	381	23	9	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	198	414	25	10	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	439	0	-	0	695	427
Stage 1	-	-	-	-	427	-
Stage 2	-	-	-	-	268	-
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	1121	-	-	-	408	628
Stage 1	-	-	-	-	658	-
Stage 2	-	-	-	-	777	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1121	-	-	-	394	628
Mov Cap-2 Maneuver	-	-	-	-	394	-
Stage 1	-	-	-	-	635	-
Stage 2	-	-	-	-	777	-

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	12.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1121	-	-	-	510
HCM Lane V/C Ratio	0.031	-	-	-	0.049
HCM Control Delay (s)	8.3	0	-	-	12.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	85	119	97	28	21	28
Future Vol, veh/h	85	119	97	28	21	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	92	129	105	30	23	30

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	135	0	-	0	433	120
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	313	-
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	1449	-	-	-	580	931
Stage 1	-	-	-	-	905	-
Stage 2	-	-	-	-	741	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1449	-	-	-	541	931
Mov Cap-2 Maneuver	-	-	-	-	541	-
Stage 1	-	-	-	-	843	-
Stage 2	-	-	-	-	741	-

Approach	EB	WB	SB
HCM Control Delay, s	3.2	0	10.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1449	-	-	-	711
HCM Lane V/C Ratio	0.064	-	-	-	0.075
HCM Control Delay (s)	7.7	0	-	-	10.5
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.2

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	116	64	48	178	27	21
Future Vol, veh/h	116	64	48	178	27	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	126	70	52	193	29	23

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	196	0	458	161
Stage 1	-	-	-	-	161	-
Stage 2	-	-	-	-	297	-
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	-	-	1377	-	561	884
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	754	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1377	-	537	884
Mov Cap-2 Maneuver	-	-	-	-	537	-
Stage 1	-	-	-	-	832	-
Stage 2	-	-	-	-	754	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	11
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	648	-	-	1377	-
HCM Lane V/C Ratio	0.081	-	-	0.038	-
HCM Control Delay (s)	11	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	20	734	46	0	742
Future Vol, veh/h	0	20	734	46	0	742
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	22	798	50	0	807

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	424	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	495	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	495	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	495	-
HCM Lane V/C Ratio	-	-	0.044	-
HCM Control Delay (s)	-	-	12.6	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	18	69	784	754	23
Future Vol, veh/h	12	18	69	784	754	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	250	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	20	75	852	820	25

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1409	423	845	0	-	0
Stage 1	833	-	-	-	-	-
Stage 2	576	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	130	579	787	-	-	-
Stage 1	387	-	-	-	-	-
Stage 2	525	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	118	579	787	-	-	-
Mov Cap-2 Maneuver	118	-	-	-	-	-
Stage 1	350	-	-	-	-	-
Stage 2	525	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	23.6	0.8	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	787	-	226	-	-
HCM Lane V/C Ratio	0.095	-	0.144	-	-
HCM Control Delay (s)	10.1	-	23.6	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0.3	-	0.5	-	-

Intersection: 50: Windcrest Ln & Unit 1 Dwy

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	44	10
Average Queue (ft)	22	0
95th Queue (ft)	47	7
Link Distance (ft)	320	306
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 51: Shoal Creek Dr. & Unit 2 Dwy

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	16	40
Average Queue (ft)	1	21
95th Queue (ft)	9	44
Link Distance (ft)	269	317
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 52: Rancho Carmel Dr. & Unit 5 Dwy

Movement	EB
Directions Served	R
Maximum Queue (ft)	47
Average Queue (ft)	19
95th Queue (ft)	46
Link Distance (ft)	328
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 53: Rancho Carmel Dr. & Unit 6 Dwy

Movement	WB
Directions Served	R
Maximum Queue (ft)	59
Average Queue (ft)	27
95th Queue (ft)	51
Link Distance (ft)	438
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 54: Shoal Creek Dr/Shoal Creek Dr. & Unit 8 Dwy

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	53	33	56
Average Queue (ft)	6	2	27
95th Queue (ft)	31	17	51
Link Distance (ft)	227	310	298
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 55: Carmel Ridge Rd & Unit 9 Dwy

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	37	85
Average Queue (ft)	4	35
95th Queue (ft)	21	60
Link Distance (ft)	403	339
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 56: Unit 10 Dwy & Carmel Ridge Rd

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	2	29	76
Average Queue (ft)	0	1	38
95th Queue (ft)	2	12	62
Link Distance (ft)	478	380	213
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 57: Highland Ranch Rd & Unit 16 Dwy

Movement	WB
Directions Served	R
Maximum Queue (ft)	54
Average Queue (ft)	25
95th Queue (ft)	49
Link Distance (ft)	338
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 58: Rancho Carmel Dr. & Cambridge

Movement	EB	NB
Directions Served	LR	L
Maximum Queue (ft)	47	39
Average Queue (ft)	25	12
95th Queue (ft)	48	38
Link Distance (ft)	372	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		250
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Intersection: 50: Windcrest Ln & Unit 1 Dwy

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	37	35
Average Queue (ft)	13	3
95th Queue (ft)	38	17
Link Distance (ft)	319	259
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 51: Shoal Creek Dr. & Unit 2 Dwy

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	37	37
Average Queue (ft)	4	11
95th Queue (ft)	22	36
Link Distance (ft)	269	319
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 52: Rancho Carmel Dr. & Unit 5 Dwy

Movement	EB
Directions Served	R
Maximum Queue (ft)	37
Average Queue (ft)	12
95th Queue (ft)	37
Link Distance (ft)	346
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 53: Rancho Carmel Dr. & Unit 6 Dwy

Movement	WB
Directions Served	R
Maximum Queue (ft)	39
Average Queue (ft)	15
95th Queue (ft)	41
Link Distance (ft)	318
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 54: Shoal Creek Dr/Shoal Creek Dr. & Unit 8 Dwy

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	70	2	49
Average Queue (ft)	12	0	17
95th Queue (ft)	44	2	44
Link Distance (ft)	201	185	297
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 55: Carmel Ridge Rd & Unit 9 Dwy

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	54	2	54
Average Queue (ft)	10	0	24
95th Queue (ft)	37	2	45
Link Distance (ft)	403	478	339
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 56: Unit 10 Dwy & Carmel Ridge Rd

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	2	55	60
Average Queue (ft)	0	8	30
95th Queue (ft)	2	34	52
Link Distance (ft)	478	380	213
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 57: Highland Ranch Rd & Unit 16 Dwy

Movement	WB
Directions Served	R
Maximum Queue (ft)	42
Average Queue (ft)	15
95th Queue (ft)	41
Link Distance (ft)	338
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 58: Rancho Carmel Dr. & Cambridge

Movement	EB	NB	SB
Directions Served	LR	L	TR
Maximum Queue (ft)	46	65	7
Average Queue (ft)	21	25	0
95th Queue (ft)	46	56	4
Link Distance (ft)	431		573
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		250	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

Intersection: 50: Windcrest Ln & Unit 1 Dwy

Movement	WB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	12
95th Queue (ft)	36
Link Distance (ft)	359
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 51: Shoal Creek Dr. & Unit 2 Dwy

Movement	SB
Directions Served	LR
Maximum Queue (ft)	27
Average Queue (ft)	11
95th Queue (ft)	32
Link Distance (ft)	284
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 52: Provencal Pl. & Unit 5 Dwy

Movement	SB
Directions Served	LTR
Maximum Queue (ft)	30
Average Queue (ft)	18
95th Queue (ft)	41
Link Distance (ft)	296
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 53: Rancho Carmel Dr. & Unit 6 Dwy

Movement	WB
Directions Served	R
Maximum Queue (ft)	29
Average Queue (ft)	16
95th Queue (ft)	38
Link Distance (ft)	360
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 54: Shoal Creek Dr/Shoal Creek Dr. & Unit 8 Dwy

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	29	24
Average Queue (ft)	6	22
95th Queue (ft)	25	25
Link Distance (ft)	125	435
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 55: Carmel Ridge Rd & Unit 9 Dwy

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	53	52
Average Queue (ft)	11	33
95th Queue (ft)	46	49
Link Distance (ft)	590	311
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 56: Unit 10 Dwy & Carmel Ridge Rd

Movement	NB
Directions Served	LR
Maximum Queue (ft)	53
Average Queue (ft)	39
95th Queue (ft)	56
Link Distance (ft)	552
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 57: Highland Ranch Rd & Unit 16 Dwy

Movement	WB	NB	NB
Directions Served	R	T	TR
Maximum Queue (ft)	30	85	94
Average Queue (ft)	17	17	19
95th Queue (ft)	41	73	81
Link Distance (ft)	315	86	86
Upstream Blk Time (%)		0	0
Queuing Penalty (veh)		0	1
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty: 1

Intersection: 50: Windcrest Ln & Unit 1 Dwy

Movement	SB
Directions Served	LT
Maximum Queue (ft)	31
Average Queue (ft)	6
95th Queue (ft)	27
Link Distance (ft)	96
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 51: Shoal Creek Dr. & Unit 2 Dwy

Movement	SB
Directions Served	LR
Maximum Queue (ft)	27
Average Queue (ft)	10
95th Queue (ft)	32
Link Distance (ft)	284
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 52: Provencal Pl. & Unit 5 Dwy

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 53: Rancho Carmel Dr. & Unit 6 Dwy

Movement	WB
Directions Served	R
Maximum Queue (ft)	52
Average Queue (ft)	27
95th Queue (ft)	54
Link Distance (ft)	360
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 54: Shoal Creek Dr/Shoal Creek Dr. & Unit 8 Dwy

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	30	24
Average Queue (ft)	6	14
95th Queue (ft)	26	34
Link Distance (ft)	125	435
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 55: Carmel Ridge Rd & Unit 9 Dwy

Movement	SB
Directions Served	LR
Maximum Queue (ft)	29
Average Queue (ft)	28
95th Queue (ft)	29
Link Distance (ft)	311
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 56: Unit 10 Dwy & Carmel Ridge Rd

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	31	31
Average Queue (ft)	6	30
95th Queue (ft)	27	31
Link Distance (ft)	1251	552
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 57: Highland Ranch Rd & Unit 16 Dwy

Movement	NB	NB
Directions Served	T	TR
Maximum Queue (ft)	78	55
Average Queue (ft)	16	17
95th Queue (ft)	67	54
Link Distance (ft)	86	86
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

Appendix K: Pedestrian Hotspot Map

N
Scale
1" = 3600'
ENCINITAS BLVD
S COAST HIGHWAY 101
N EL CAMINO REAL
S EL CAMINO REAL
SANTA FE DR
MANCHESTER AVE
DEL DIOS HWY
LA GRANADA
PASEO DELICIAS
LINEA DEL CIELO
VIA DE LA VALLE
LOMAS SANTA FE DR
N HIGHWAY 101
S HIGHWAY 101
CAMINO DEL MAR
DEL MAR HEIGHTS RD
NORTH TORREY PINES RD
CARMEL VALLEY RD
CARMEL MOUNTAIN RD
GILMAN DR
REGENTS RD
LA JOLLA VILLAGE DR
MIRAMAR RD
BLACK MOUNTAIN RD
MERCY RD
SCRIPPS POWAY PKY
SABRE SPRINGS PKY
POWAY RD
TED WILLIAMS PKY
TWIN PEAKS RD
CAMINO DEL NORTE
RANCHO BERNARDO RD
POMERADO RD
HIGHLAND VALLEY RD
ESPOLA RD
LA JOLLA PKY
PROSPECT ST
TORREY PINES RD
NAUTILUS ST
LA JOLLA BLVD
CLAIREMONT MESA BLVD
KEARNY VILLA RD
SANTO RD
TIERRASANTA BLVD
BALBOA AVE
CONVOY ST
GENESSE AVE
MISSION BLVD
GARNET AVE
GRAND AVE
MISSION BAY DR
CLAIREMONT DR
EAST MISSION BAY DR
WEST MISSION BAY DR
INGRAHAM ST
SEA WORLD DR
SUNSET CLIFFS BLVD
WEST POINT LOMA BLVD
NIMITZ BLVD
CHATSWORTH BLVD
ROSECRANS ST
CANON ST
CATALINA BLVD
MOREENA BLVD
FRIARS RD
SPORTS ARENA BLVD
MIDWAY DR
BARNETT AVE
PACIFIC HWY
NORTH HARBOR DR
W LAUREL ST
W WASHINGTON ST
WASHINGTON ST
EL CAJON BLVD
UNIVERSITY AVE
ADAMS AVE
ALDINE DR
MONTEZUMA RD
COLLEGE AVE
FEDERAL BLVD
MASSACHUSETTS AVE
LEMON GROVE AVE
SWEETWATER RD
JAMACHA RD
JAMACHA BLVD
PARADISE VALLEY RD
BROADWAY
MARKET ST
IMPERIAL AVE
OCEAN VIEW BLVD
NATIONAL AVE
LOGAN AVE
DIVISION ST
E DIVISION ST
DELTA ST
VISTA ST
PLAZA BLVD
W 08TH ST
E 08TH ST
BAY MARINA DR
NATIONAL CITY BLVD
HIGHLAND AVE
N AVE
BONITA RD
SAN MIGUEL RD
WILLOW ST
E ST
H ST
E H ST
L ST
E L ST
BROADWAY
ORD AVE
OTAY LAKES RD
OLYMPIC PKY
TELEGRAPH CANYON RD
PALOMAR ST
ORANGE AVE
E ORANGE AVE
MAIN ST
BEYER WAY
PALM AVE
IMPERIAL BEACH BLVD
CORONADO AVE
PICADOR BLVD
TOCAYO AVE
BEYER BLVD
SMYTHE AVE
OTAY MESA RD
EAST BEYER BLVD
HERITAGE RD
OTAY VALLEY RD
MAST BLVD
MISSION GORGE RD
CUYAMACA ST
WOODSIDE AVE
WINTER GARDENS BLVD
LOS COCHES RD
MAPLEVIEW ST
W BRADLEY AVE
E BRADLEY AVE
PEPPER DR
N 01ST ST
N 02ND ST
FLETCHER PKY
BROADWAY
N MOLLISON AVE
E MAIN ST
W MAIN ST
S MAGNOLIA AVE
E WASHINGTON AVE
W CHASE AVE
E CHASE AVE
AVOCADO AVE
CHASE AVE
MURRAY DR
NAVAJO RD
LA MESA BLVD
SPRING ST
BALTIMORE DR
JACKSON DR
AVOCADO BLVD