STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit

Gavin Newsom
Governor

Kate Gordon
Director

Memorandum

Date: February 24, 2020

To: All Reviewing Agencies

From: Scott Morgan, Director

Re: SCH # **2006091093**

Bedford Marketplace / DPR2019-0019, DPR2019-0020 and DPR2019-0021, GPA2019-0005, PM 37788, PP2019-0008, and VMIN2019-0006

The Lead Agency has corrected some information regarding the above-mentioned project. Please see the attached materials for more specific information. All other project information remains the same.

cc: Sandra Yang
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APPENDIX I:

Traffic Study

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Bedford Marketplace

TRAFFIC STUDY

CITY OF CORONA

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JANUARY 10, 2020 (REVISED)
OCTOBER 15, 2019

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LIST OF ABBREVIATED TERMS

ADT	Average Daily Traffic
Caltrans	California Department of Transportation
FHWA	Federal Highway Administration
HCM	Highway Capacity Manual
ITE	Institute of Transportation Engineers
LOS	Level of Service
MUTCD	Manual on Uniform Traffic Control Devices
PHF	Peak Hour Factor
Project	Bedford Marketplace
RivTAM	Riverside County Transportation Analysis Model
RTA	Riverside Transit Authority
SCAG	Southern California Association of Governments
SP	Service Population
TIA	Traffic Impact Analysis
TSF	Thousand Square Feet
v/c	Volume-to-Capacity Ratio
vphg	Vehicle Per Hour of Green
VMT	Vehicle Miles Traveled
VPH	Vehicle Per Hour
WRCOG	Western Riverside Council of Governments

1.0 INTRODUCTION AND KEY FINDINGS

The purpose of this traffic study report is to evaluate the proposed Bedford Marketplace development ("Project"), an expansion of the previously approved commercial development area included within the Arantine Hills Specific Plan. The 80,000 square feet (sf) of commercial retail use included in the Arantine Hills Specific Plan was evaluated in 2015 and 2018 traffic studies prepared for amendments to the Arantine Hills Specific Plan. The proposed Project being studied in this TIA is the expansion of Bedford Marketplace from 80,000 sf to 135,000 sf of retail uses and a 135-room hotel. The incremental expansion of Bedford Marketplace constitutes the "Project" analyzed in this study. Reference to "Bedford Marketplace" includes the total development of the center, equal to the combination of the proposed Project and the previously approved 80,000 sf in the Arantine Hills Specific Plan.

Study objectives include (1) evaluation of interim year 2021 without and with Project conditions; (2) evaluation of horizon year 2035 without and with Project conditions; (3) determination of on-site and off-site improvements needed to achieve City of Corona level of service (LOS) requirements, and (4) estimation of the Project vehicle miles traveled (VMT). The City is in the process of updating its General Plan and adopting an updated Citywide traffic model. This TIA analyzes the incremental change in traffic impacts of the Project in the same manner as previously analyzed in the 2015 and 2018 studies.

The Project is located south of Eagle Glen Parkway – Cajalco Road and west of the I-15 Freeway in the City of Corona as shown on Exhibit 1-1.

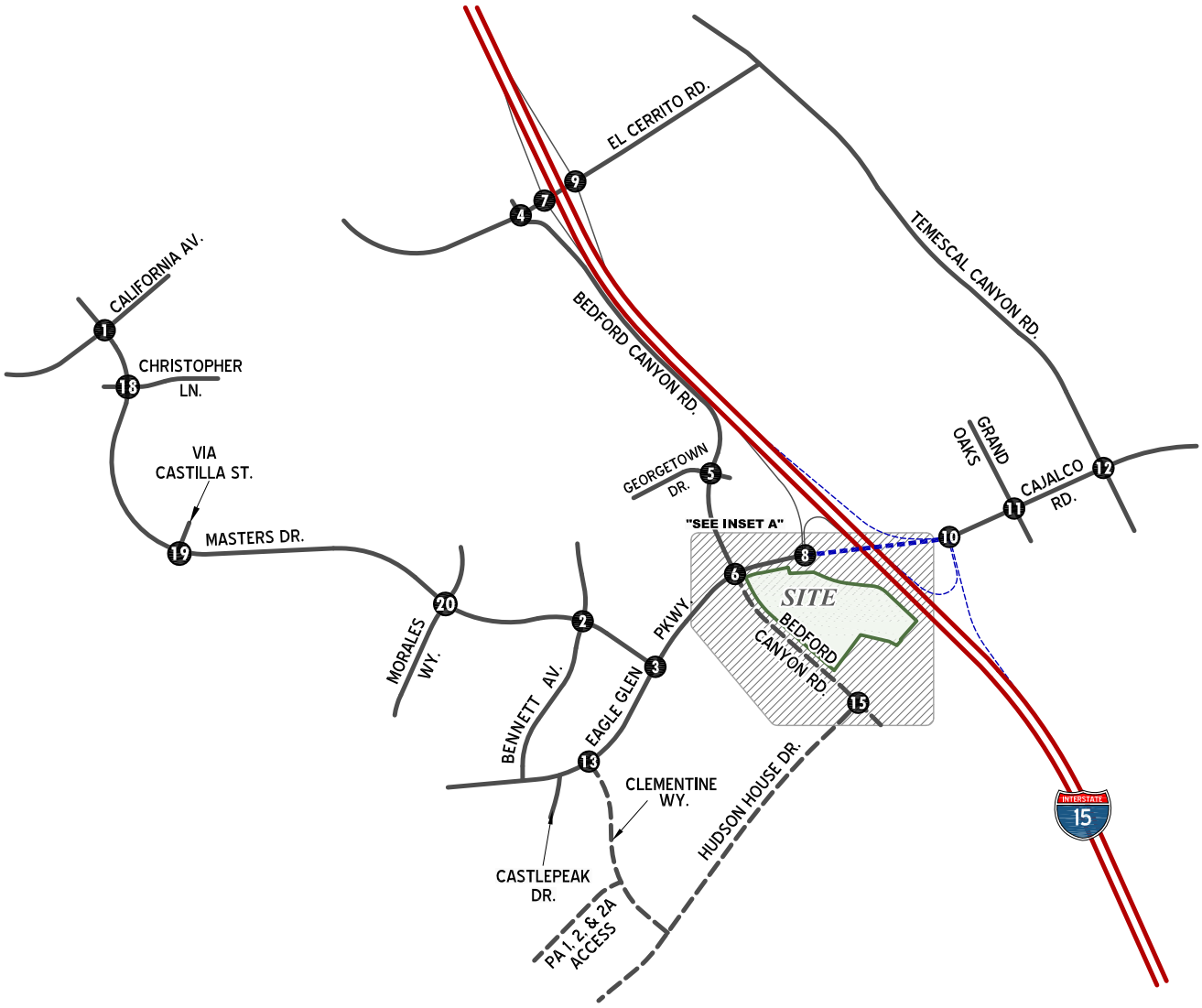
1.1 PROJECT OVERVIEW

The Project land use plan (shown on Exhibit 1-2) expands the approved commercial site and is proposed to consist of the following uses:

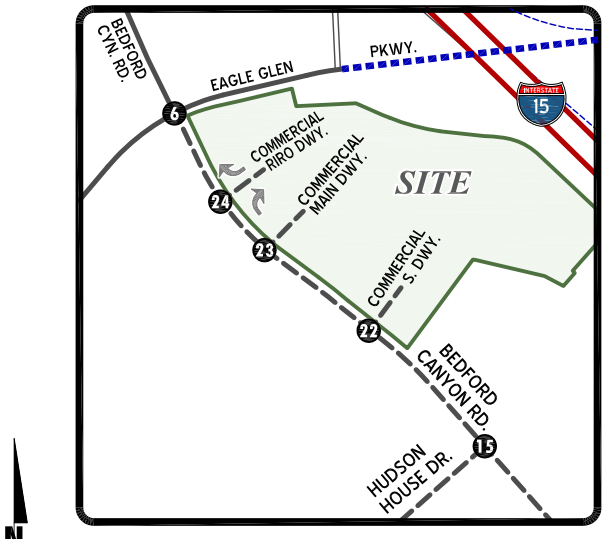
- Hotel - 135 rooms
- Health/fitness club - 38,000 sf
- Day Care Center - 9,990 sf
- Retail Shopping Center – 51,000 sf
- Bank – 6,562 sf
- Restaurant – 21,230 sf
- Gas Station – 18 vehicle fueling positions (vfp's)
- Automated Car Wash – 3,600 sf

Access to the Project site will be provided via Bedford Canyon Road. The Project will provide two full access driveways and one right-in/right-out driveway, consistent with the amended Arantine Hills Specific Plan.

EXHIBIT 1-1: TRAFFIC STUDY AREA



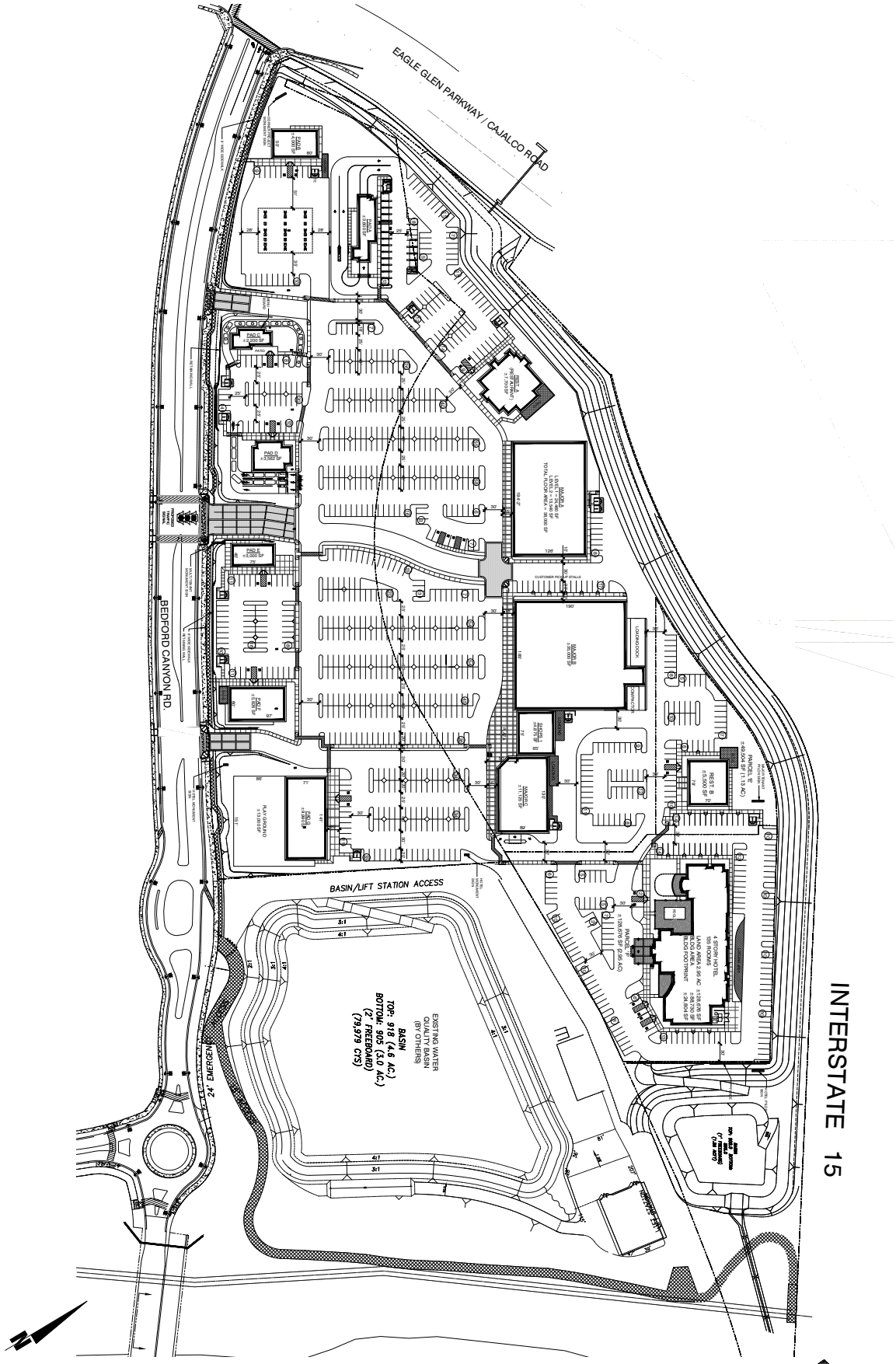
PROJECT SITE AREA



LEGEND:

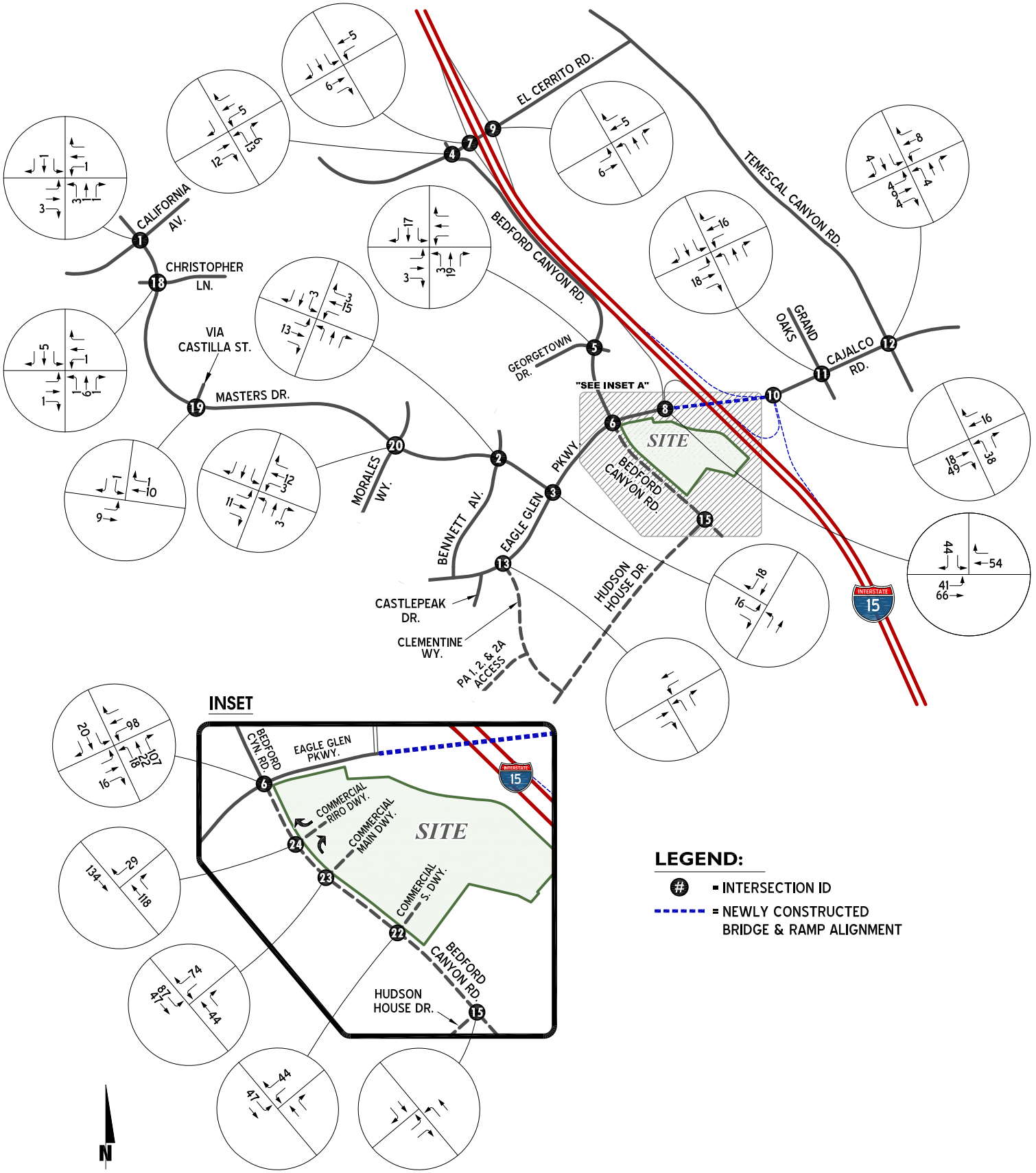
- (#) = INTERSECTION ID
- = NEWLY CONSTRUCTED BRIDGE & RAMP ALIGNMENT
- RIRO = RIGHT-IN/RIGHT-OUT ONLY ACCESS

EXHIBIT 1-2: PRELIMINARY SITE LAN



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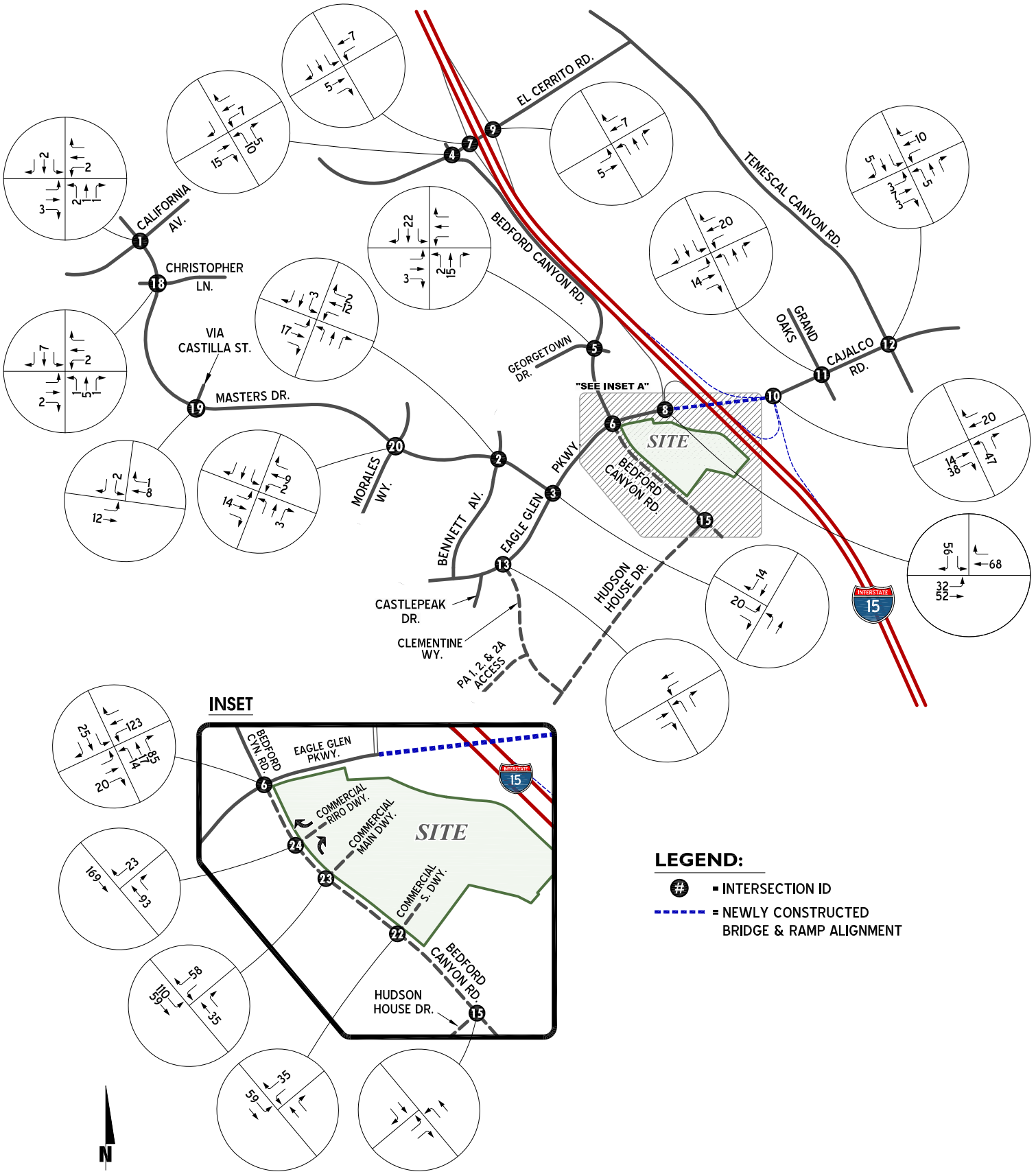
EXHIBIT 1-3: PROJECT ONLY VOLUME (EXTERNAL TRIPS) NET INCREASES IN COMPARISON TO 80 TSF RETAIL AM PEAK HOUR



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URBAN CROSSROADS

EXHIBIT 1-4: PROJECT ONLY VOLUME (EXTERNAL TRIPS) NET INCREASES IN COMPARISON TO 80 TSF RETAIL PM PEAK HOUR



Trips generated by the proposed Project's land plan have been estimated based on trip generation rates collected by the Institute of Transportation Engineers (ITE) as presented in ITE's most current edition of Trip Generation (10th Edition, 2017). Bedford Marketplace is estimated to generate a total of approximately 7,014 external trips per day with 394 AM peak hour external trips and 686 PM peak hour external trips. Of the total number of vehicle trips, the proposed Project generates 2,061 external trips per day with 281 AM peak hour external trips and 285 PM peak hour external trips.

The net increase to the AM peak hour and PM peak hour project volumes related to the Project, as compared to the previously approved project, are presented in Exhibit 1-3 (morning peak hour) and Exhibit 1-4 (evening peak hour) for the study area intersections.

1.2 ANALYSIS SCENARIOS

This traffic study includes the following conditions:

- Existing (2017 and 2018) Conditions
- Interim Year (2021) Without and With Project Conditions
- Horizon Year 2035 Without and With Project Conditions

1.2.1 STUDY AREA INTERSECTIONS

The intersection analysis locations for this traffic study are listed in Table 1-1 and previously shown on Exhibit 1-1.

TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS

ID	Intersection Location	Jurisdiction
1	Masters Drive / California Avenue	Corona
2	Masters Drive / Bennett Avenue	Corona
3	Masters Drive / Eagle Glen Parkway	Corona
4	Bedford Canyon Road / El Cerrito Road	Corona
5	Bedford Canyon Road / Georgetown Drive	Corona
6	Bedford Canyon Road / Eagle Glen Parkway	Corona
7	I-15 SB Ramps / El Cerrito Road	Caltrans
8	I-15 SB Ramps / Cajalco Road	Caltrans
9	I-15 NB Ramps / El Cerrito Road	Caltrans
10	I-15 NB Ramps / Cajalco Road	Caltrans
11	Grand Oaks / Cajalco Road	Corona
12	Temescal Canyon Road / Cajalco Road	Corona
13	Clementine Way / Eagle Glen Parkway	Corona
15	Bedford Canyon Road / Hudson House Drive	Corona
18	Masters Drive / Christopher Lane	Corona
19	Via Castilla Street / Masters Drive	Corona
20	Morales Way / Masters Drive	Corona

TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS (CONTINUED)

ID	Intersection Location	Jurisdiction
22	Bedford Canyon Road / Commercial South Driveway	Corona
23	Bedford Canyon Road / Commercial Main Driveway	Corona
24	Bedford Canyon Road / Commercial Right-In/Right-Out (RIRO) Driveway	Corona

1.3 STUDY AREA CIRCULATION CONDITIONS

Construction activity is still underway in the Cajalco Road / I-15 interchange area. A new 6-lane bridge has been built over the I-15 mainline, replacing the previous 2-lane divided roadway, between the I-15 SB and I-15 NB ramps. Extensive improvements are also being made to the I-15 on and off ramps.

Cajalco Road / I-15 interchange area improvement plans are illustrated in Appendix 1.1. Consistent with the previously approved Arantine Hills Traffic Impact Analysis (2015), LOS "E" is anticipated to be considered acceptable level of service for the I-15 / Cajalco Road interchange.

1.3.1 INTERSECTION OPERATIONS ANALYSIS

For Existing (2017 and 2018) Conditions, the following study area intersections are currently operating at deficient level of service during the morning peak hours:

ID	Intersection Location	Jurisdiction
1	Masters Drive / California Avenue	Corona
18	Masters Drive / Christopher Lane	Corona
19	Via Castilla Street / Masters Drive	Corona
20	Morales Way / Masters Drive	Corona

Improvements have previously been identified to address these existing deficiencies in 2015 and 2018 traffic studies prepared for amendments to the Arantine Hills Specific Plan.

For Interim Year (2021) conditions, the improvements under construction at or near the Cajalco Road / I-15 Interchange area are assumed to be completed. No additional off-site intersections are anticipated to operate at unacceptable level of service, beyond those intersections previously identified under existing conditions.

For Horizon Year 2035 Without Project Conditions, the following four additional intersections are anticipated to operate at deficient levels of service (without currently planned improvements), beyond those intersections previously identified under existing conditions:

ID	Intersection Location	Jurisdiction
2	Masters Drive / Bennett Avenue	Corona
5	Bedford Canyon Road / Georgetown Drive	Corona
7	I-15 SB Ramps / El Cerrito Road	Caltrans
12	Temescal Canyon Road / Cajalco Road	Corona

Improvements have also previously been identified to address these 2035 deficiencies in 2015 and 2018 traffic studies prepared for amendments to the Arantine Hills Specific Plan.

For Horizon Year 2035 With Project Conditions, there are no new intersections anticipated to operate at deficient level of service, beyond the intersections identified under 2035 Without Project Conditions.

1.3.2 TRAFFIC SIGNAL WARRANT ANALYSIS

For Existing (2017 and 2018) Conditions, the following unsignalized intersections warrant a traffic signal:

ID	Intersection Location	Jurisdiction
1	Masters Drive / California Avenue	Corona
18	Masters Drive / Christopher Lane	Corona
20	Morales Way / Masters Drive	Corona

For Interim Year (2021) Without Project Conditions, the intersection of Bedford Canyon Road / Commercial Main Driveway (#23) is anticipated to meet traffic signal warrants (in addition to the intersection previously identified under Existing conditions).

It should be noted that new traffic signals were recently installed at the intersections of Masters Drive / Eagle Glen Parkway (#3) and Clementine Way / Eagle Glen Parkway (#13).

For Horizon Year 2035 Without Project Conditions, the following intersections are anticipated to meet traffic signal warrants, in addition to the intersections identified previously under Interim Year (2021) conditions:

ID	Intersection Location	Jurisdiction
2	Masters Drive / Bennett Avenue	Corona
5	Bedford Canyon Road / Georgetown Drive	Corona

For Horizon Year 2035 With Project Conditions, there are no additional intersections anticipated to meet traffic signal warrants (beyond the intersections identified previously under 2035 Without Project conditions).

1.4 RECOMMENDED IMPROVEMENTS

For Interim Year (2021) Without and With Project Conditions, the following off-site improvements have previously been recommended in the study area in 2015 and 2018 traffic studies prepared for amendments to the Arantine Hills Specific Plan:

Masters Drive / California Drive (#1)

- Participate in the installation of a traffic signal.

Bedford Canyon Road / Eagle Glen Parkway - Cajalco Road (#6) *– Under Construction*

- Traffic Signal Modification.
- Adjust the east leg striping to provide a 2nd receiving lane.
- NB Approach: Participate in the construction of one left turn lane, one through lane and one right turn lane with overlap phasing.
- SB Approach: Modify striping to provide a new shared left-through lane.
- EB Approach: Modify striping to provide a new shared through/right turn lane.
- WB Approach: Construct 2 left turn lanes.

I-15 SB Ramps / Cajalco Road (#8) *– Under Construction*

- SB Approach: Participate in the construction of 2nd left turn lane and 2nd right turn lane.
- EB Approach: Participate in the construction of 2nd left turn lane, 2nd through lane, and 3rd through lane.
- WB Approach: Participate in the construction of 2nd through lane
- It should be noted that the planned I-15/Cajalco Road interchange improvements accommodate triple southbound left turns. However, based on the intersection operations results, providing a minimum of two southbound left turns would result to an acceptable level of service.

I-15 NB Ramps / Cajalco Road (#10)

- NB Approach: Participate in the construction of 2nd left turn lane and 2nd right turn lane.
- EB Approach: Participate in the construction of 2nd and 3rd through lanes and one right turn lane with overlap phasing.
- WB Approach: Participate in the construction of 3rd and 4th through lanes.

Grand Oaks / Cajalco Road (#11)

- EB Approach: Participate in the construction of 3rd through lane.

Masters Drive / Christopher Lane (#18)

- Participate in the installation of a traffic signal, or roundabout.

Via Castilla Street / Masters Drive (#19)

- Participate in the conversion to cross-street stop control on Via Castilla Street (in conjunction with Masters Drive / Christopher Lane and Morales Way / Masters Drive traffic signals), or roundabout.

Morales Way / Masters Drive (#20)

- Participate in the installation of a traffic signal, or roundabout.

For Horizon Year 2035 Without and With Project Conditions, the following off-site improvements have previously been recommended in the study area in 2015 and 2018 traffic studies prepared for amendments to the Arantine Hills Specific Plan:

Masters Drive / Bennett Avenue (#2)

- Participate in the installation of a traffic signal.

Bedford Canyon Road / Georgetown Drive (#5)

- Participate in the installation of a traffic signal.

I-15 SB Ramps / El Cerrito Road (#7)

- EB Approach: Participate in the construction of a separate right turn lane.

Temescal Canyon Road / Cajalco Road (#12)

- Participate in the widening of Cajalco Road east of Temescal Canyon Road to provide 2nd and 3rd eastbound lane within 600 feet of Temescal Canyon Road.
- SB Approach: Modify striping to provide a 2nd left turn lane, in addition to the existing two through lanes.
- EB Approach: Modify striping to provide a 2nd through lane, in addition to the existing left turn lane and right turn lane.
- WB Approach: Construct one right turn lane.

Improvements recommended in this study with the proposed Project are consistent to the previously approved Arantine Hills TIA (2015) under 2035 conditions; the Project does not trigger the need for additional improvements beyond those identified in the 2015 study for 2035 conditions.

1.5 SITE ACCESS

Access in and out of the Project occurs at three existing driveways along Bedford Canyon Road south of Eagle Glen Parkway/Cajalco Road. The northerly driveway is limited to right-in right-out (RIRO) conditions, without an opening of the median on Bedford Canyon Road. It serves as a convenient exit for vehicles leaving the Gas Station and Automated Car Wash, bound for Eagle Glen Parkway/Cajalco Road. The RIRO driveway also accommodates entering vehicles from northbound on Bedford Canyon Road.

The main Project driveway is located at a mid-point along the site frontage to Bedford Canyon Road. It is a full access location, serving left and right turns to and from Bedford Canyon Road with traffic signal control. With expansion of commercial uses at the Project site, the existing

southbound left turn lane (approximately 50 feet turn pocket) serving the main Project driveway is recommended to be extended to provide 200 feet of vehicle queuing.

The southerly Project driveway is also a full access location, serving left and right turns to and from Bedford Canyon Road with cross-street stop sign control of the exiting vehicles. At this location, the existing southbound left turn lane is recommended to be extended to provide 150 feet of vehicle queuing with the expansion of commercial uses at the Project site.

An efficient network of on-site driveways provides connectivity to all access points and facilitates the internal flow of activity between the variety of Project land uses.

1.6 VEHICLE MILES TRAVELED

The California Environmental Quality Act (CEQA) procedures for determination of transportation impacts have recently changed to an evaluation of Vehicle Miles Traveled (VMT) rather than vehicle delay or level of service, due to Senate Bill 743 (SB 743). The City of Corona VMT Analysis Guidelines provide a structure for evaluating VMT on a project level basis. Vehicle delay and level of service are still used in Corona traffic studies, as presented in sections 2 through 7 of this traffic study.

Approximately 582 employees (including 240 temporary and 342 permanent positions) are anticipated for Bedford Marketplace. The previous approval of commercial use for the site accounts for approximately 320 employees (based upon an average of 4 employees per tsf of gross floor area). An increase of approximately 262 jobs will occur with the Project.

The mix of land uses (including hotel, retail, and service-oriented uses for Bedford Marketplace) is anticipated to encourage trip capture on-site, resulting in a lower than usual VMT per service population (SP). The combination of banking, restaurant, gas, health club, retail, and a day care center in close proximity to residential and hotel uses is expected to encourage internal interaction.

Pathways and bike routes associated with the site provide an integrated sidewalk and trails system that conveniently links the Bedford Marketplace site to community facilities, residential neighborhoods, and parks. The Project is also located within a Low VMT generating traffic analysis zone (TAZ), with a VMT / service population between 26.6 and 27.8 VMT/SP, which is less than the City of Corona average of approximately 30 VMT/SP.

The VMT / SP associated with the Project could potentially fall within the range of approximately 26.6 to 31.5, but the Project location, mix of uses, and effectiveness of the design features support a conservative estimate of 29 VMT / SP, which has been developed utilizing the procedures documented in Section 7. The resulting total Project VMT is approximately 7,598 for the 262 employees added by the project, which is less than the City average per SP and considered a less than significant impact based upon City criteria.

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2.0 AREA CONDITIONS

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

2.1 EXISTING CIRCULATION NETWORK

Per discussion with City of Corona staff, the study area includes a total of twenty (20) existing and future intersections as shown previously on Exhibit 1-1. Of these twenty (20) intersections, the existing study area circulation network includes fifteen (15) intersections. The other five (5) intersections in the study area are future planned intersections that are currently under construction (Arantine Hills roadways and key project driveways).

Exhibit 2-1 illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls (during interchange construction in 2018).

2.2 CITY OF CORONA GENERAL PLAN CIRCULATION ELEMENT

As previously noted, the Project site is located within the City of Corona. Exhibit 2-2 shows the City of Corona General Plan Circulation Element, and Exhibit 2-3 illustrates the City of Corona General Plan Roadway Cross-Sections.

2.3 EXISTING (2017 AND 2018) TRAFFIC COUNTS

The AM peak hour traffic volumes were determined by counting traffic volumes in the three hour period between 6:00 and 9:00 AM. The PM peak hour traffic volumes were identified by counting traffic volumes in the two hour period from 4:00 to 6:00 PM. For the purpose of this analysis, the counts provided in the November 2018 traffic assessment for the Arantine Hills Specific Plan Amendment No. 2 are presented in this report due to ongoing construction activity in the Cajalco interchange area.

The manual AM and PM peak hour turning movement counts were conducted in October 2017 and March 2018. The raw manual peak hour turning movement traffic count data sheets are included in Appendix "2.1". Flow conservation checks have been performed to the existing peak hour counts in an effort to ensure the flow of traffic volumes between closely spaced intersections is maintained.

Existing (2017 and 2018) AM and PM peak hour intersection volumes are shown on Exhibit 2-4 and Exhibit 2-5, respectively.

EXHIBIT 2-1: EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS

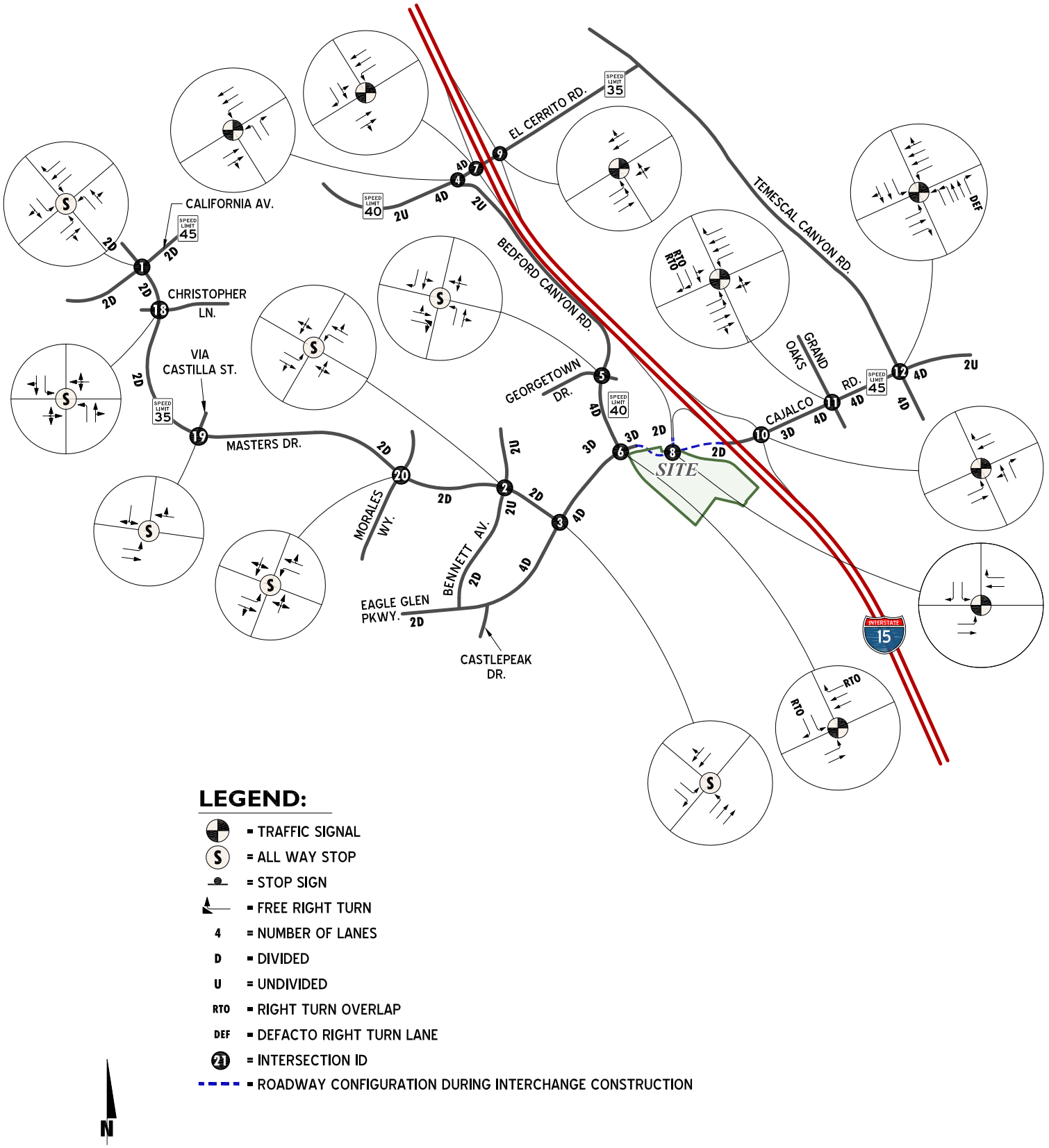
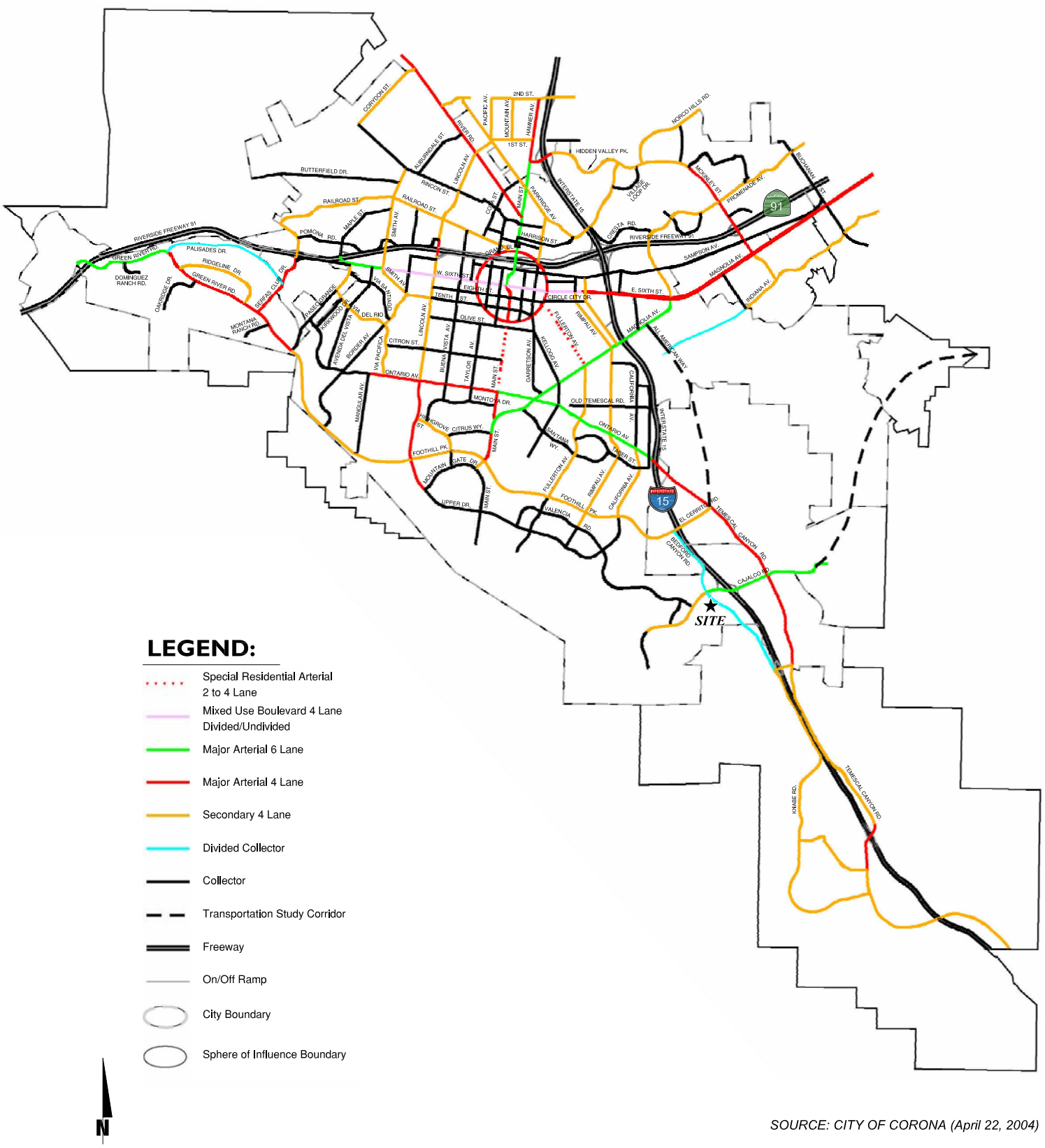


EXHIBIT 2-2: CITY OF CORONA GENERAL PLAN CIRCULATION ELEMENT

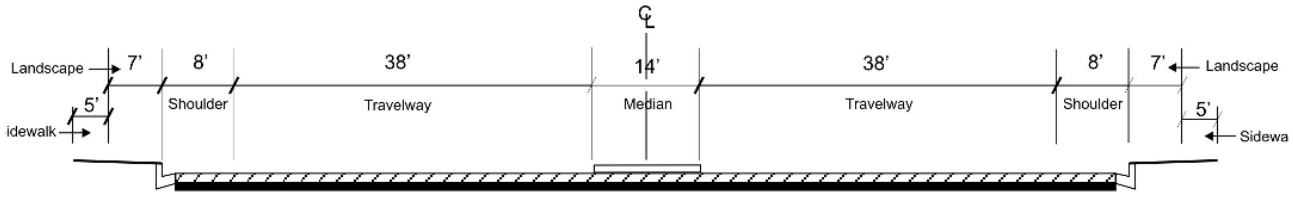


SOURCE: CITY OF CORONA (April 22, 2004)

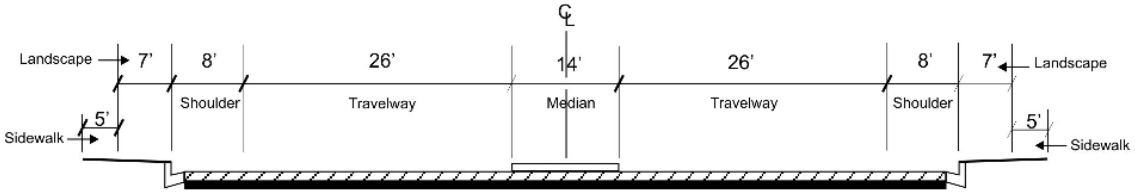
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URBAN CROSSROADS

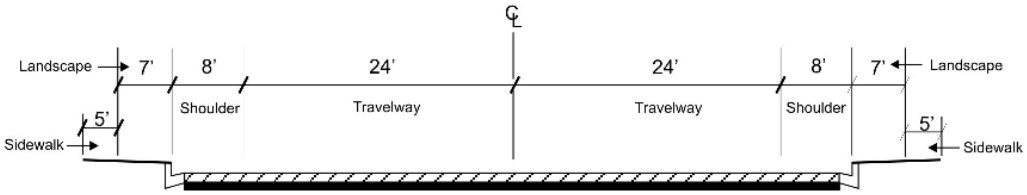
EXHIBIT 2-3 (1 OF 3): CITY OF CORONA GENERAL PLAN CROSS-SECTIONS



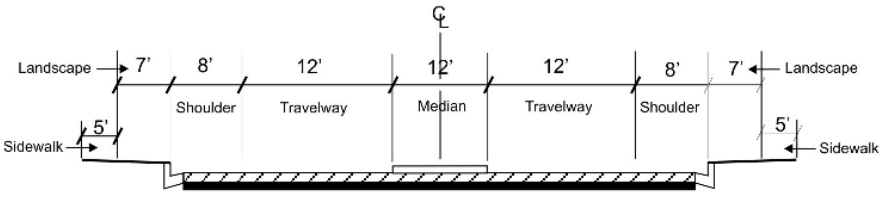
Major Arterial (6 lanes)
R.W. 130
Roadway 106



Major Arterial (4 lanes)
R.W. 106
Roadway 82



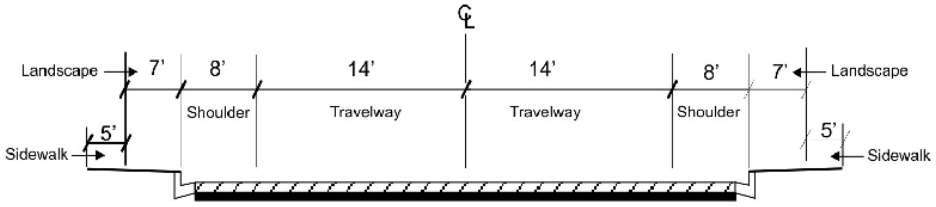
Secondary (4 lanes)
R.W. 88
Roadway 64



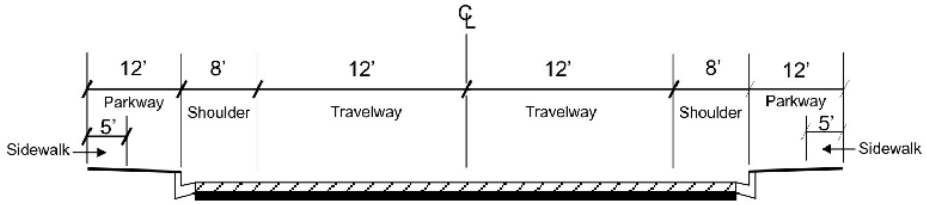
Divided Collector (2 lanes)
R.W. 76
Roadway 52

SOURCE: CITY OF CORONA

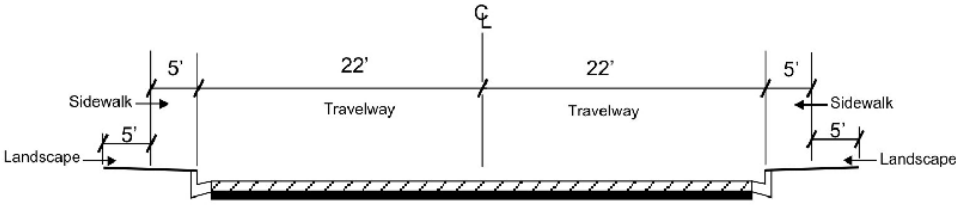
EXHIBIT 2-3 (2 OF 3): CITY OF CORONA GENERAL PLAN CROSS-SECTIONS



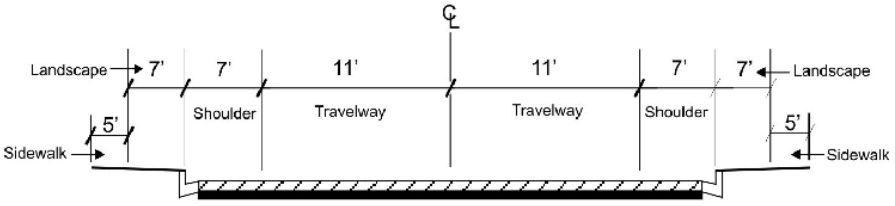
Collector (2 lanes)
R.W. 68
Roadway 44



Local Street
R.W. 64
Roadway 40
Note: See local residential street Planning Policy 6.1.10



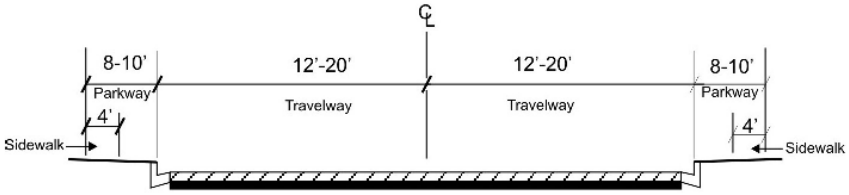
Local Industrial
R.W. 64
Roadway 44



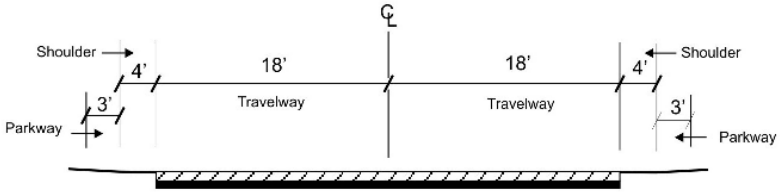
Cul-De-Sac
R.W. 60
Roadway 36

SOURCE: CITY OF CORONA

EXHIBIT 2-3 (3 OF 3): CITY OF CORONA GENERAL PLAN CROSS-SECTIONS



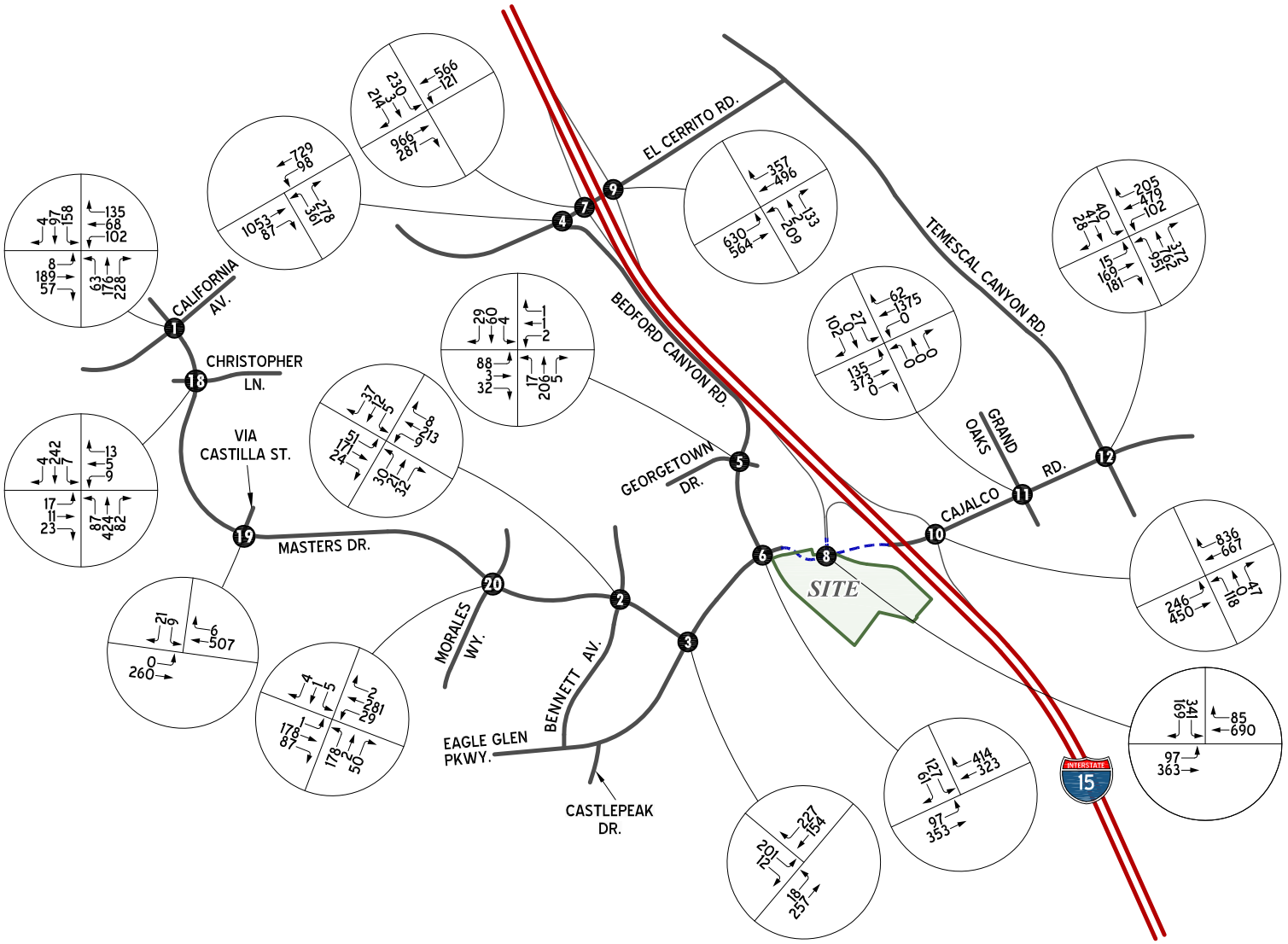
Private Residential Street
R.W. 40-60
Roadway 24-40
Note: See local residential street Planning Policy 6.1.10



Rural Road (Traffic Volume)
R.W. 50
Roadway 36
Note: See local residential street Planning Policy 6.1.10

SOURCE: CITY OF CORONA

EXHIBIT 2-4: EXISTING (2017/2018) AM PEAK HOUR INTERSECTION VOLUMES



LEGEND:

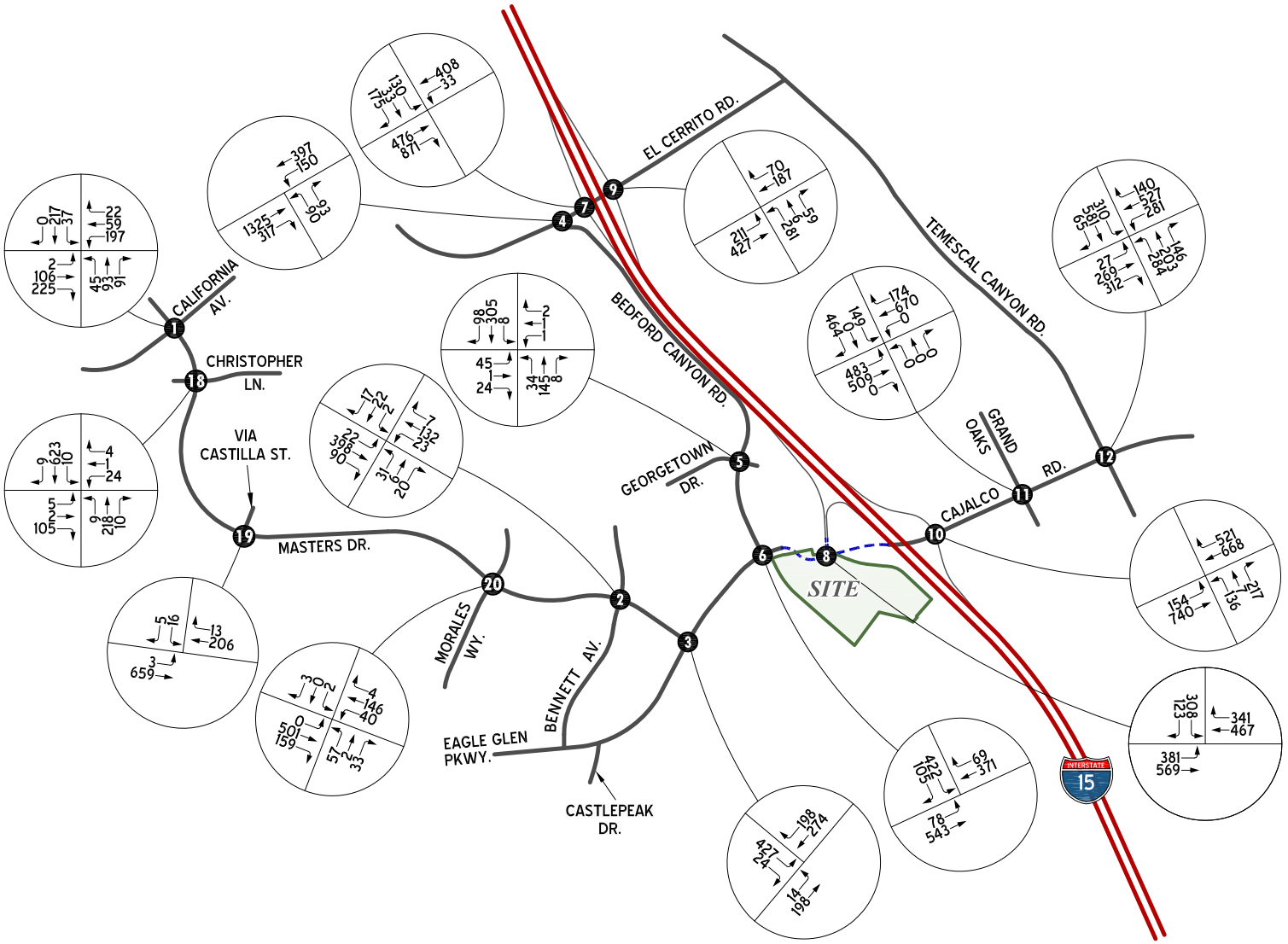
- (#) = INTERSECTION ID
- = ROADWAY CONFIGURATION DURING INTERCHANGE CONSTRUCTION

N

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URBAN CROSSROADS

EXHIBIT 2-5: EXISTING (2017/2018) PM PEAK HOUR INTERSECTION VOLUMES



LEGEND:

- (#) = INTERSECTION ID
- = ROADWAY CONFIGURATION DURING INTERCHANGE CONSTRUCTION

N

Existing (2017 and 2018) average daily traffic (ADT) volumes on arterial highways throughout the study area are shown on Exhibit 2-6. The ADT volumes are either based on traffic counts or have been estimated by factoring up peak hour counts. The following formula was used to estimate the daily volume for each intersection leg if daily traffic counts were not available:

PM Peak Hour (Approach Volume + Exit Volume) x 12 = Leg Volume

2.4 EXISTING (2017 AND 2018) CONDITIONS INTERSECTION OPERATIONS ANALYSIS

Existing (2017 and 2018) peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 4.2 *Intersection Capacity Analysis* of this report. The intersection operations analysis results are summarized in Table 2-1 which indicates that the intersections of Masters Drive / California Avenue (#1), Masters Drive / Christopher Lane (#18), Via Castilla Street / Masters Drive (#19), and Morales Way / Masters Drive (#20) do not operate at an acceptable level of service (LOS) during the peak hours. The intersection operations analysis worksheets are included in Appendix "2.2" of this TIA.

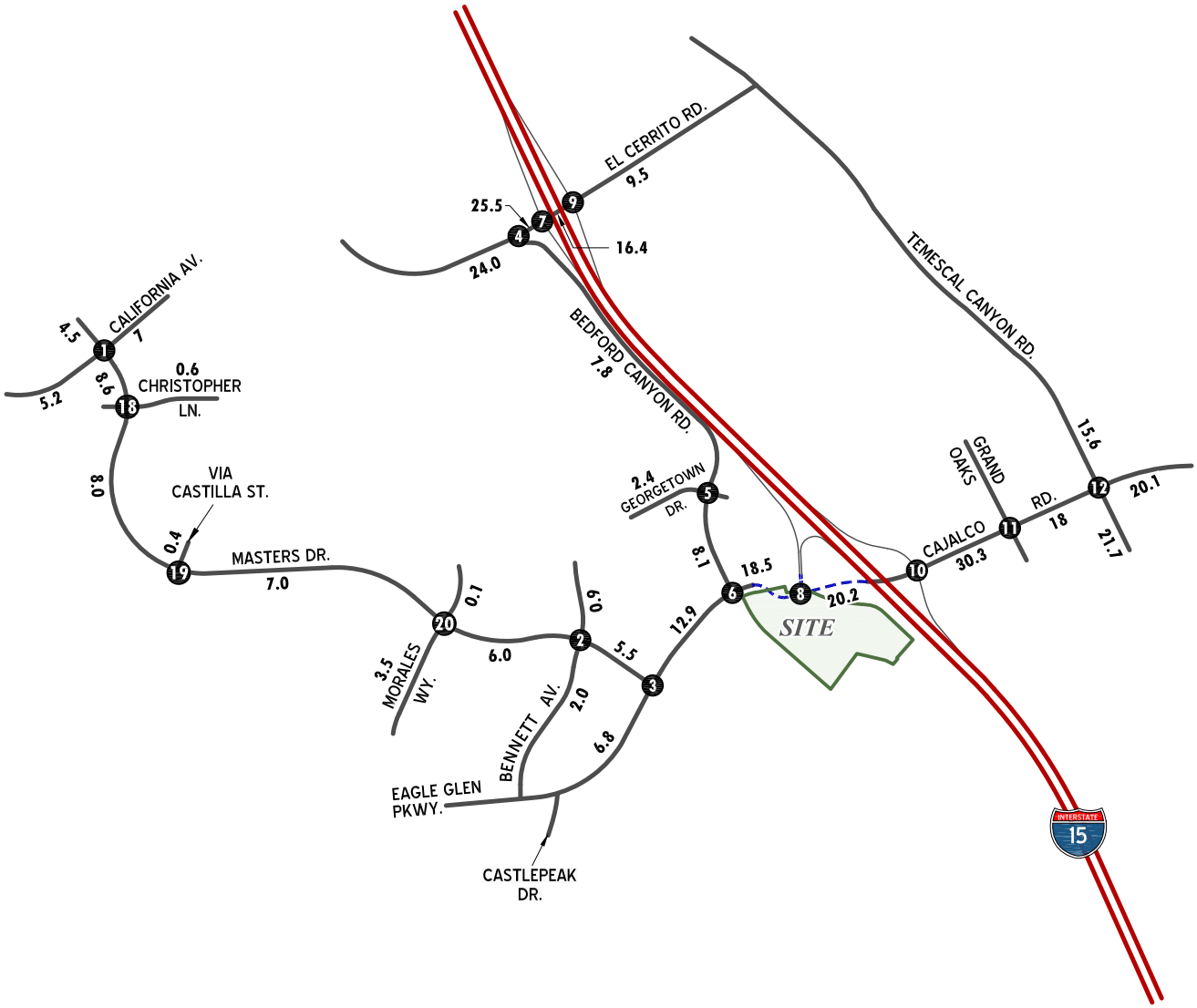
2.5 EXISTING (2017 AND 2018) CONDITIONS TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants for Existing (2017 and 2018) traffic conditions are based on existing peak hour intersection turning volumes. For Existing (2017 and 2018) traffic conditions, the following unsignalized study area intersections appear to warrant traffic signals (See Appendix "2.3"):

ID	Intersection Location	Jurisdiction
1	Masters Drive / California Avenue	Corona
18	Masters Drive / Christopher Lane	Corona
20	Morales Way / Masters Drive	Corona

It should be noted that in the 2015 traffic study, the intersection of Masters Drive / Eagle Glen Parkway (#3) warrants a traffic signal under Existing (2014 and 2015) conditions and the intersection of Clementine Way / Eagle Glen Parkway (#13) did not exist. New traffic signals were recently installed at these locations. Therefore, evaluation of existing (2017 and 2018) traffic signal warrants at the intersection of Masters Drive / Eagle Glen Parkway (#3) and Clementine Way / Eagle Glen Parkway (#13) are no longer needed.

EXHIBIT 2-6: EXISTING (2017/2018) AVERAGE DAILY TRAFFIC (ADT) VOLUMES



LEGEND:

- (#) = INTERSECTION ID
- = ROADWAY CONFIGURATION DURING INTERCHANGE CONSTRUCTION
- 10.0 = VEHICLES PER DAY (1000'S)

TABLE 2-1: INTERSECTION ANALYSIS SUMMARY FOR EXISTING (2017/2018) CONDITIONS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (Secs)		Level of Service[2]		LOS Criteria
			Northbound			Southbound			Eastbound			Westbound							
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	
1	Masters Dr. / California Av.	AWS	1	1	0	1	1	0	1	1	0	1	1	1	**82.1**	19.9	**F**	C	*C*
2	Masters Dr. / Bennett Av.	AWS	1	1	0	1	1	0	0	1!	0	0	1!	0	10.0	15.1	A	C	*C*
3	Masters Dr. / Eagle Glen Pkwy.	AWS	0	0	0	1	0	1	1	2	0	0	2	0	12.4	28.4	B	D	*D*
4	Bedford Cyn. Rd. / El Cerrito Rd.	TS	1	0	1	0	0	0	0	2	0	1	2	0	27.4	23.1	C	C	*D*
5	Bedford Cyn. Rd. / Georgetown Dr.	AWS	1	1	0	0	1	1	0	1	1>>	0	1!	0	9.7	10.3	A	B	*C*
6	Bedford Cyn. Rd. / Eagle Glen Pkwy.	TS	0	0	0	1	0	1>	1	1	0	0	2	1>	22.4	29.7	C	C	*D*
7	I-15 SB Ramps / El Cerrito Rd.	TS	0	0	0	0.5	0.5	1	0	2	0	1	2	0	14.4	19.6	B	B	*D*
8	I-15 SB Ramps / Cajalco Rd.	TS	0	0	0	1	0	1	1	1	0	0	1	1	33.2	38.1	C	D	*E*
9	I-15 NB Ramps / El Cerrito Rd.	TS	0	1!	0	0	0	0	2	1	0	0	2	0	35.1	22.4	D	C	*D*
10	I-15 NB Ramps / Cajalco Rd.	TS	0	1	1	0	0	0	1	1	0	0	1	1	27.4	21.3	C	C	*E*
11	Grand Oaks / Cajalco Rd.	TS	0	1!	0	0.5	0.5	2>	2	2	0	1	***2***	1	11.1	26.3	B	C	*D*
12	Temescal Cyn. Rd. / Cajalco Rd.	TS	2	2	1	1	2	0	1	1	1	1	3	0	35.2	44.8	D	D	*D*
13	Clementine Wy. / Eagle Glen Pkwy.	--	Future Intersection												--	--	--	--	*D*
15	Bedford Cyn. Rd. / Hudson House Dr.	--	Future Intersection												--	--	--	--	*C*
18	Masters Dr. / Christopher Ln.	AWS	1	1	0	1	1	0	0	1!	0	0	1!	0	**29.6**	**40.0**	**D**	**E**	*C*
19	Via Castilla St. / Masters Dr.	AWS	0	0	0	0	1!	0	1	1	0	0	1	0	20.5	**49.8**	C	**E**	*C*
20	Morales Wy. / Masters Dr.	AWS	0	1!	0	0	1!	0	1	1	0	1	1	0	14.1	**40.5**	B	**E**	*C*
22	Bedford Cyn. Rd. / Commercial S. Dwy.	--	Future Intersection												--	--	--	--	*C*
23	Bedford Cyn. Rd. / Commercial Main Dwy.	--	Future Intersection												--	--	--	--	*C*
24	Bedford Cyn. Rd. / Commercial RIRO Dwy.	--	Future Intersection												--	--	--	--	*C*

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; 1! = Shared Left-Through-Right turn lane; d= Defacto Right Turn Lane;

1 = Lane reduction during interchange construction

[2] Per the Highway Capacity Manual 6th Edition (HCM6), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. Delay and level of service is calculated using Synchro 10.1 analysis software.

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[3] TS = Traffic Signal; CSS = Cross-street Stop; AWS = All-Way Stop

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3.0 PROJECTED FUTURE TRAFFIC

Future traffic from the Project has been estimated for interim year (2021) conditions, horizon year 2035 conditions.

Future 2021 traffic is represented by the combination of existing traffic, ambient growth (total of 8%), approved Arantine Hills Specific Plan traffic, and increases in traffic volumes associated with the added Project land uses.

The horizon year 2035 forecasts are derived from the approved Arantine Hills Specific Plan Traffic Assessment (November 2018).

3.1 PROJECT TRAFFIC

3.1.1 PROJECT TRIP GENERATION

Table 3-1 presents overall Project trip generation. Bedford Marketplace is anticipated to generate a total of approximately 7,014 external trips per day with 394 AM peak hour external trips and 686 PM peak hour external trips. Of the total trips for Bedford Marketplace, the Project will generate approximately 2,061 external trips per day with 281 AM peak hour external trips and 285 PM peak hour external trips.

The ITE Trip Generation manual is a nationally recognized source for estimating site specific trip generation. The ITE 2017 Trip Generation manual (10th Edition) trip generation rates are used to estimate Project trip ends generated by each individual use, which is then considered in combination with the mix of site uses. Internal interaction represents the trips captured internally because of the opportunity to visit various land uses without using the arterial roadway system (for example, exiting the hotel in the morning and stopping at the gas station before leaving the Bedford Marketplace property). Internal capture calculations for each use are indicated on Table 1.

In addition to the internal capture adjustment, trips generated by the commercial site are adjusted due to interactions with nearby residential areas. Due to the location of Bedford Marketplace, some of the existing and future residential trips are diverted from the surrounding arterial system. These trips represent travelers who interact with a shop, service, or restaurant and then continue traveling elsewhere. To understand the traffic volume effects at study area intersections, estimates of diverted pass-by trips are necessary.

As shown on Table 3-1, in comparison to the approved commercial trip generation in the Arantine Hills Traffic Assessment (November 2018), the Project is anticipated to generate an additional 2,061 external trips per day with 281 AM peak hour external trips and 285 PM peak hour external trips.

3.1.2 PROJECT TRIP DISTRIBUTION

Trip distribution is the process of identifying the probable destinations, directions or traffic routes that will be utilized by Project traffic.

TABLE 3-1: BEDFORD MARKETPLACE PROJECT TRIP GENERATION SUMMARY

Trip Generation Rates[1]										
	ITE LU		AM Peak Hour			PM Peak Hour			
Land Use	Code	Quantity[2]	In	Out	Total	In	Out	Total	Daily
Hotel	310	135 RM	0.36	0.26	0.62	0.358	0.372	0.73	12.23
Health/Fitness Club	492	38 TSF	0.67	0.64	1.31	1.97	1.48	3.45	30.00
Day Care Center	565	9.99 TSF	5.83	5.17	11.00	5.23	5.89	11.12	47.62
Retail Shopping Center	820	51 TSF	0.58	0.36	0.94	1.83	1.98	3.81	37.75
Walk-in Bank	911	3 TSF	3.26	2.37	5.64	5.340	6.790	12.13	59.33
Drive-in Bank	912	3.562 TSF	5.51	3.99	9.50	10.225	10.225	20.45	100.03
Quality Restaurant	931	13.2 TSF	0.37	0.37	0.73	5.23	2.57	7.80	83.84
High Turnover (Sit-Down) Restaurant	932	5.826 TSF	5.47	4.47	9.94	6.06	3.71	9.77	112.18
Coffee/Donut Shop with Drive-Through Window	937	2.2 TSF	45.38	43.61	88.99	21.69	21.69	43.38	820.38
Gasoline/Service Station	944	18 VFP	5.14	5.14	10.28	7.015	7.015	14.03	172.01
Automated Car Wash	948	3.6 TSF	0.30	0.30	0.60	7.10	7.10	14.20	142.00

Trip Generation Results									
	ITE LU		AM Peak Hour			PM Peak Hour			
Land Use	Code	Quantity[2]	In	Out	Total	In	Out	Total	Daily
Hotel	310	135 RM	49	35	84	48	50	98	1,651
- Internal Interaction[4]			*(4)*	*(8)*	*(12)*	*(15)*	*(13)*	*(28)*	*(347)*
Health/Fitness Club	492	38 TSF	25	24	49	75	56	131	1,140
- Internal Interaction[4]			*(4)*	*(7)*	*(11)*	*(7)*	*(9)*	*(16)*	*(194)*
- Eagle Glen Diverted Trips[3]			*(3)*	*(3)*	*(6)*	*(10)*	*(10)*	*(20)*	*(171)*
- Arantine Hills Residential Interaction/Diverted Trips			*(6)*	*(4)*	*(10)*	*(7)*	*(12)*	*(19)*	*(194)*
Day Care Center	565	9.99 TSF	58	52	110	52	59	111	476
- Internal Interaction[4]			*(10)*	*(15)*	*(25)*	*(5)*	*(10)*	*(15)*	*(86)*
- Eagle Glen Diverted Trips[3]			*(9)*	*(9)*	*(18)*	*(9)*	*(9)*	*(18)*	*(81)*
- Arantine Hills Residential Interaction/Diverted Trips			*(14)*	*(8)*	*(22)*	*(6)*	*(10)*	*(16)*	*(81)*
Retail	820	51 TSF	30	18	48	93	101	194	1,925
- Internal Interaction[4]			*(6)*	*(3)*	*(9)*	*(14)*	*(16)*	*(30)*	*(327)*
- Eagle Glen Diverted Trips[3]			*(4)*	*(3)*	*(7)*	*(10)*	*(9)*	*(19)*	*(250)*
- Arantine Hills Residential Interaction/Diverted Trips			*(6)*	*(4)*	*(10)*	*(11)*	*(18)*	*(29)*	*(347)*
Walk-in Bank	911	3 TSF	10	7	17	16	20	36	178
Drive-in Bank	912	3 TSF	17	12	29	31	31	62	300
- Internal Interaction[4]			*(5)*	*(5)*	*(10)*	*(4)*	*(8)*	*(12)*	*(81)*
- Eagle Glen Diverted Trips[3]			*(2)*	*(1)*	*(3)*	*(8)*	*(7)*	*(15)*	*(53)*
- Arantine Hills Residential Interaction/Diverted Trips			*(6)*	*(4)*	*(10)*	*(5)*	*(9)*	*(14)*	*(86)*
Quality Restaurant	931	13.2 TSF	5	5	10	69	34	103	1,107
High Turnover (Sit-Down) Restaurant	932	5.826 TSF	32	26	58	35	22	57	654
- Internal Interaction[4]			*(9)*	*(6)*	*(15)*	*(26)*	*(14)*	*(40)*	*(423)*
- Eagle Glen Diverted Trips[3]			*(3)*	*(3)*	*(6)*	*(12)*	*(11)*	*(23)*	*(211)*
- Arantine Hills Residential Interaction/Diverted Trips			*(9)*	*(5)*	*(14)*	*(9)*	*(15)*	*(24)*	*(317)*
Coffee/Donut Shop with Drive-Through Window	937	2.2 TSF	100	96	196	48	48	96	1,805
- Internal Interaction[4]			*(25)*	*(21)*	*(46)*	*(12)*	*(12)*	*(24)*	*(433)*
- Eagle Glen Diverted Trips[3]			*(15)*	*(15)*	*(30)*	*(10)*	*(10)*	*(20)*	*(325)*
- Arantine Hills Residential Interaction/Diverted Trips			*(25)*	*(14)*	*(39)*	*(7)*	*(7)*	*(14)*	*(307)*
Gasoline/Service Station	944	18 VFP	93	93	186	126	126	252	3,096
Automated Car Wash	948	3.6 TSF	1	1	2	26	26	52	511
- Internal Interaction[4]			*(20)*	*(18)*	*(38)*	*(23)*	*(25)*	*(48)*	*(649)*
- Eagle Glen Diverted Trips[3]			*(8)*	*(8)*	*(16)*	*(9)*	*(8)*	*(17)*	*(217)*
- Arantine Hills Residential Interaction/Diverted Trips			*(24)*	*(14)*	*(38)*	*(17)*	*(28)*	*(45)*	*(649)*
SUBTOTAL TRIP ENDS FOR ALL LAND USES			**420**	**369**	**789**	**619**	**573**	**1,192**	**12,843**
- Internal Interaction Total[4]			*(83)*	*(83)*	*(166)*	*(106)*	*(107)*	*(213)*	*(2,540)*
- Eagle Glen Diverted Total[3]			*(44)*	*(42)*	*(86)*	*(68)*	*(64)*	*(132)*	*(1,308)*
- Arantine Hills Residential Interaction/Diverted Total			*(90)*	*(53)*	*(143)*	*(62)*	*(99)*	*(161)*	*(1,981)*
TOTAL PROJECT EXTERNAL TRIPS			**203**	**191**	**394**	**383**	**303**	**686**	**7,014**

	ITE LU		AM Peak Hour			PM Peak Hour			
EXTERNAL TRIP GENERATION COMPARISON	Code	Quantity[2]	In	Out	Total	In	Out	Total	Daily
80 TSF Commercial (November 2018 Analysis)			69	44	113	214	187	401	4,953
Bedford Marketplace (June 2019)			203	191	394	383	303	686	7,014
Net Increase			**134**	**147**	**281**	**169**	**116**	**285**	**2,061**

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 10th Edition (2017).
Daily Rate for ITE Land Use 948 (Car Wash) has been estimated (PMx10); AM & Daily Rates for ITE LU Code 911 has been estimated based on ITE LU Code 912

[2] RM = Occupied Rooms; TSF = Thousand Square Feet; VFP = Vehicle Fueling Positions

[3] Source: ITE Trip Generation Handbook, 3rd Edition.

[4] Internal capture estimated based on NCHRP 8-51.

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The potential interaction between the planned land uses and surrounding regional access routes are considered to identify the routes where Project traffic would travel. The Project trip distribution was developed based on anticipated travel patterns to and from the Project site and are consistent with the commercial trip distribution patterns reviewed and approved by the City as part of the 2015 and 2018 studies. The proposed Project does not cause any change to the previously approved trip distribution patterns included in the *Arantine Hills Modified Project Traffic Study*, dated September 11, 2015 and *Arantine Hills Specific Plan Amendment No. 2 Traffic Assessment*, dated November 12, 2018. Recent select zone traffic assignments from the recently updated City of Corona traffic model were also reviewed.

The trip distribution pattern is heavily influenced by the geographical location of the site, the location of surrounding uses, and the proximity to the arterial network and regional freeway system. Exhibit 3-1 include the Project distribution used in this study.

3.1.3 MODAL SPLIT

The traffic-reducing potential of public transit has not been considered in this report. Essentially the traffic projections are "conservative" in that public transit might be able to reduce the traffic volumes.

3.1.4 PROJECT TRIP ASSIGNMENT

The assignment of traffic from the Project area to the adjoining roadway system is based upon the Project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of initial occupancy of the Project.

Based on the identified Project traffic generation and trip distribution patterns, the increase in AM and PM peak hour volumes generated by the Project are shown on Exhibit 3-2 and Exhibit 3-3, respectively.

3.2 TOTAL FUTURE TRAFFIC

This analysis assesses the following future traffic conditions.

- Interim Year (2021) Without Project conditions
- Interim Year (2021) With Project conditions
- Horizon Year 2035 Without Project Conditions
- Horizon Year 2035 With Project Conditions

Interim Year (2021) Without Project conditions AM and PM peak hour intersection turning movement volumes are shown on Exhibit 3-4 and Exhibit 3-5, respectively. Interim Year (2021) With Project conditions AM and PM peak hour intersection turning movement volumes are shown on Exhibit 3-6 and Exhibit 3-7, respectively.

Horizon Year 2035 Without Project Conditions AM and PM peak hour intersection turning movement volumes are shown on Exhibit 3-8 and 3-9, respectively. Horizon Year 2035 With Project Conditions AM and PM peak hour intersection turning movement volumes are shown on Exhibit 3-10 and Exhibit 3-11, respectively.

EXHIBIT 3-1: BEDFORD MARKETPLACE PROJECT (EXTERNAL) TRIP DISTRIBUTION PATTERN

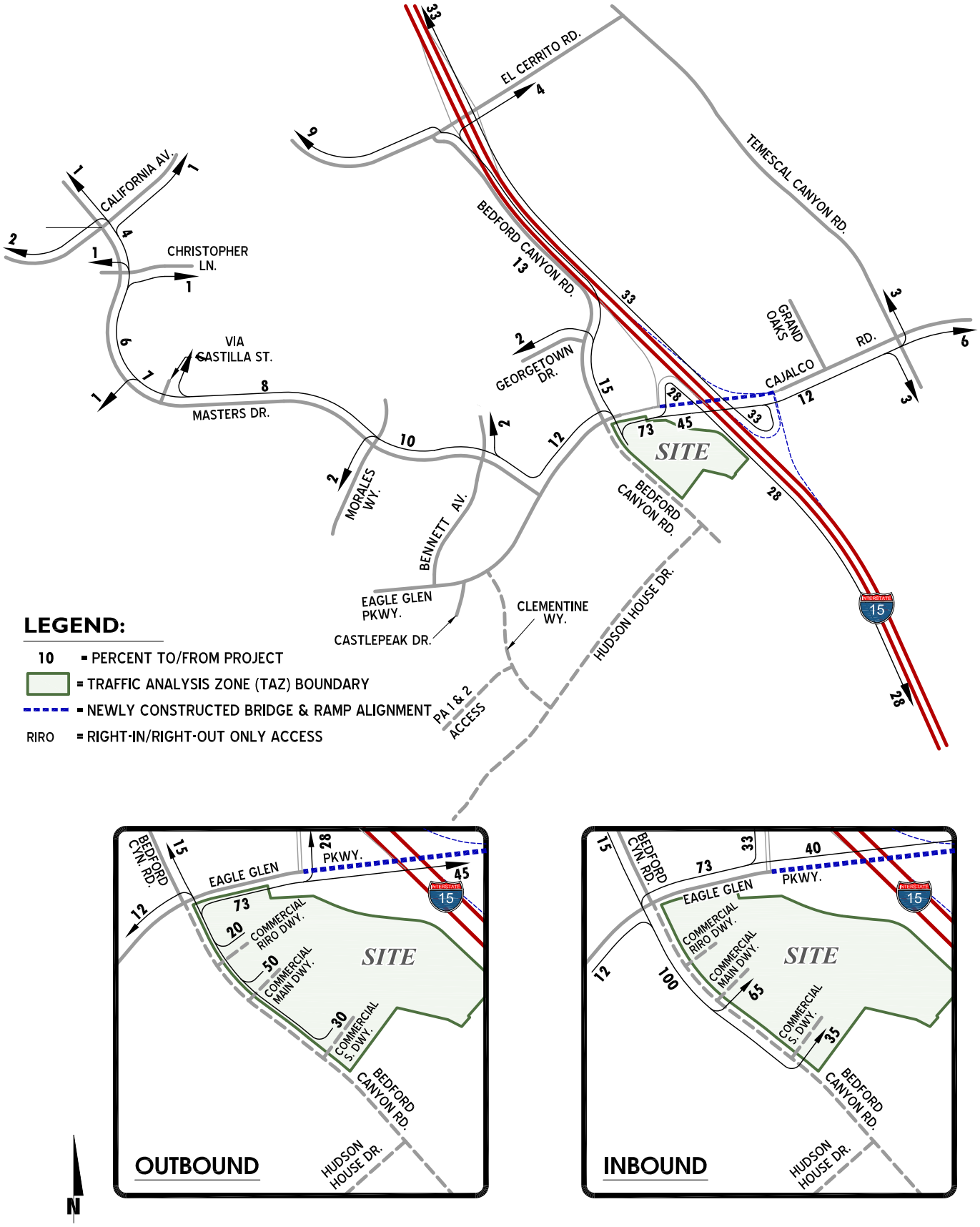
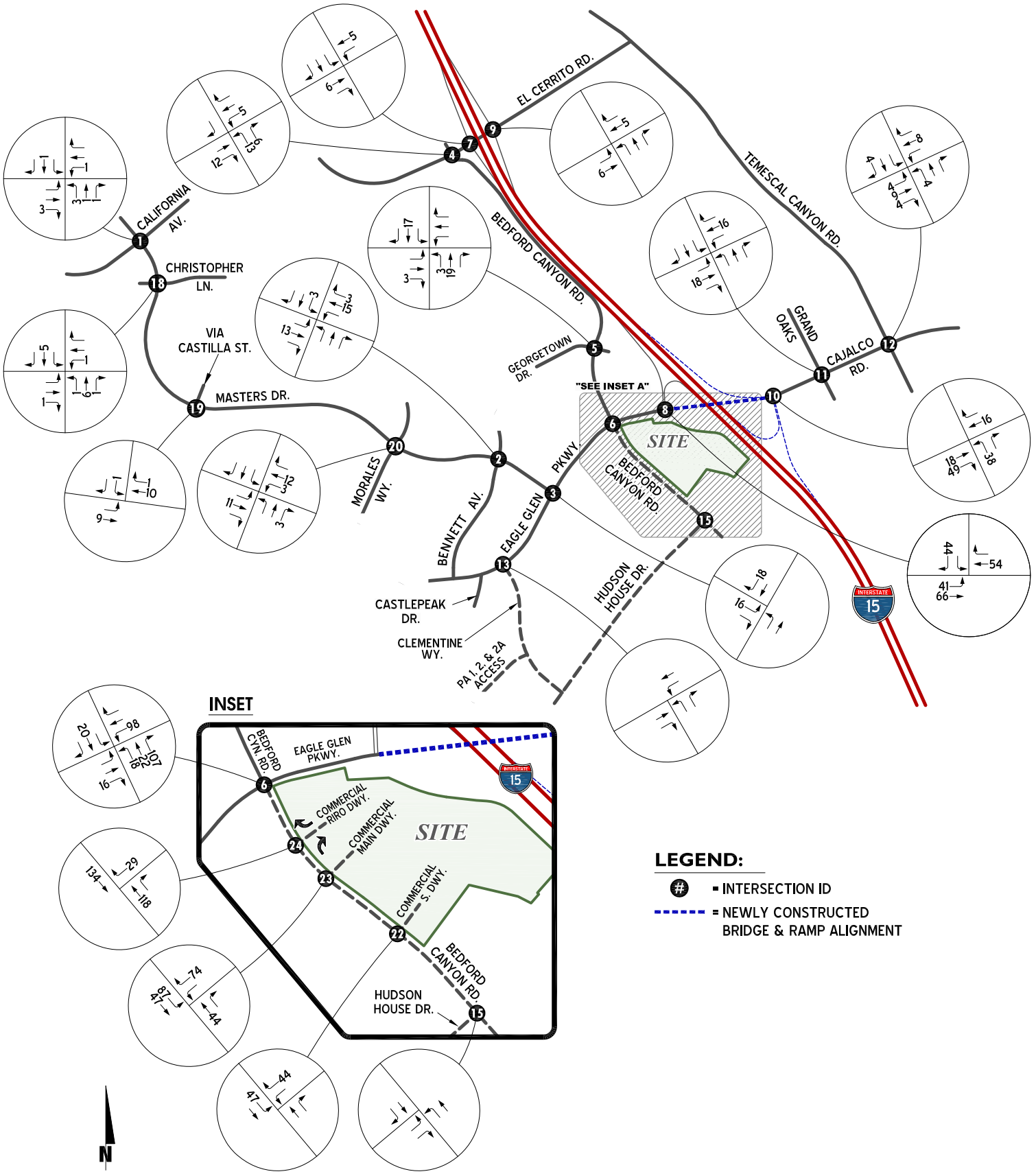


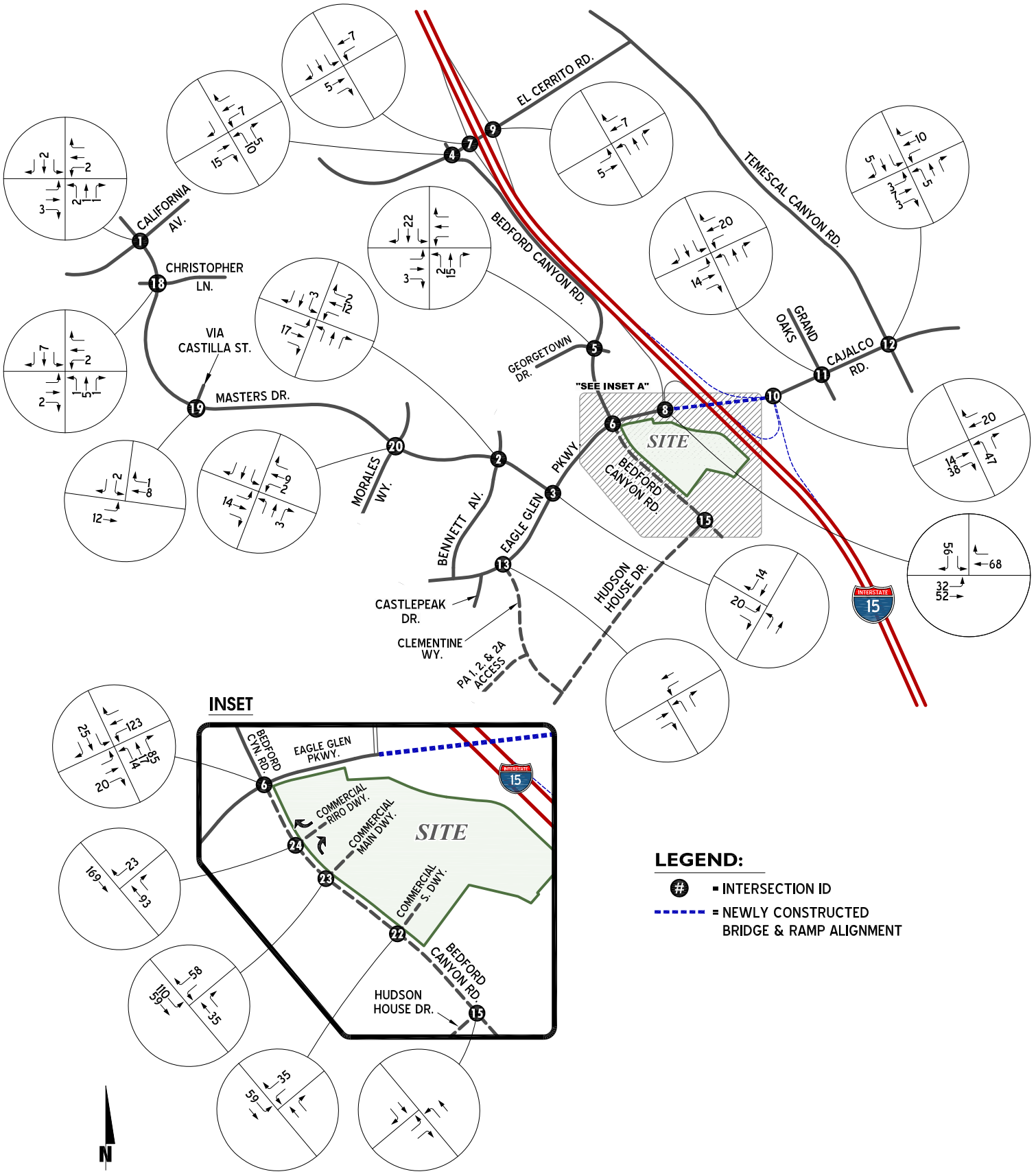
EXHIBIT 3-2: PROJECT ONLY VOLUME (EXTERNAL TRIPS) NET INCREASES IN COMPARISON TO 80 TSF RETAIL AM PEAK HOUR



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URBAN CROSSROADS

EXHIBIT 3-3: PROJECT ONLY VOLUME (EXTERNAL TRIPS) NET INCREASES IN COMPARISON TO 80 TSF RETAIL PM PEAK HOUR



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URBAN CROSSROADS

EXHIBIT 3-4: INTERIM YEAR 2021 WITHOUT PROJECT
AM PEAK HOUR INTERSECTION VOLUMES

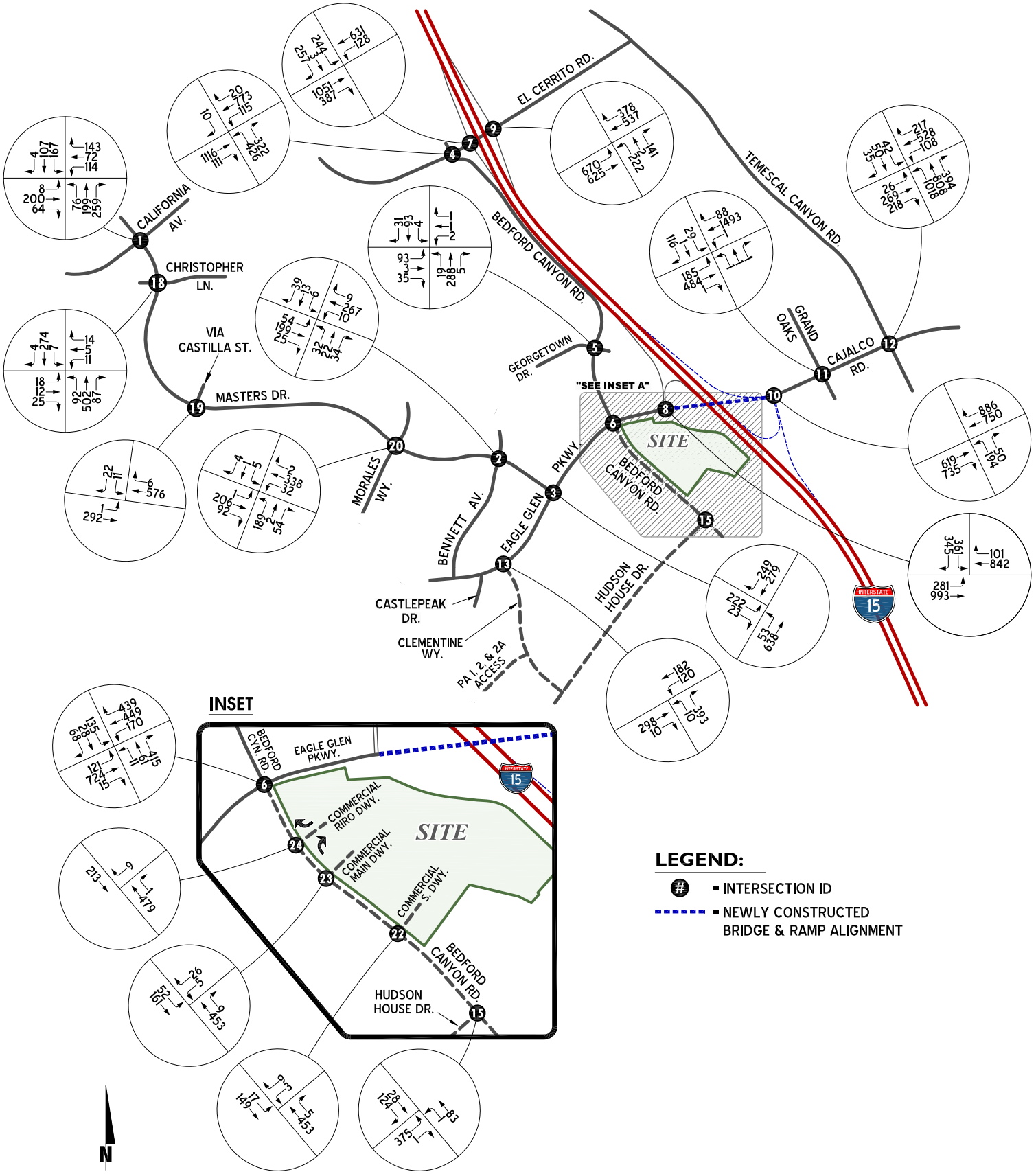


EXHIBIT 3-5: INTERIM YEAR 2021 WITHOUT PROJECT
PM PEAK HOUR INTERSECTION VOLUMES

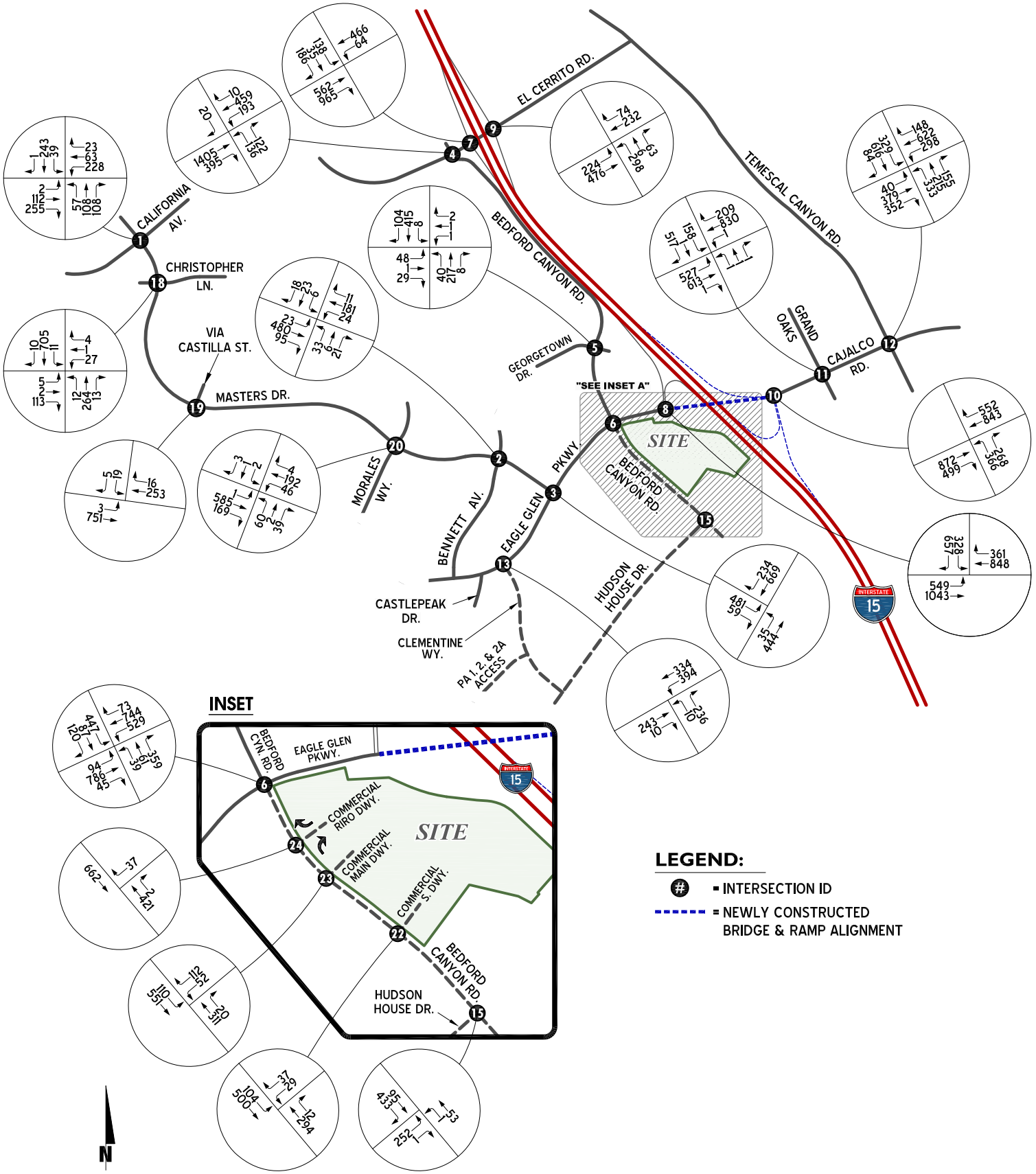
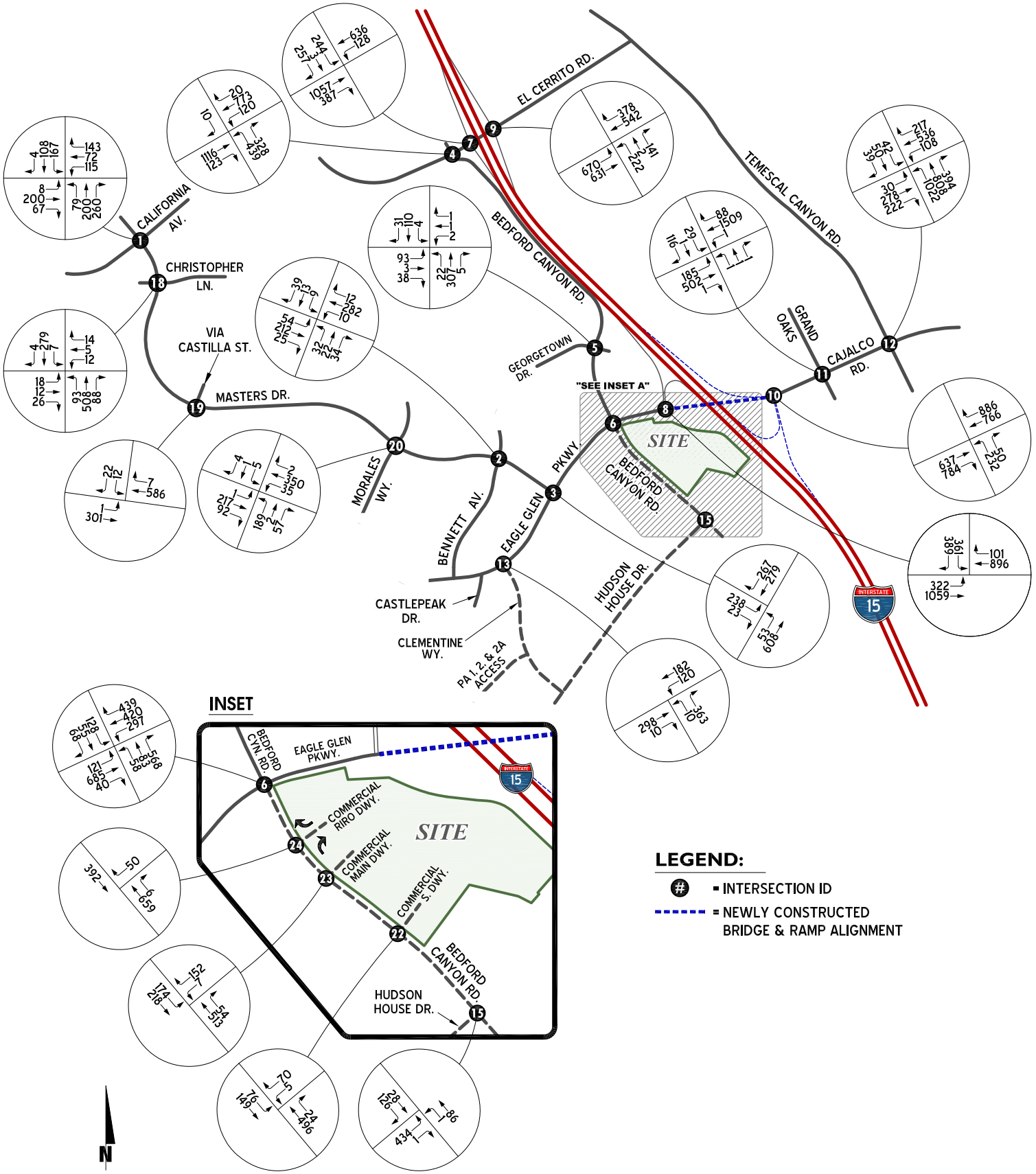


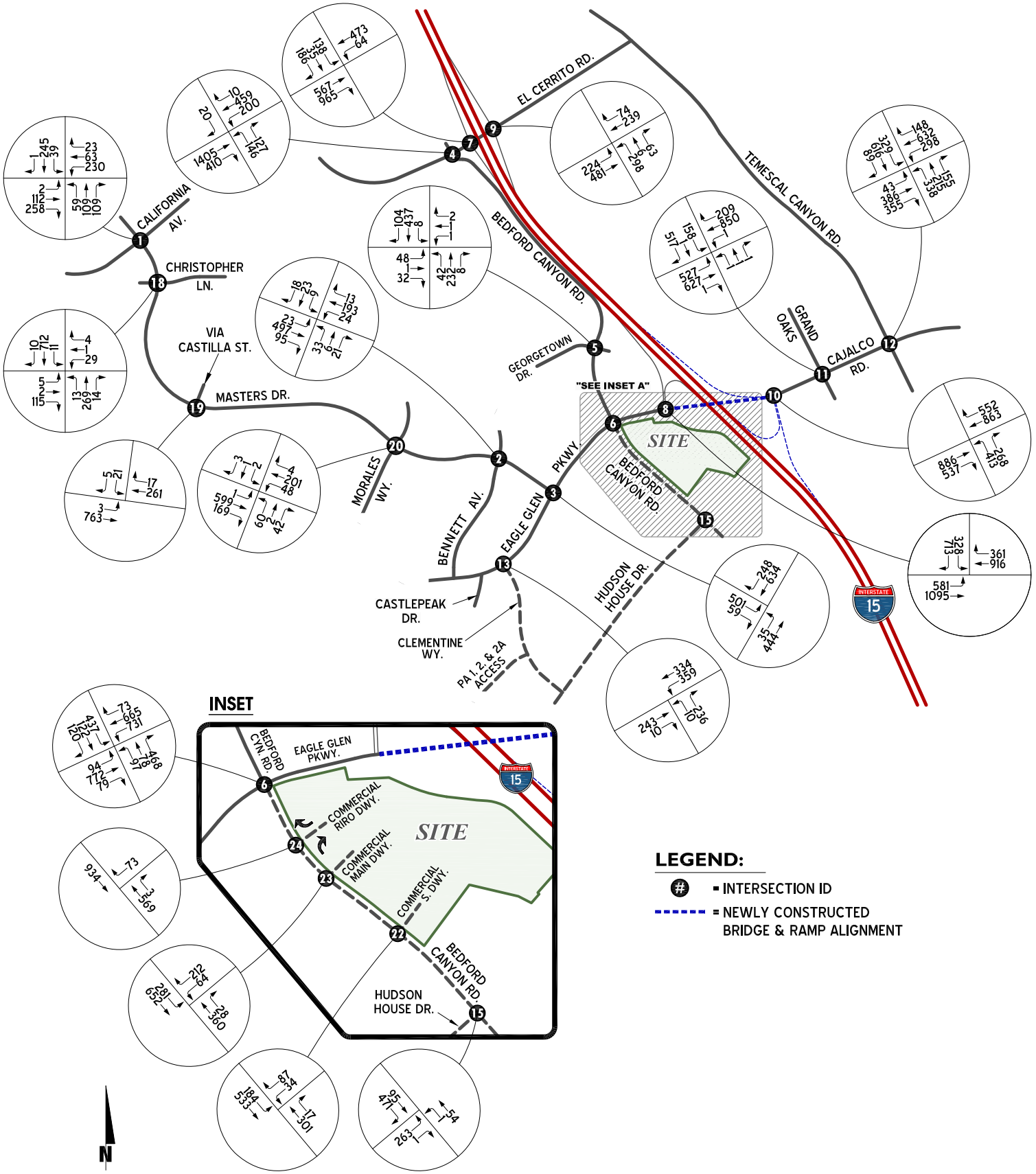
EXHIBIT 3-6: INTERIM YEAR 2021 WITH PROJECT AM PEAK HOUR INTERSECTION VOLUMES



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URBAN CROSSROADS

EXHIBIT 3-7: INTERIM YEAR 2021 WITH PROJECT PM PEAK HOUR INTERSECTION VOLUMES



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URBAN CROSSROADS

3.3 SITE ACCESS IMPROVEMENTS

Access in and out of Bedford Marketplace occurs at three existing driveways along Bedford Canyon Road south of Eagle Glen Parkway/Cajalco Road. The northerly driveway is limited to right-in right-out (RIRO) conditions, without an opening of the median on Bedford Canyon Road. It serves as a convenient exit for vehicles leaving the Gas Station and Automated Car Wash, bound for Eagle Glen Parkway/Cajalco Road. The RIRO driveway also accommodates entering vehicles from northbound on Bedford Canyon Road.

The main driveway to Bedford Marketplace is located at a mid-point along the site frontage to Bedford Canyon Road. It is a full access location, serving left and right turns to and from Bedford Canyon Road with traffic signal control. With additional traffic generated by the Project, the existing southbound left turn lane serving the main driveway to Bedford Marketplace is recommended to be extended to provide 200 feet of vehicle queuing.

The southerly driveway to Bedford Marketplace is also a full access location, serving left and right turns to and from Bedford Canyon Road with cross-street stop sign control of the exiting vehicles. At this location, the existing southbound left turn lane is recommended to be extended to provide 150 feet of vehicle queuing with to accommodate the additional traffic generated by the Project.

An efficient network of on-site driveways provides connectivity to all access points and facilitates the internal flow of activity between the variety of land uses.

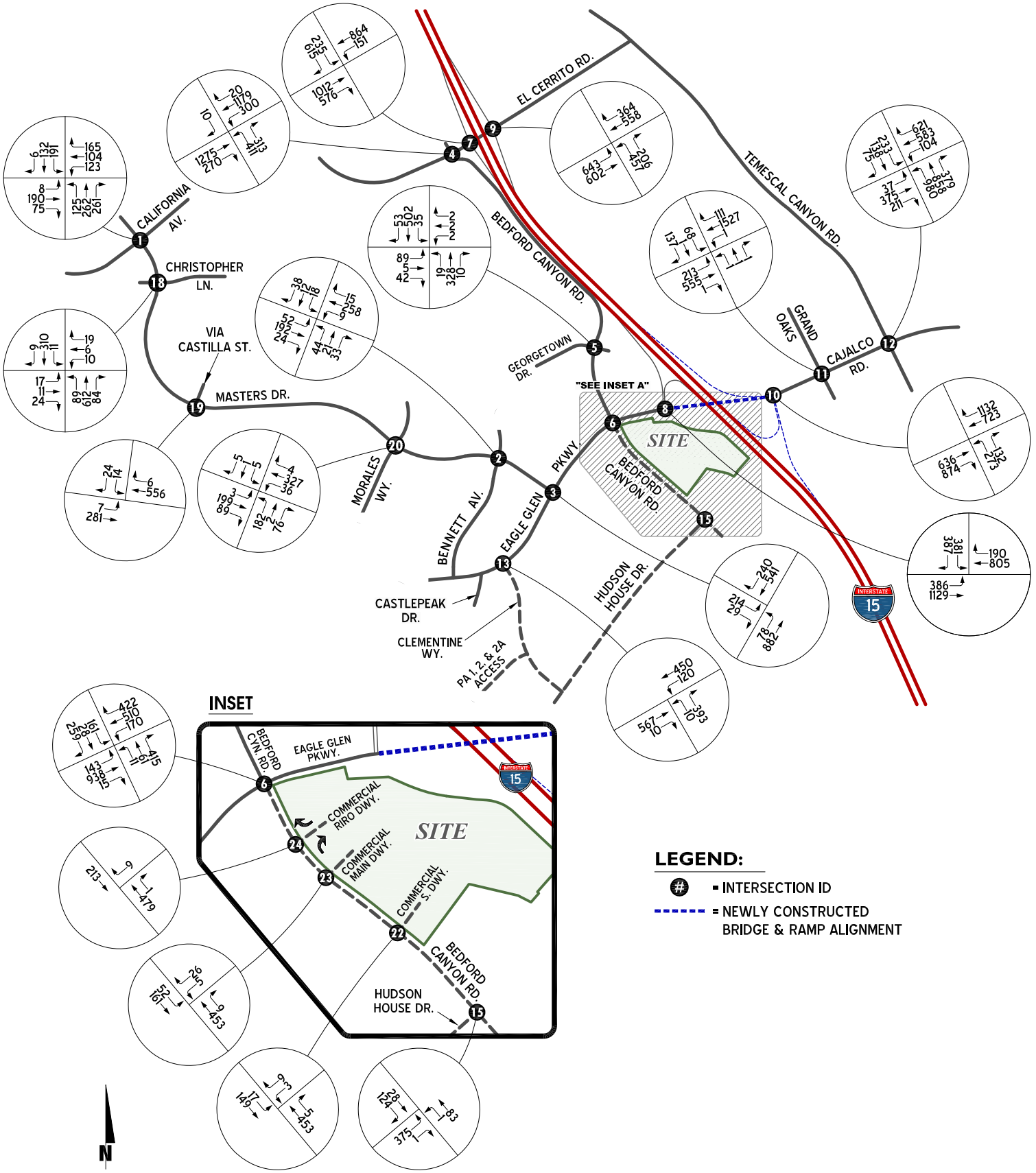
In conjunction with approved 80 TSF commercial, the following site access provisions were included as follows, and remain unchanged with the Project:

- Restrict the intersection of Bedford Canyon Road / Commercial RIRO Driveway (#24) to a right-in/right-out only intersection
- Install a traffic signal at the Bedford Canyon Road / Commercial Main Driveway (#23).
- Provide a well-integrated network of on-site driveways to facilitate the internal flow of activity between the variety of Project land uses.
- Sight distance at each project access driveway should be reviewed with respect to Caltrans and City of Corona sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

The Project generates the need for the following site access improvements as illustrated on Exhibit 3-12:

- Extend the existing southbound left turn lane at Bedford Canyon Road / Commercial Main Driveway (#23) to provide 200 ft. storage length.
- Extend the existing southbound left turn lane at Bedford Canyon Road / Commercial South Driveway (#22) to provide a minimum of 150 ft. storage length.
- On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the Project, along with any modifications to sight distance.

EXHIBIT 3-8: HORIZON YEAR 2035 WITHOUT PROJECT
AM PEAK HOUR INTERSECTION VOLUMES



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URBAN CROSSROADS

EXHIBIT 3-9: HORIZON YEAR 2035 WITHOUT PROJECT
PM PEAK HOUR INTERSECTION VOLUMES

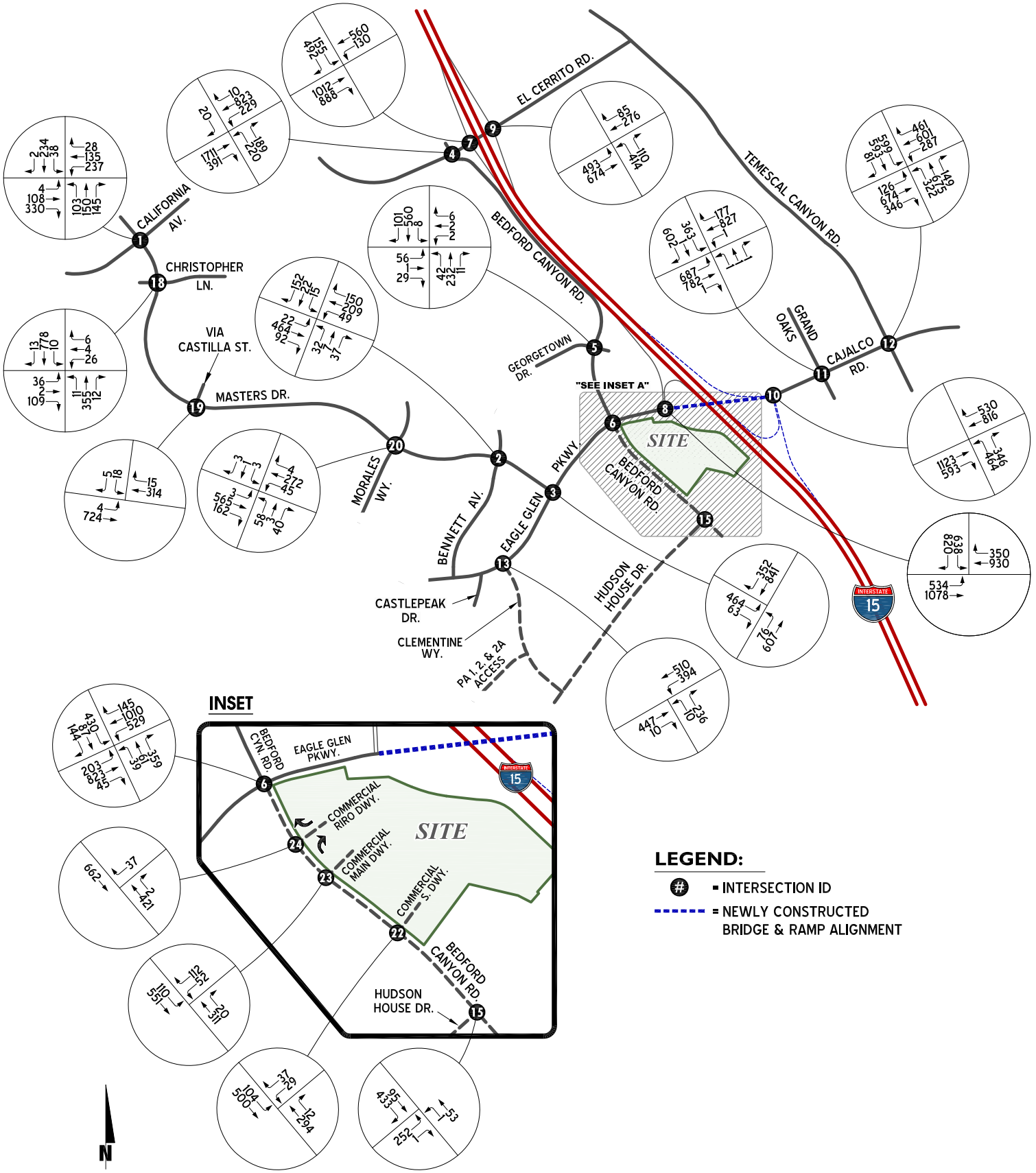
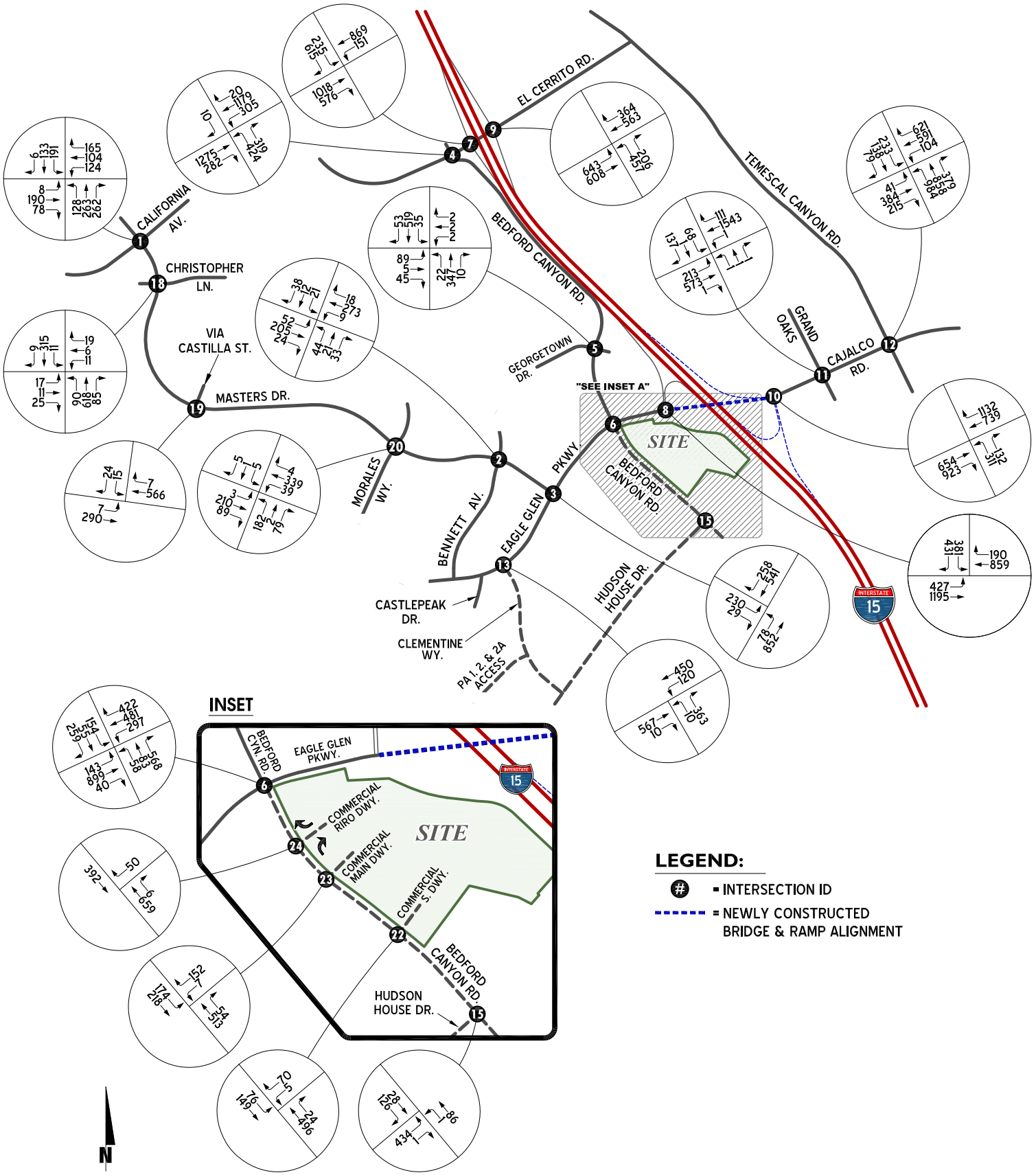


EXHIBIT 3-10: HORIZON YEAR 2035 WITH PROJECT AM PEAK HOUR INTERSECTION VOLUMES



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URBAN CROSSROADS

EXHIBIT 3-11: HORIZON YEAR 2035 WITH PROJECT PM PEAK HOUR INTERSECTION VOLUMES

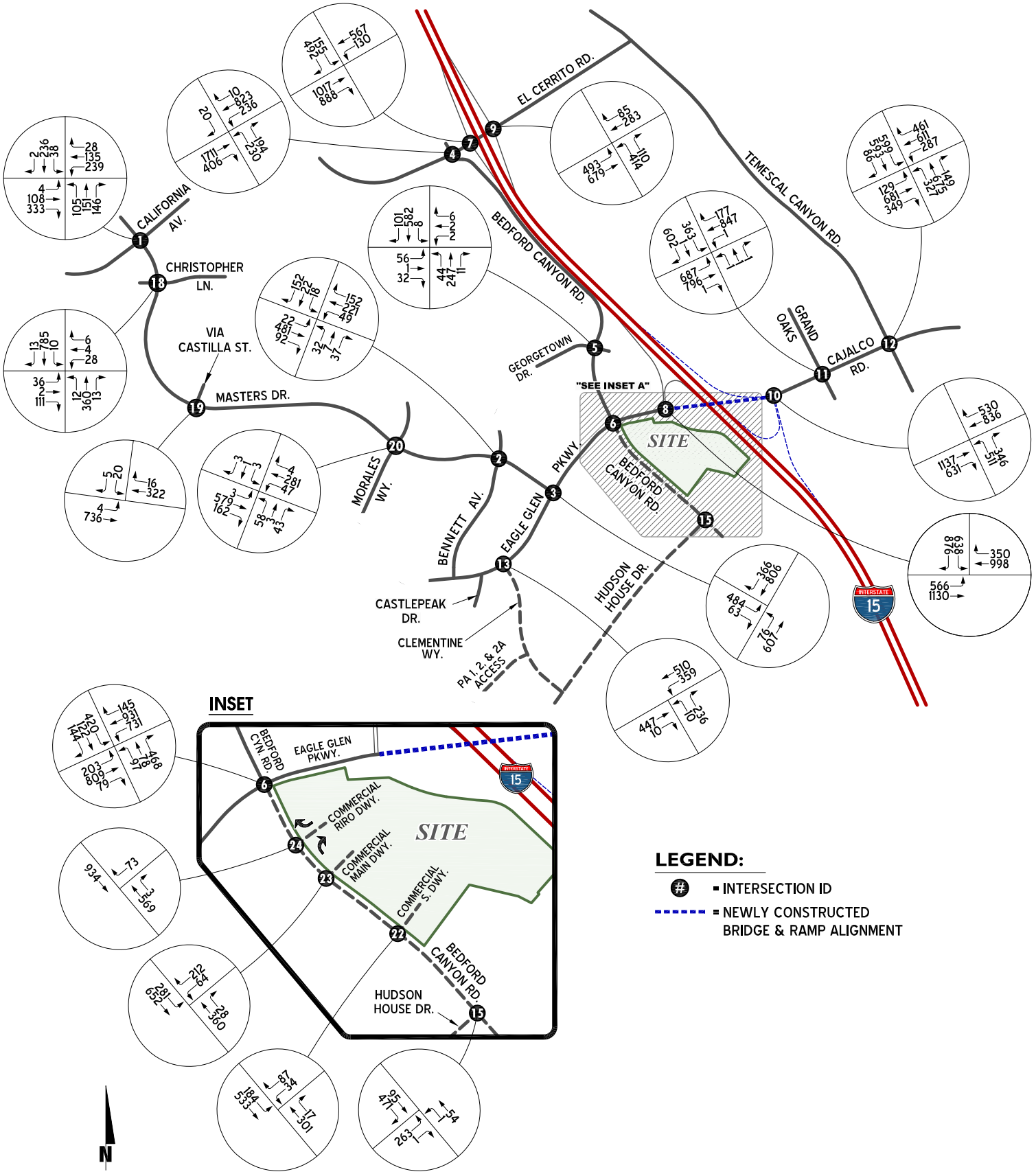
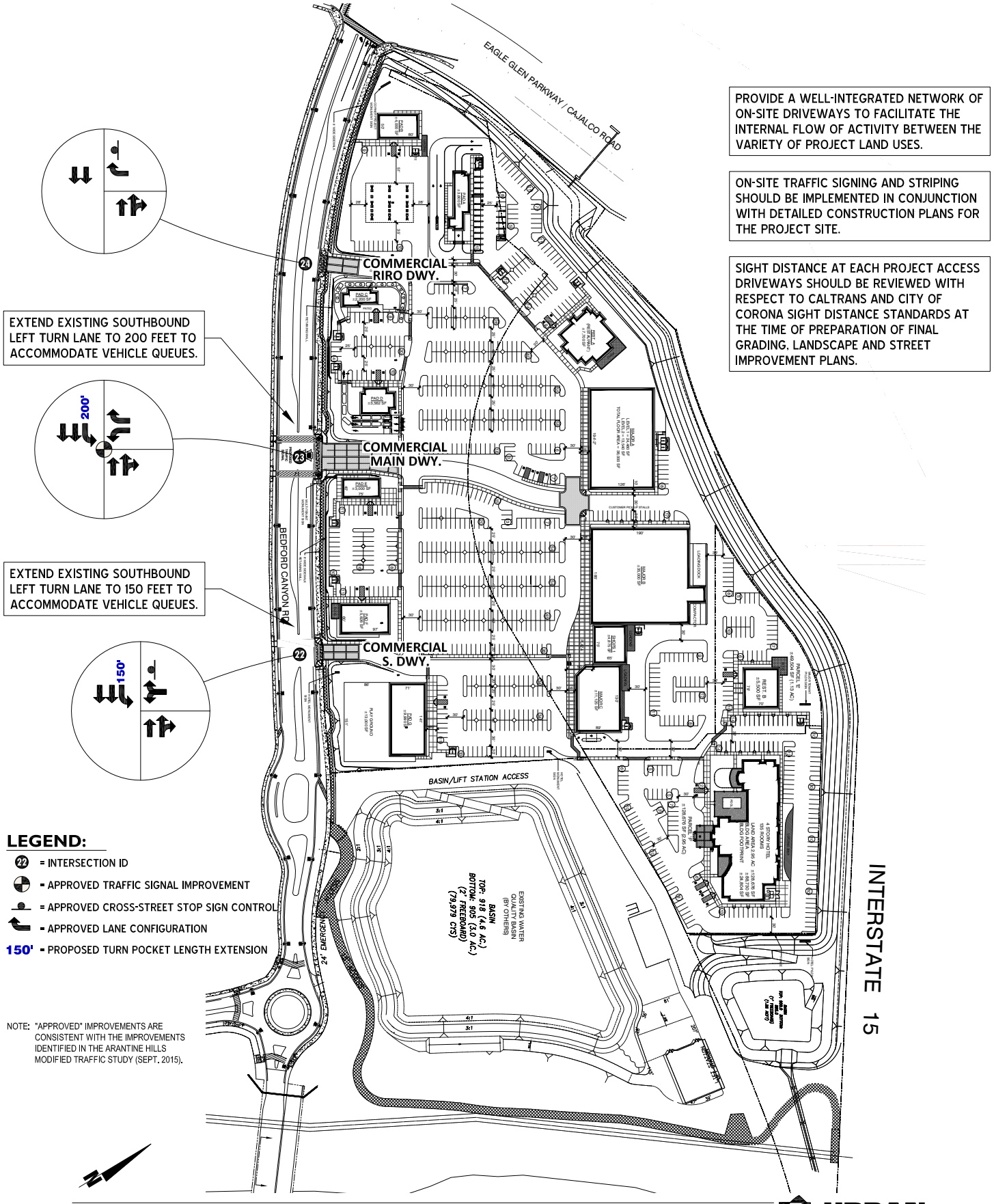


EXHIBIT 3-12: ACCESS IMPROVEMENTS



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URBAN CROSSROADS

3.4 INTERNAL CIRCULATION

The internal network of driveways and parking aisles shown on Exhibit 3-12 has been refined in response to City of Corona technical comments. The three driveway entries to the site are connected internally by a 30' north/south drive aisle (westerly drive aisle), and movement along this spine driveway is not interrupted by direct access to parking stalls.

At each of the three driveway entries, an uninterrupted travel way is provided between the street and the westerly drive aisle. The central driveway entry (commercial main driveway) accommodates two inbound and two outbound lanes. Entering vehicles which turn left or right at the westerly drive aisle are therefore served by separate travel lanes.

Approximately six vehicles per lane can be stored within each of the inbound and outbound lanes at the three driveway entries to the site without affecting Bedford Canyon Road traffic flows. The design of the site entries and internal drive aisles minimizes conflict points which would interfere with key traffic movements. Each of the three driveway entries extends into the site beyond the westerly drive aisle and connects to other parallel internal driveways.

The central parking lots provide parking spaces suited to travelers who wish to access multiple shops, restaurants, health / fitness club, day care center, and banks. The central parking lots are located east of the westerly drive aisle and west of the central north/south drive aisle which is adjacent to the major retail buildings. Vehicles turn into parking aisles which in turn provide direct access to parking stalls. Parking spaces are also located near Pads A, B, C, D, and E, in addition to the hotel, providing convenient access to these establishments.

Pad C and Pad D are located south of the northerly right in / right out driveway, in an area of the parking lot that is separated from the main parking lot area with two internal drive aisle openings. Entry to the Pad C and Pad D drive-thru aisles is provided by two separate parking aisles from the westerly drive aisle. For Pad D, the exiting drive-thru lanes connect directly to the westerly drive aisle. Parking is also provided in this area for visitors who may decide to park and enter Pad C and Pad D on foot.

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4.0 METHODOLOGIES

This section of the report presents the methodologies used to perform the traffic analyses summarized in this report. The methodologies described are generally consistent with the City of Corona traffic impact study guidelines.

4.1 LEVEL OF SERVICE

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

4.2 INTERSECTION CAPACITY ANALYSIS

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

The following peak hours were selected for analysis:

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

4.2.1 SIGNALIZED INTERSECTIONS

The City of Corona requires signalized intersection operations analysis based on the methodology described in Chapter 18 and Chapter 31 of the HCM 6th Edition. Intersection LOS operations are based on an intersection's average control delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. For signalized intersections LOS is directly related to the average control delay per vehicle and is correlated to a LOS designation as described in Table 4-1.

Study area intersections have been analyzed using the software package Synchro (Version 10). Synchro is a macroscopic traffic software program that is based on the signalized intersection capacity analysis as specified in the Chapter 18 of the HCM. Macroscopic level models represent traffic in terms of aggregate measures for each movement at the study intersections. Equations are used to determine measures of effectiveness such as delay and queue length.

TABLE 4-1: SIGNALIZED INTERSECTION LOS THRESHOLDS

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

Source: HCM 6th Edition

The level of service and capacity analysis performed by Synchro takes into consideration optimization and coordination of signalized intersections within a network. The LOS analysis for signalized intersections has been performed using optimized signal timing for existing traffic conditions. Signal timing optimization has considered pedestrian safety and signal coordination requirements. Appropriate time for pedestrian crossings has also been considered in the signalized intersection analysis. Signal timing for study area intersections have been requested and utilized. Where signal timing was unavailable, the local accepted standards were utilized in lieu of actual signal timing.

The peak hour traffic volumes have been adjusted using a peak hour factor (PHF) to reflect peak 15 minute volumes. Flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume (e.g. PHF = [Hourly Volume] / [4 x Peak 15-minute Flow Rate]). The use of a 15-minute PHF produces a more detailed analysis as compared to analyzing vehicles per hour. Existing PHFs have been used for all analysis scenarios. Per Chapter 4 of the HCM 6th Edition (HCM6), PHF values over 0.95 often are indicative of high traffic volumes with capacity constraints on peak hour flows while lower PHF values are indicative of greater variability of flow during the peak hour.

4.2.2 UNSIGNALIZED INTERSECTIONS

The City of Corona requires the operations of unsignalized intersections be evaluated using the methodology described in Chapter 19, Chapter 20, and Chapter 32 of the HCM 6th Edition. The LOS rating is based on the weighted average control delay expressed in seconds per vehicle (see Table 4-2).

TABLE 4-2: UNSIGNALIZED INTERSECTION DESCRIPTION OF LOS

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

Source: HCM 6th Edition

At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane.

To evaluate roundabout intersections, the HCM6 methodology has been utilized. The LOS for roundabouts is based on average vehicle delay and utilizes the same LOS threshold used for unsignalized intersections and previously presented on Table 4-2.

4.3 QUEUING ANALYSIS

For the purpose of this analysis and per the City of Corona's request, the 95th percentile queuing of vehicles has been assessed along Eagle Glen – Cajalco Road from Bedford Canyon Road to I-5 / Cajalco Interchange, Bedford Canyon Road / Foothill Parkway – El Cerrito Road, and Project Access points on Bedford Canyon Road to determine potential queuing deficiencies.

The traffic progression analysis tool and HCM intersection analysis program, Synchro, has been used to assess the potential deficiencies/needs of the intersections with traffic added from the proposed Project. Storage (turn-pocket) length recommendations have been based upon the 95th percentile queue resulting from the Synchro progression analysis. The queue length reported is for the lane with the highest queue in the lane group.

A vehicle is considered queued whenever it is traveling at less than 10 feet/second. A vehicle will only become queued when it is either at the stop bar or behind another queued vehicle. Although only the 95th percentile queue has been reported in the tables, the 50th percentile queue can be found in the appendix alongside the 95th percentile queue for each ramp location. The 50th percentile maximum queue is the maximum back of queue on a typical cycle during the peak hour, while the 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes during the peak hour. In other words, if traffic were observed for 100 cycles, the 95th percentile queue would be the queue experienced with the 95th busiest cycle (or 5% of the time). The 50th percentile or average queue represents the typical queue length for peak hour traffic conditions, while the 95th percentile queue is derived from the average queue plus

1.65 standard deviations. The 95th percentile queue is not necessarily ever observed, it is simply based on statistical calculations.

4.4 TRAFFIC SIGNAL WARRANT ANALYSIS METHODOLOGY

The term "signal warrants" refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify or ascertain the potential need for installation of a traffic signal at an otherwise unsignalized intersection. This TIA uses the signal warrant criteria presented in the latest edition of the Federal Highway Administration's (FHWA) *Manual on Uniform Traffic Control Devices (MUTCD)*, as amended by *the MUTCD 2012 California Supplement*, for all study area intersections.

The signal warrant criteria for Existing conditions are based upon several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. Both the FHWA's *MUTCD* and the *MUTCD 2012 California Supplement* indicate that the installation of a traffic signal should be considered if one or more of the signal warrants are met. Specifically, this TIA utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for existing traffic conditions. Warrant 3 criteria are basically identical for both the FHWA's *MUTCD* and the *MUTCD 2012 California Supplement*. Warrant 3 is appropriate to use for this TIA because it provides specialized warrant criteria for intersections with rural characteristics (e.g. located in communities with populations of less than 10,000 persons or with adjacent major streets operating above 40 miles per hour). For the purposes of this study, the speed limit was the basis for determining whether Urban or Rural warrants were used for a given intersection. It should be noted that Rural warrants have been utilized along Masters Drive and Bedford Canyon Road.

Future intersections that do not currently exist have been assessed regarding the potential need for new traffic signals based on future average daily traffic (ADT) volumes, using the Caltrans planning level ADT-based signal warrant analysis worksheets.

Traffic signal warrant analyses were performed for the unsignalized study area intersections listed in Table 4-3.

TABLE 4-3: TRAFFIC SIGNAL WARRANT ANALYSIS LOCATIONS

ID	Intersection Location	Jurisdiction
1	Masters Drive / California Avenue	Corona
2	Masters Drive / Bennett Avenue	Corona
5	Bedford Canyon Road / Georgetown Drive	Corona
18	Masters Drive / Christopher Lane	Corona
19	Via Castilla Street / Masters Drive	Corona
20	Morales Way / Masters Drive	Corona
22	Bedford Canyon Road / Commercial South Driveway – *Future Intersection*	Corona
23	Bedford Canyon Road / Commercial Main Driveway – *Future Intersection*	Corona

The Existing (2017 and 2018) conditions traffic signal warrant analysis is presented previously in Section 2.5. The traffic signal warrant analysis for future conditions are presented in Section 5.0 *Interim Year (2021) Traffic Analysis*, and Section 6.0 *Horizon Year 2035 Traffic Analysis* of this report.

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

4.5 LOS CRITERIA

In accordance with the City of Corona General Plan, the following intersection LOS thresholds from the General Plan are to be implemented:

- LOS C or better shall be maintained for local intersections in residential/industrial areas.
- LOS D or better shall be maintained on collector and arterial intersections.
- Consistent with the previously approved Arantine Hills Traffic Impact Analysis (2015) and Arantine Hills Specific Plan Amendment No.2 Traffic Assessment (November 2018), LOS "E" is anticipated to be permitted for the ramp intersections at the I-15 / Cajalco Road interchange.

The City of Corona LOS criteria for the study area intersections are listed below:

ID	Intersection	LOS Criteria
1	Masters Drive / California Avenue	*C*
2	Masters Drive / Bennett Avenue	*C*
3	Masters Drive / Eagle Glen Parkway	*D*
4	Bedford Canyon Road / El Cerrito Road	*D*
5	Bedford Canyon Road / Georgetown Drive	*C*
6	Bedford Canyon Road / Eagle Glen Parkway	*D*
7	I-15 SB Ramps / El Cerrito Road	*D*
8	I-15 SB Ramps / Cajalco Road	*E*
9	I-15 NB Ramps / El Cerrito Road	*D*
10	I-15 NB Ramps / Cajalco Road	*E*
11	Grand Oaks / Cajalco Road	*D*
12	Temescal Canyon Road / Cajalco Road	*D*
13	Clementine Way / Eagle Glen Parkway	*D*
14	Clementine Way / Hudson House Drive	*C*
15	Bedford Canyon Road / Hudson House Drive	*C*
18	Masters Drive / Christopher Lane	*C*
19	Via Castilla Street / Masters Drive	*C*

ID	Intersection (Continued)	LOS Criteria
20	Morales Way / Masters Drive	*C*
22	Bedford Canyon Road / Commercial RIRO Driveway	*C*
23	Bedford Canyon Road / Commercial Main Driveway	*C*
24	Bedford Canyon Road / Commercial South Driveway	*C*

The Arantine Hills Project Traffic Study provides the mitigation measures needed to satisfy the minimum level of service thresholds defined by the City of Corona. This is consistent with the Caltrans Guide for the preparation of Traffic Impact Studies that states "Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on State highway facilities". However, it should be noted that Caltrans acknowledges that maintaining these levels of service thresholds may not always be feasible and recommends the lead agency consult with Caltrans to determine the appropriate target level of service. If an existing facility is operating at less than the appropriate target LOS, the existing LOS should be maintained.

5.0 INTERIM YEAR (2021) TRAFFIC ANALYSIS

This section discusses the methods used to develop Interim Year (2021) without and with Project traffic conditions and the resulting intersection operations.

5.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed for Interim Year (2021) Conditions are as follows:

- Bedford Marketplace driveways and those facilities assumed to be constructed as part of the Bedford Marketplace to provide site access are assumed to be in place for With Project conditions only (e.g., intersection and roadway improvements at the Project's frontage and driveways).

Planned improvements (currently under construction) at or near the Cajalco Road/I-15 interchange area include the following:

- Widen Cajalco Road from a 2-lane divided roadway to a 4-lane divided roadway, between Bedford Canyon Road and I-15 SB Ramps.
- Widen Cajalco Road from a 2-lane divided roadway to a 6-lane divided roadway, between the I-15 SB and I-15 NB ramps.
- Widen Cajalco Road from a 5-lane divided roadway to a 6-lane divided roadway, between the I-15 NB ramps Temescal Canyon Road.

The unsignalized intersection of Masters Drive / Eagle Glen Parkway (#3) and future intersection of Clementine Way / Eagle Glen Parkway (#13) under existing conditions are evaluated with traffic signal control for Interim Year (2021) conditions. These traffic signal improvements were recently installed after existing (2017/2018) counts were taken.

5.2 INTERIM YEAR (2021) TRAFFIC VOLUME FORECASTS

To account for ambient growth on area roadways, future 2021 traffic volumes have been estimated based on an annual growth of 2% per year (total of 8% growth for 4 years). In addition, the approved Arantine Hills Project traffic is also included as background traffic for 2021 conditions.

The Interim Year (2021) Without Project conditions peak hour intersection turning movement volumes were shown previously on Exhibits 3-4 and 3-5. The 2021 With Project conditions peak hour intersection turning movement volumes were shown previously on Exhibits 3-6 and 3-7.

5.3 INTERSECTION OPERATIONS ANALYSIS AND RECOMMENDED IMPROVEMENTS

Table 5-1 provides an overall summary of intersection operations in the study area with Interim Year (2021) without and with Project conditions.

TABLE 5-1: INTERSECTION ANALYSIS SUMMARY FOR INTERIM YEAR (2021) CONDITIONS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												2021 Without Project				2021 With Project				LOS Criteria
			Northbound			Southbound			Eastbound			Westbound			Delay[2] (Secs)		Level of Service[2]		Delay[2] (Secs)		Level of Service[2]		
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM	
1	Masters Dr. / California Av.																						
	- Without Improvements	AWS	1	1	0	1	1	0	1	1	0	1	1	1	**126.7**	30.6	**F**	**D**	**130.2**	31.9	**F**	**D**	*C*
	- With Improvements[5]	**TS**	1	1	0	1	1	0	1	1	0	1	1	1	21.8	16.7	C	B	22.0	16.8	C	B	*C*
2	Masters Dr. / Bennett Av.	AWS	1	1	0	1	1	0	0	1!	0	0	1!	0	11.0	22.3	B	C	11.4	24.9	B	C	*C*
3	Masters Dr. / Eagle Glen Pkwy.	*TS*	0	0	0	1	0	1	1	2	0	0	2	0	20.5	36.4	C	D	29.5	37.0	C	D	*D*
4	Bedford Cyn. Rd. / El Cerrito Rd.	TS	1	0	1	0	0	*1*	0	2	*1*	1	2	*1>>*	39.0	17.3	D	B	42.5	18.1	D	B	*D*
5	Bedford Cyn. Rd. / Georgetown Dr.	AWS	1	1	0	0	1	1	0	1	1>>	0	1!	0	10.7	13.9	B	B	11.1	15.0	B	B	*C*
6	Bedford Cyn. Rd. / Eagle Glen Pkwy.																						
	- With Arantine Hills South Leg Access, During Interchange Construction	TS	**1**	**1**	**1>**	1	**1**	1>	1	1	0	**2**	*1*	1>	**84.0**	**137.2**	**F**	**F**	**87.2**	**143.3**	**F**	**F**	*D*
	- With Arantine Hills Improvements[5]	TS	**1**	**1**	**1>**	**1.5**	**0.5**	1>	1	*2*	0	**2**	2	1>	38.0	39.5	D	D	45.1	48.3	D	D	*D*
7	I-15 SB Ramps / El Cerrito Rd.	TS	0	0	0	0.5	0.5	1	0	2	0	1	2	0	16.4	27.5	B	C	16.4	27.5	B	C	*D*
8	I-15 SB Ramps / Cajalco Rd.																						
	- Without Improvements, Lane Config. During Interchange Construction	TS	0	0	0	1	0	1	1	1	0	0	*1*	0	**73.6**	**225.9**	E	**F**	**79.9**	**250.3**	E	**F**	*E*
	- With Interchange Improvements[4,5]	TS	0	0	0	*2*	0	*2*	*2*	**3**	0	0	*2*	1	20.2	38.6	C	D	21.0	44.8	C	D	*E*
9	I-15 NB Ramps / El Cerrito Rd.	TS	0	1!	0	0	0	0	2	1	0	0	2	0	37.9	32.6	D	C	38.1	32.6	D	C	*D*
10	I-15 NB Ramps / Cajalco Rd.																						
	- Without Improvements, Lane Config. During Interchange Construction	TS	1	0	1	0	0	0	*1*	*1*	0	0	*1*	0	**268.7**	**214.4**	**F**	**F**	**276.5**	**215.3**	**F**	**F**	*E*
	- With Interchange Improvements[5]	TS	*2*	0	*2*	0	0	0	0	*3*	*1>*	0	*4*	0	18.3	16.3	B	B	19.2	16.9	B	B	*E*
11	Grand Oaks / Cajalco Rd.																						
	- Without Improvements, Lane Config. During Interchange Construction	TS	0	1!	0	0.5	0.5	2>	*0.5*	*1.5*	0	*0.5*	*1.5*	0	**301.6**	**97.3**	**F**	**F**	**306.1**	**101.8**	**F**	**F**	*D*
	- With Interchange Improvements[5]	TS	0	1!	0	0.5	0.5	2>	2	*3*	0	1	3	1	39.4	32.0	D	C	38.2	32.3	D	C	*D*
12	Temescal Cyn. Rd. / Cajalco Rd.	TS	2	2	d	1	2	0	1	1	1	1	3	0	38.4	49.1	D	D	38.9	49.5	D	D	*D*
13	Clementine Wy. / Eagle Glen Pkwy.	*TS*	*1*	0	*1*	0	0	0	0	2	0	*1*	1	0	30.2	28.3	C	C	30.2	28.3	C	C	*D*
15	Bedford Cyn. Rd. / Hudson House Dr.[5]	*RDB*	0	**1**	0	0	**1**	0	0	**1**	0	0	0	0	4.9	5.9	A	A	5.3	6.2	A	A	*C*

TABLE 5-1: INTERSECTION ANALYSIS SUMMARY FOR INTERIM YEAR (2021) CONDITIONS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												2021 Without Project				2021 With Project				LOS Criteria
			Northbound			Southbound			Eastbound			Westbound			Delay[2] (Secs)		Level of Service[2]		Delay[2] (Secs)		Level of Service[2]		
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM	
18	Masters Dr. / Christopher Ln.																						
	- Without Improvements	AWS	1	1	0	1	1	0	0	1!	0	0	1!	0	**58.9**	**70.8**	**F**	**F**	**62.6**	**74.8**	**F**	**F**	*C*
	- With Roundabout[5]	**RDB**	0	1!	0	0	1!	0	0	1!	0	0	1!	0	10.3	8.4	B	A	10.5	8.5	B	A	*C*
	- With Traffic Signal[5]	**TS**	1	1	0	1	1	0	0	1!	0	0	1!	0	5.9	9.8	A	A	6.0	10.0	A	A	*C*
19	Via Castilla St. / Masters Dr.																						
	- Without Improvements	AWS	0	0	0	0	1!	0	1	1	0	0	1	0	**32.2**	**88.1**	**D**	**F**	**35.2**	**94.4**	**E**	**F**	*C*
	- With Roundabout[5]	**RDB**	0	0	0	0	1!	0	0	1	0	0	1	0	7.4	9.5	A	A	7.6	9.8	A	A	*C*
	- With CSS control[5]	CSS	0	0	0	0	1!	0	1	1	0	0	1	0	17.6	22.1	C	C	18.3	23.1	C	C	*C*
20	Morales Wy. / Masters Dr.																						
	- Without Improvements	AWS	0	1!	0	0	1!	0	1	1	0	1	1	0	17.5	**77.8**	C	**F**	18.7	**85.0**	C	**F**	*C*
	- With Roundabout[5]	**RDB**	0	1!	0	0	1!	0	0	1!	0	0	1!	0	6.5	9.4	A	A	6.7	9.7	A	A	*C*
	- With Traffic Signal[5]	**TS**	0	1!	0	0	1!	0	1	1	0	1	1	0	13.7	25.9	B	C	13.9	27.7	B	C	*C*
22	Bedford Cyn. Rd. / Commercial S. Dwy[6]	**CSS**	0	**2**	0	**1**	**2**	0	0	0	0	0	**1!**	0	10.8	14.1	B	B	11.1	16.2	B	C	*C*
23	Bedford Cyn. Rd. / Commercial Main Dwy.[6]	**TS**	0	**2**	0	**1**	**2**	0	0	0	0	**1**	0	**1**	10.4	10.7	B	B	23.1	13.9	C	B	*C*
24	Bedford Cyn. Rd. / Commercial RIRO Dwy.	**CSS**	0	**2**	0	0	**2**	0	0	0	0	0	0	**1**	9.9	9.9	A	A	11.1	10.8	B	B	*C*

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; d = Defacto Right Turn Lane; 1! = Shared Left-Through-Right turn lane; > = Right Turn Overlap; >> = Free-Right;

1 = Recently Completed Improvement; ***1*** = Lane reduction/configuration during interchange construction; **1** = Improvement; ***1*** = Planned Interchange Improvement

[2] Per the Highway Capacity Manual 6th Edition (HCM6), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control.

For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

Delay and level of service is calculated using Synchro 10.1 analysis software.

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[3] TS = Traffic Signal; CSS = Cross-street Stop; AWS = All-Way Stop; RDB = Roundabout

[4] Per City of Corona staff, a 3rd EBT lane is recommended.

[5] Source: Arantine Hills Specific Plan Amendment No.2 Traffic Assessment (November 2018). Prepared by Urban Crossroads, Inc.

[6] Source: Arantine Hills Modified Project Traffic Study (September 2015). Prepared by Urban Crossroads, Inc.

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The Interim Year (2021) Without Project conditions intersection operations analysis worksheets are provided in Appendix "5.1". The 2021 With Project conditions intersection operations analysis worksheets are provided in Appendix "5.2".

For Interim Year (2021) Without Project and With Project scenarios, LOS deficiencies occur at the following intersections:

ID	Intersection Location	Jurisdiction
1	Masters Drive / California Avenue	Corona
6	Bedford Canyon Road / Eagle Glen Parkway	Corona
8	I-15 SB Ramps / Cajalco Road	Caltrans
10	I-15 NB Ramps / Cajalco Road	Caltrans
11	Grand Oaks / Cajalco Road	Corona
18	Masters Drive / Christopher Lane	Corona
19	Via Castilla Street / Masters Drive	Corona
20	Morales Way / Masters Drive	Corona

With the recommended intersection improvements listed below, the deficient intersections identified under Interim Year (2021) Without Project conditions are projected to operate at acceptable level of service during both AM and PM peak hours. Planned improvements (see Caltrans improvement plans in Appendix 1.2) at or near the Cajalco Road / I-15 Interchange area are also included below.

Masters Drive / California Drive (#1)

- Install a traffic signal.

Bedford Canyon Road / Eagle Glen Parkway - Cajalco Road (#6) *– Under Construction*

- Traffic Signal Modification.
- Adjust the east leg striping to provide a 2nd receiving lane.
- NB Approach: Construct one left turn lane, one through lane, and one-right turn lane.
- SB Approach: Modify striping to provide a new shared left/through lane.
- EB Approach: Modify striping to provide a new shared through/right turn lane.
- WB Approach: Construct 2 left turn lanes.

I-15 SB Ramps / Cajalco Road (#8) *– Under Construction*

- SB Approach: Construct a 2nd left turn lane and 2nd right turn lane.
- EB Approach: Construct a 2nd left turn lane, 2nd through lane, and 3rd through lane.
- WB Approach: Construct a 2nd through lane

I-15 NB Ramps / Cajalco Road (#10) *– Under Construction*

- NB Approach: Construct a 2nd left turn lane and 2nd right turn lane.
- EB Approach: Construct a 2nd and 3rd through lanes and one right turn lane with overlap phasing.
- WB Approach: Construct a 2nd and 3rd through lanes.

Grand Oaks / Cajalco Road (#11) *– Under Construction*

- EB Approach: Construct a 3rd through lane.

Bedford Canyon Road / Hudson House Drive (#15)

- Install roundabout.
- NB Approach: Provide a shared left/through lane.
- SB Approach: Provide a shared through/right turn lane.
- EB Approach: Provide a shared left/right turn lane.

Masters Drive / Christopher Lane (#18)

- Provide traffic signal, or small roundabout (within existing right-of-way).

Via Castilla Street / Masters Drive (#19)

- Convert to cross-street stop control on Via Castilla Street (in conjunction with Masters Drive / Christopher Lane and Morales Way / Masters Drive traffic signals), or construct a roundabout (within existing right-of-way).

Morales Way / Masters Drive (#20)

- Install a traffic signal, or construct a roundabout (within existing right-of-way).

Bedford Canyon Road / Commercial South Driveway (#22)

- Install a stop sign control for the westbound approach.
- NB Approach: Provide one through lane and one shared through/right lane.
- SB Approach: Provide a left turn (minimum 150 ft.) lane and two through lanes.
- WB Approach: Provide a shared left/right turn lane.

Bedford Canyon Road / Commercial Main Driveway (#23)

- Install a traffic signal.
- NB Approach: Provide one through lane and one shared through/right lane.
- SB Approach: Provide a left turn (minimum 200 ft.) lane and two through lanes.
- WB Approach: Provide one left turn lane and one right turn lane.

Bedford Canyon Road / Commercial RIRO Driveway (#24)

- Install a stop sign control for the westbound approach.
- Restrict intersection to right-in/right-out access only
- NB Approach: Provide one through lane and one shared through/right lane.
- SB Approach: Provide two through lanes.
- WB Approach: Provide one right turn lane.

For Interim Year (2021) With Project Conditions, the Project does not generate impacts that require new improvements beyond the improvements identified under Interim Year (2021) Without Project conditions.

5.4 QUEUING ANALYSIS

A queuing analysis was performed for With Project Conditions to assess the adequacy of turn bay lengths to accommodate vehicle queues at the Bedford Marketplace entries and nearby interchange area (including Eagle Glen Parkway – Cajalco Road between Bedford Canyon Road and I-15 Ramps, Bedford Canyon Road / Foothill Parkway - El Cerrito Road). The simulation and optimization traffic modeling tools Synchro and SimTraffic were utilized to perform this evaluation of traffic flows and vehicle queuing. Synchro is a macroscopic analysis and optimization program, and SimTraffic performs microsimulations and animation of vehicle traffic. The SimTraffic analysis includes the effects of nearby intersections on arrival time at an intersection, during the AM and PM peak periods.

In SimTraffic, each vehicle in the traffic system is individually tracked and operational measures of effectiveness are collected on every vehicle during each 10th of a second of simulation. Driver behavior characteristics (ranging from passive to aggressive) are assigned to each vehicle by the model, affecting the vehicle's free-flow speed, queue discharge headways, and other behavioral attributes. The variation in each vehicle's behavior is simulated in a manner reflecting real-world operations.

The queue length reported for each movement in SimTraffic is responsive to the turn pocket length, just like in the real world. SimTraffic simply observes the actual queue activity as it unfolds during the peak hour. Any spillover from the left turn pocket would be reported in the adjacent lane queue length. The random simulations generated by SimTraffic have been utilized to determine the 95th percentile queue lengths observed for each turn lane.

The estimated turn lane storage length requirements for the Project entries and nearby interchange area for Interim Year (2021) with Project traffic conditions are summarized in Table 5-2. These lengths are based on the volumes presented in Chapter 3, and queue length worksheets are included in Appendix 5.2.

TABLE 5-2: INTERIM YEAR (2021) WITH PROJECT CONDITIONS LANE STORAGE LENGTHS

ID	Intersection	Turning Movement Lane	# of Lanes	2035 With Project				Storage Length[2] (ft.)	95th Percentile Queue Length[1]	
				AM	PM	Peak Hour	Volume		AM	PM
4	Bedford Cyn. Rd. / El Cerrito Rd.	NBR	1	328	127	AM	328	125	190 [3]	110
		WBL	1	120	200	PM	200	135	165 [3]	176 [3]
6	Bedford Cyn. Rd. / Eagle Glen Pkwy.	NBL	1	58	97	PM	97	**150**	75	128
		NBR	1	568	468	AM	568	>150	291	240
		SBL	1.5	128	437	PM	437	>240	113	205
		EBL	1	121	94	AM	121	200	155	270 [3]
		WBL	2	297	731	PM	731	**200**	185	318 [3]
		WBR	1	439	73	PM	420	**200**	46	37
8	I-15 SB Ramps / Cajalco Rd.	EBL	2	322	581	PM	581	**290**	182	238
		WBR	1	101	361	PM	542	**>250**	44	105
10	I-15 NB Ramps / Cajalco Rd.	EBR	1	784	537	AM	784	**340**	61	36
22	Bedford Cyn. Rd. / Commercial S. Dwy.	SBL	1	76	184	PM	184	**150**	55	91
23	Bedford Cyn. Rd. / Commercial Main Dwy.	SBL	1	174	281	PM	281	**200**	172	175

[1] Queue length calculated using SimTraffic.

[2] Existing/Proposed length of storage. Existing = 100; Proposed =**100**

[3] Review of SimTraffic simulation results indicate that the turn lane queue is anticipated to clear in a timely manner and that the provided pocket length is adequate.

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5.5 TRAFFIC SIGNAL WARRANT ANALYSIS

For Interim Year (2021) Without Project Conditions, the intersection of Bedford Canyon Road / Commercial Main Driveway (#23) is anticipated to meet traffic signal warrants in addition to the intersection previously identified under Existing conditions.

For Interim Year (2021) With Project traffic conditions, there are no new unsignalized intersections anticipated to meet traffic signal warrants, in addition to the intersections identified under Interim Year (2021) without Project conditions.

The 2021 Without and With Project traffic signal warrant analysis worksheets are provided in Appendix "5.3". For 2021 conditions without the Project, the intersection of Bedford Canyon Road / Commercial Main Driveway (#23) is anticipated to meet traffic signal warrants (in addition to the intersection previously identified under Existing conditions).

6.0 HORIZON YEAR 2035 TRAFFIC ANALYSIS

6.1 HORIZON YEAR 2035 TRAFFIC VOLUME FORECASTS

The Horizon Year 2035 volumes from Arantine Hills Specific Plan Amendment No. 2 Traffic Assessment (November 2018) have been utilized in this report to represent "Without Project" conditions.

The Horizon Year 2035 Without Project Conditions peak hour intersection turning movement volumes were shown previously on Exhibits 3-8 and 3-9.

The Horizon Year 2035 With Project Conditions peak hour intersection turning movement volumes were shown previously on Exhibits 3-10 and 3-11.

6.2 INTERSECTION OPERATIONS ANALYSIS AND RECOMMENDED IMPROVEMENTS

Table 6-1 provides an overall summary of intersection operations in the study area with 2035 Without Project and With Project conditions.

The Horizon Year 2035 Without Project Conditions intersection operations analysis worksheets are provided in Appendix "6.1". The Horizon Year 2035 With Project Conditions intersection operations analysis worksheets are provided in Appendix "6.2".

For Horizon Year 2035 Without Project Conditions, the following intersections are anticipated to operate at unacceptable level of service, with planned improvements at or near the Cajalco Road / I-15 interchange area:

ID	Intersection Location	Jurisdiction
1	Masters Drive / California Avenue	Corona
2	Masters Drive / Bennett Avenue	Corona
5	Bedford Canyon Road / Eagle Glen Parkway	Corona
7	I-15 SB Ramps / El Cerrito Road	Caltrans
12	Temescal Canyon Road / Cajalco Road	Corona
18	Masters Drive / Christopher Lane	Corona
19	Via Castilla Street / Masters Drive	Corona
20	Morales Way / Masters Drive	Corona

For Horizon Year 2035 With Project Conditions, there are no new intersections anticipated to operate at deficient level of service, beyond the intersections previously identified under Horizon Year 2035 Without Project Conditions. Project driveways and those facilities to be constructed by Bedford Marketplace to provide site access are assumed to be in place for With Project conditions (e.g., intersection and roadway improvements at the Project's frontage and driveways).

TABLE 6-1: INTERSECTION ANALYSIS SUMMARY FOR HORIZON YEAR 2035 CONDITIONS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												HY 2035 Without Project				HY 2035 With Project				LOS Criteria
			Northbound			Southbound			Eastbound			Westbound			Delay[2] (Secs)		Level of Service[2]		Delay[2] (Secs)		Level of Service[2]		
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM	
1	Masters Dr. / California Av.																						
	- With Improvements[5]	**TS**	1	1	0	1	1	0	1	1	0	1	1	1	34.2	18.2	C	B	34.7	18.4	C	B	*C*
2	Masters Dr. / Bennett Av.																						
	- With Improvements[5]	**TS**	1	1	0	1	1	0	0	1!	0	0	1!	0	7.9	8.9	A	A	7.9	9.0	A	A	*C*
3	Masters Dr. / Eagle Glen Pkwy.	*TS*	0	0	0	1	0	1	1	2	0	0	2	0	17.5	32.3	B	C	18.3	32.8	B	C	*D*
4	Bedford Cyn. Rd. / El Cerrito Rd.	TS	1	0	1	0	0	*1*	0	2	*1*	1	2	*1>>*	29.1	24.4	C	C	30.4	25.6	C	C	*D*
5	Bedford Cyn. Rd. / Georgetown Dr.																						
	- With Improvements[6]	**TS**	1	1	0	0	1	1	0	1	1>>	0	1!	0	5.1	3.9	A	A	5.1	3.9	A	A	*C*
6	Bedford Cyn. Rd. / Eagle Glen Pkwy.																						
	- With Arantine Hills Improvements[5]	TS	**1**	**1**	**1>**	**1.5**	**0.5**	1>	1	***2***	0	**2**	2	1>	39.9	46.6	D	D	48.8	54.9	D	D	*D*
7	I-15 SB Ramps / El Cerrito Rd.																						
	- With Improvements[6]	TS	0	0	0	0.5	0.5	1	0	2	**1**	1	2	0	37.8	39.8	D	D	37.8	39.8	D	D	*D*
8	I-15 SB Ramps / Cajalco Rd.																						
	- With Interchange Improvements[4,5]	TS	0	0	0	***2***	0	***2***	***2***	**3**	0	0	***2***	1	21.1	39.9	C	D	21.9	47.1	C	D	*E*
9	I-15 NB Ramps / El Cerrito Rd.	TS	0	1!	0	0	0	0	2	1	0	0	2	0	53.1	45.7	D	D	53.4	45.7	D	D	*D*
10	I-15 NB Ramps / Cajalco Rd.																						
	- With Interchange Improvements[5]	TS	***2***	0	***2***	0	0	0	0	***3***	***1>***	0	***4***	0	19.5	17.9	B	B	20.5	18.5	C	B	*E*
11	Grand Oaks / Cajalco Rd.																						
	- With Interchange Improvements[5]	TS	0	1!	0	0.5	0.5	2>	2	***3***	0	1	3	1	38.3	33.6	D	C	38.9	33.8	D	C	*D*
12	Temescal Cyn. Rd. / Cajalco Rd.																						
	- With Improvements[5]	TS	2	2	d	**2**	2	0	1	**2**	1	1	3	**1**	51.6	50.7	D	D	52.4	50.9	D	D	*D*
13	Clementine Wy. / Eagle Glen Pkwy.	*TS*	*1*	0	*1*	0	0	0	0	2	0	*1*	1	0	30.1	28.6	C	C	30.2	28.6	C	C	*D*
15	Bedford Cyn. Rd. / Hudson House Dr.[5]	*RDB*	0	**1**	0	0	**1**	0	0	**1**	0	0	0	0	4.9	5.9	A	A	5.3	6.2	A	A	*C*
18	Masters Dr. / Christopher Ln.																						
	- With Roundabout[5]	**RDB**	0	1!	0	0	1!	0	0	1!	0	0	1!	0	8.9	9.3	A	A	9.0	9.5	A	A	*C*
	- With Traffic Signal[5]	**TS**	1	1	0	1	1	0	0	1!	0	0	1!	0	5.1	5.3	A	A	6.2	5.4	A	A	*C*
19	Via Castilla St. / Masters Dr.																						
	- With Roundabout[5]	**RDB**	0	0	0	0	1!	0	0	1	0	0	1	0	6.1	7.8	A	A	6.2	7.9	A	A	*C*
	- With CSS control[5]	CSS	0	0	0	0	1!	0	1	1	0	0	1	0	14.7	19.6	B	C	15.1	20.5	C	C	*C*

TABLE 6-1: INTERSECTION ANALYSIS SUMMARY FOR HORIZON YEAR 2035 CONDITIONS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												HY 2035 Without Project				HY 2035 With Project				LOS Criteria
			Northbound			Southbound			Eastbound			Westbound			Delay[2] (Secs)		Level of Service[2]		Delay[2] (Secs)		Level of Service[2]		
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM	
20	Morales Wy. / Masters Dr.																						
	- With Roundabout[5]	**RDB**	0	1!	0	0	1!	0	0	1!	0	0	1!	0	6.5	8.3	A	A	6.7	9.7	A	A	*C*
	- With Traffic Signal[5]	**TS**	0	1!	0	0	1!	0	1	1	0	1	1	0	13.7	19.1	B	B	14.3	19.9	B	B	*C*
22	Bedford Cyn. Rd. / Commercial S. Dwy[6]	**CSS**	0	**2**	0	**1**	**2**	0	0	0	0	0	**1!**	0	10.8	14.1	B	B	11.1	16.2	B	C	*C*
23	Bedford Cyn. Rd. / Commercial Main Dwy.[6]	**TS**	0	**2**	0	**1**	**2**	0	0	0	0	**1**	0	**1**	10.4	10.7	B	B	23.1	13.9	C	B	*C*
24	Bedford Cyn. Rd. / Commercial RIRO Dwy.	**CSS**	0	**2**	0	0	**2**	0	0	0	0	0	0	**1**	9.9	9.9	A	A	11.1	10.8	B	B	*C*

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; d = Defacto Right Turn Lane; 1! = Shared Left-Through-Right turn lane; > = Right Turn Overlap; >> = Free-Right;

1 = Recently Completed Improvement; **1** = Improvement; ***1*** = Planned Interchange Improvement

[2] Per the Highway Capacity Manual 6th Edition (HCM6), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control.

For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

Delay and level of service is calculated using Synchro 10.1 analysis software.

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[3] TS = Traffic Signal; CSS = Cross-street Stop; AWS = All-Way Stop; RDB = Roundabout

[4] Per City of Corona staff, a 3rd EBT lane is recommended.

[5] Source: Arantine Hills Specific Plan Amendment No.2 Traffic Assessment (November 2018). Prepared by Urban Crossroads, Inc.

[6] Source: Arantine Hills Modified Project Traffic Study (September 2015). Prepared by Urban Crossroads, Inc.

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With the recommended intersection improvements listed below (in addition to the previously identified improvements under Interim Year (2021) Without Project conditions), the deficient intersections identified under Horizon Year 2035 Without Project Conditions are projected to operate at acceptable level of service during both AM and PM peak hours.

I-15 SB Ramps / El Cerrito Road (#7)

- EB Approach: Construct a separate right turn lane

Temescal Canyon Road / Cajalco Road (#12)

- Widen Cajalco Road from four-lane divided to six-lane divided roadway, east of Temescal Canyon Road.
- SB Approach: Modify striping to provide a 2nd left turn lane, in addition to the existing two through lanes.
- EB Approach: Modify striping to provide a 2nd through lane, in addition to the existing left turn lane and right turn lane.
- WB Approach: Construct one right turn lane.

Traffic signal improvements are also recommended at the following intersections without the Project based on the traffic signal warrant results discussed in section 6.4:

Masters Drive / Bennett Avenue (#2)

- Install a traffic signal.

Bedford Canyon Road / Georgetown Drive (#5)

- Install a traffic signal.

For Horizon Year 2035 With Project Conditions, the Project does not generate impacts that require new improvements beyond the improvements identified under Horizon Year 2035 Without Project conditions.

6.3 QUEUING ANALYSIS

A queuing analysis was performed for With Project Conditions to assess the adequacy of turn bay lengths to accommodate vehicle queues at the Bedford Marketplace entries and nearby interchange area (including Eagle Glen Parkway – Cajalco Road between Bedford Canyon Road and I-15 Ramps, Bedford Canyon Road / Foothill Parkway - El Cerrito Road). The simulation and optimization traffic modeling tools Synchro and SimTraffic were utilized to perform this evaluation of traffic flows and vehicle queuing. Synchro is a macroscopic analysis and optimization program, and SimTraffic performs microsimulations and animation of vehicle traffic. The SimTraffic analysis includes the effects of nearby intersections on arrival time at an intersection, during the AM and PM peak periods.

In SimTraffic, each vehicle in the traffic system is individually tracked and operational measures of effectiveness are collected on every vehicle during each 10th of a second of simulation. Driver behavior characteristics (ranging from passive to aggressive) are assigned to each vehicle by the model, affecting the vehicle's free-flow speed, queue discharge headways, and other behavioral attributes. The variation in each vehicle's behavior is simulated in a manner reflecting real-world operations.

The queue length reported for each movement in SimTraffic is responsive to the turn pocket length, just like in the real world. SimTraffic simply observes the actual queue activity as it unfolds during the peak hour. Any spillover from the left turn pocket would be reported in the adjacent lane queue length. The random simulations generated by SimTraffic have been utilized to determine the 95th percentile queue lengths observed for each turn lane.

The estimated turn lane storage length requirements for the Project entries and nearby interchange area for Horizon Year 2035 with Project traffic conditions are summarized in Table 6-2. These lengths are based on the volumes presented in Chapter 3, and queue length worksheets are included in Appendix 6.2.

6.4 TRAFFIC SIGNAL WARRANT ANALYSIS

For Horizon Year 2035 Without Project Conditions, the following intersections are anticipated to meet traffic signal warrants, in addition to the intersections identified previously under Interim Year (2021) conditions:

ID	Intersection Location	Jurisdiction
2	Masters Drive / Bennett Avenue	Corona
5	Bedford Canyon Road / Georgetown Drive	Corona

For Horizon Year 2035 With Project Conditions, there are no new intersections anticipated to meet traffic signal warrants, in addition to the intersections identified previously under 2035 Without Project conditions.

The 2035 Without Project and With Project traffic signal warrant analysis worksheets are provided in Appendix "6.3".

TABLE 6-2: HORIZON YEAR 2035 WITH PROJECT CONDITIONS LANE STORAGE LENGTHS

ID	Intersection	Turning Movement Lane	# of Lanes	2035 With Project				Storage Length[2] (ft.)	95th Percentile Queue Length[1]	
				AM	PM	Peak Hour	Volume		AM	PM
4	Bedford Cyn. Rd. / El Cerrito Rd.	NBR	1	319	194	AM	319	125	188 [3]	199 [3]
		WBL	1	305	236	AM	305	135	206 [3]	204 [3]
6	Bedford Cyn. Rd. / Eagle Glen Pkwy.	NBL	1	58	97	PM	97	**150**	62	112
		NBR	1	568	468	AM	568	>150	291	301
		SBL	1.5	154	420	PM	420	>240	94	208
		EBL	1	143	203	PM	203	200	219 [3]	223 [3]
		WBL	2	297	731	PM	731	**200**	185	329 [3]
		WBR	1	422	145	PM	420	**200**	52	27
8	I-15 SB Ramps / Cajalco Rd.	EBL	2	427	566	PM	566	**290**	202	221
		WBR	1	190	350	PM	542	**>250**	51	191
10	I-15 NB Ramps / Cajalco Rd.	EBR	1	923	631	AM	923	**340**	111	73
22	Bedford Cyn. Rd. / Commercial S. Dwy.	SBL	1	76	184	PM	184	**150**	60	57
23	Bedford Cyn. Rd. / Commercial Main Dwy.	SBL	1	174	281	PM	281	**200**	180	195

[1] Queue length calculated using SimTraffic.

[2] Existing/Proposed length of storage. Existing = 100; Proposed = **100**

[3] Review of SimTraffic simulation results indicate that the turn lane queue is anticipated to clear in a timely manner and that the provided pocket length is adequate.

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7.0 VEHICLE MILES TRAVELED (VMT)

The California Environmental Quality Act (CEQA) procedures for determination of transportation impacts have recently changed to an evaluation of Vehicle Miles Traveled (VMT) rather than vehicle delay or level of service, due to Senate Bill 743 (SB 743). The City of Corona VMT Analysis Guidelines provide a structure for evaluating VMT on a project level basis. Vehicle delay and level of service are still used in Corona traffic studies, as presented in earlier sections of this traffic study.

7.1 CORONA VMT ANALYSIS GUIDELINES

The Corona VMT Analysis Guidelines (Fehr & Peers, January 2019) recommend a VMT assessment procedure that is consistent with the Western Regional Council of Governments (WRCOG). Projects are first screened to determine if a VMT analysis is required. If a Project has the potential to reduce VMT/SP, a VMT impact is not anticipated.

Consistency with the SCAG RTP/SCS is reviewed, and an analysis is necessary if the Project is inconsistent with the RTP/SCS. The Project area is screened to determine if it is in a Transit Priority Area or High Quality Transit Corridor. Local serving retail Projects of less than 50,000 square feet and neighborhood schools are not anticipated to cause VMT impacts. Projects in low VMT-generating TAZs may not require VMT analysis.

Per the Corona General Plan VMT Assessment, Corona residents on average travel 30 VMT per weekday. Projects that are consistent with the General Plan can tier off the General Plan EIR and therefore do not require VMT analysis.

Based upon the WRCOG VMT Screening Tool, the Project is located within a Low VMT generating TAZ. The total VMT per service population for the TAZ is estimated by WRCOG at 27.78 in comparison to the jurisdictional average of 30.52.

VMT is calculated via the City of Corona traffic model, then compared to Service Population (SP), which consists of Population and Employment. Project VMT is considered a significant impact if the Project generates VMT/SP above the Citywide VMT/SP.

Although the Project is located within a Low VMT generating TAZ, the Project TAZ VMT was extracted from the Corona General Plan traffic model for information purposes. The service population in the TAZ that contains the Project is 6,073 residents and employees. The VMT / service population is approximately 26.6 VMT/SP, which is less than the City of Corona average of approximately 30 VMT/SP.

7.2 PROJECT DESIGN FEATURES

The Project is part of the Arantine Hills Specific Plan, with connectivity and mix of uses providing opportunities for on-site interaction, such as restaurant to hotel, hotel to gas station, residential to child care, etc. The Project incorporates the following strategies to reduce automobile trips and the distance traveled per service population:

1. Increase diversity of land uses - This strategy focuses on inclusion of mixed uses within the project and in consideration of the surrounding area to minimize vehicle travel in terms of both the number of auto trips and the length of those trips. By providing a healthy mix of hotel, restaurant, retail, and day care near one another and the surrounding Arantine Hills Specific Plan residential uses, typical "isolated use" travel characteristics are estimated to be reduced by at least nine percent. An increase in diversity of suburban development can reduce VMT within a single development by as much as 12%.

2. Provide pedestrian network improvements - This strategy focuses on creating pedestrian accommodations within the project and connecting to nearby destinations. The backbone plan of pathways and bike routes for Arantine Hills provides an integrated sidewalk and trails system that conveniently links the Bedford Marketplace site to community facilities, residential neighborhoods, and parks. The VMT reduction due to the provision of a compete pedestrian network is up to 5.7%.

3. Provide traffic calming measures and low-stress bicycle network improvements - Multi-purpose trails (Off road paved trails for pedestrians and bicyclist) are located on the north side of Bedford Canyon Road, the east side of Hudson House Drive, and the south side of Clementine Way where public uses can be conveniently accessed by both visitors and residents. This design approach safely accommodates travel by those bicycling in a traditional manner, as well as e-bikes (and e-scooters) which extend the effective range of travel on the bicycle network and enhance the effectiveness of this strategy. Providing accommodations for bicycle facilities results in a potential VMT reduction of 1.7%.

7.3 PROJECT EMPLOYMENT AND VMT ESTIMATES

Project employment information was provided by the Client and is provided in Appendix "7.1". Approximately 582 jobs (including 240 temporary and 342 permanent positions) are anticipated for Bedford Marketplace. The previous approval consists of approximately 80,000 square feet of retail, which accounts for approximately 320 employees (based upon an average of 4 employees per tsf of gross floor area).

Therefore, an increase of approximately 262 jobs will occur with the Project.

The Project mix of land uses (including hotel, retail, and service-oriented uses) is anticipated to encourage trip capture on-site, resulting in a lower than usual VMT. The combination of banking, restaurant, gas, health club, retail, and a day care center in close proximity to residential and hotel uses is expected to capture trips within and near to the site.

As noted above, pathways and bike routes associated with the site provide an integrated sidewalk and trails system that conveniently links the Bedford Marketplace site to community facilities, residential neighborhoods, and parks. The Project is located within a Low VMT generating TAZ, with a VMT / service population between 26.6 and 27.8 VMT/SP, which is less than the City of Corona average of approximately 30 VMT/SP.

The VMT / SP associated with the Project could potentially fall within the range of approximately 26.6 to 31.5, but the Project location, mix of uses, and effectiveness of the

design features support a conservative estimate of 29 VMT / SP. The resulting total Project VMT is approximately 7,598 annual vehicle miles traveled for the 262 employees added by the Project, which is less than the City average per SP and considered a less than significant impact based upon City criteria.

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8.0 FINDINGS AND CONCLUSIONS

This study assesses the traffic circulation of the proposed Bedford Marketplace which is an expansion of commercial development area adjacent to Arantine Hills. The conclusions and recommendations are summarized below.

- Based on the currently approved commercial trip generation in the Arantine Hills Traffic Assessment (November 2018), the Project is anticipated to generate an additional 2,061 external trips per day with 281 AM peak hour external trips and 285 PM peak hour external trips.
- For Interim Year (2021) conditions, the improvements under construction at or near the Cajalco Road / I-15 Interchange area are assumed to be completed. No additional off-site intersections are anticipated to operate at unacceptable level of service, beyond those intersections previously identified under existing conditions with traffic generated by the Project.
- For Horizon Year 2035 With Project Conditions, there are no new intersections anticipated to operate at deficient level of service, beyond the intersections identified under Without Project Conditions.
- Access in and out of Bedford Marketplace occurs at three existing driveways along Bedford Canyon Road south of Eagle Glen Parkway/Cajalco Road. The northerly driveway is limited to right-in right-out (RIRO) conditions, without an opening of the median on Bedford Canyon Road. It serves as a convenient exit for vehicles leaving the Gas Station and Automated Car Wash, bound for Eagle Glen Parkway/Cajalco Road. The RIRO driveway also accommodates entering vehicles from northbound on Bedford Canyon Road.
- The main Bedford Marketplace driveway is located at a mid-point along the site frontage to Bedford Canyon Road. It is a full access location, serving left and right turns to and from Bedford Canyon Road with traffic signal control. With expansion of commercial uses at the Project site, the existing southbound left turn lane serving the main Bedford Marketplace driveway is recommended to be extended to provide 200 feet of vehicle queuing.
- The southerly Bedford Marketplace driveway is also a full access location, serving left and right turns to and from Bedford Canyon Road with cross-street stop sign control of the exiting vehicles. At this location, the existing southbound left turn lane is recommended to be extended to provide 150 feet of vehicle queuing with the expansion of commercial uses at the Project site.
- An efficient network of on-site driveways provides connectivity to all access points and facilitates the internal flow of activity between the variety of Project land uses.
- The Project mix of land uses (including hotel, retail, and service-oriented uses) is anticipated to encourage trip capture on-site, resulting in a lower than usual VMT per

service population (SP). The Project is also located within a Low VMT generating traffic analysis zone (TAZ), with a VMT / service population between 26.6 and 27.8 VMT/SP.

- The VMT / SP associated with the Project could potentially fall within the range of approximately 26.6 to 31.5, but the Project location, mix of uses, and effectiveness of the design features support a conservative estimate of 29 VMT / SP. The resulting total Project VMT is approximately 7,598 for the 262 employees added by the project, which is less than the City average per SP and considered a less than significant impact based upon City criteria.

8.1 PROJECT FAIR SHARE CALCULATIONS

The project proponent shall participate in the City of Corona Development Impact Fee Program and the Western Riverside Council of Governments Transportation Uniform Mitigation Fee Program, with appropriate credits for overlapping participation in off-site improvements (to be determined by the City of Corona).

The City of Corona Traffic Impact Study Guidelines provide a formula for estimating the project fair share percentages based on average intersection delay. The percentage of fair share for the project shall be calculated at each location as the ratio of the increase in delay from project trips divided by the difference between total delay (including) and delay at acceptable Level of Service. In addition, for non-master planned facilities where there is no reasonable expectation that future development will significantly impact the facility, the project will be responsible for 100% of the mitigation cost and "fair share" will not apply. The following equation is used to calculate the project fair share percentage:

$$\text{Project Fair Share \%} = \frac{\text{Project Only Delay}}{\text{(Total Delay "with project" – Max Acceptable Delay Traffic)}}$$

The volume-based share calculation results are based on both the project percentage of total traffic (Project Only Traffic / Horizon Year With Project Traffic) and project percentage of new traffic (Project Only Traffic / Total New Traffic). Table 8-1 present the Project peak hour fair share calculations using this procedure.

Study area intersection improvement measures for each analysis scenario are shown on Exhibit 8-1. This summary exhibit provides an overview of intersection geometrics by scenario / timeframe. Exhibit 8-1 identifies improvements that would allow the study intersections to operate at acceptable levels of service with the project and with cumulative growth, in addition to improvements for the new project access connections. The proposed Bedford Canyon Road median design with Project left turn pockets is illustrated on Exhibit 8-2.

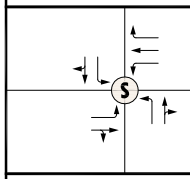
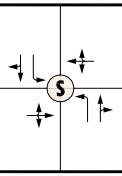
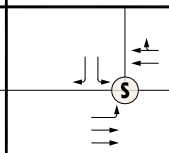
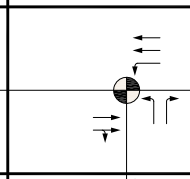
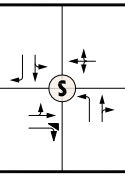
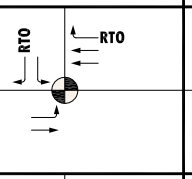
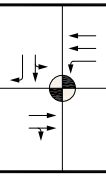
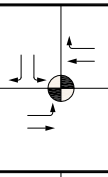
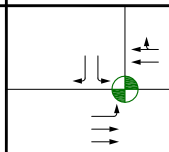
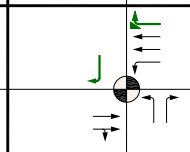
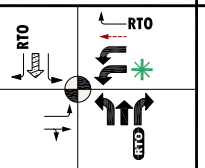
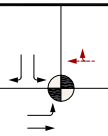
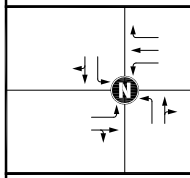
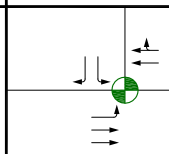
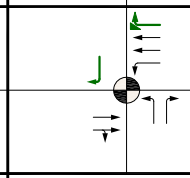
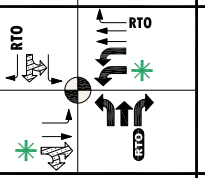
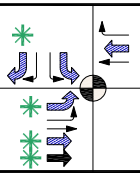
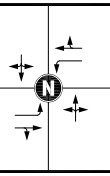
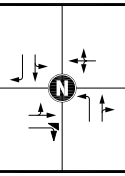
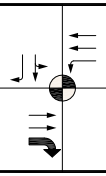
TABLE 8-1: HORIZON YEAR 2035 WITH PROJECT CONDITIONS WITH IMPROVEMENTS
FAIR SHARE PERCENTAGES FOR VARIOUS SCENARIOS

ID	Intersection	Funding Source	Traffic Control[9]	Acceptable LOS & Delay Criteria[3,4]		Without Project[5,8] (NP)	Arantine Hills SP Project Responsibility[1]	With Project[2] (Expansion above the approved 80tsf Bedford Marketplace)			
				LOS	Delay (AD)			With Project[5,8] (WP)	Project Only[6] (P)	Project Fair Share Calculations[7]	Project Share
1	Masters Dr. / California Av.	DIF									
	• Delay										
	- AM Peak Hour		AWS	C	25.0	184.1	**64%**	186.3	2.2	1%	**6%**
	- PM Peak Hour		AWS	C	25.0	55.5		57.6	2.1	6%	
2	Masters Dr. / Bennett Av.										
	• Delay										
	- AM Peak Hour		AWS	C	25.0	10.5	**32%**	10.9	0.4	-3%	**23%**
	- PM Peak Hour		AWS	C	25.0	34.8		37.7	2.9	23%	
5	Bedford Cyn. Rd. / Georgetown Dr.	DIF									
	• Delay										
	- AM Peak Hour		AWS	C	25.0	25.5	**100%**	26.7	1.2	71%	**71%**
	- PM Peak Hour		AWS	C	25.0	21.6		24.7	3.1	Less than -100%	
6	Bedford Cyn. Rd. / Eagle Glen Pkwy.										
	• Delay										
	- AM Peak Hour		TS	D	55.0	39.9	**100%**	48.8	8.9	-144%	**N/A**
	- PM Peak Hour		TS	D	55.0	46.6		54.9	8.3	Less than -100%	
7	I-15 SB Ramps / El Cerrito Rd.										
	• Delay										
	- AM Peak Hour		TS	D	55.0	63.4	**58%**	64.1	0.7	8%	**8%**
	- PM Peak Hour		TS	D	55.0	63.9		64.0	0.1	1%	
11	Grand Oaks / Cajalco Rd.										
	• Delay										
	- AM Peak Hour		TS	D	55.0	41.7	**N/A**	43.2	1.5	-13%	**N/A**
	- PM Peak Hour		TS	D	55.0	37.4		37.7	0.3	-2%	
12	Temescal Cyn. Rd. / Cajalco Rd.										
	• Delay										
	- AM Peak Hour		TS	D	55.0	60.8	**91%**	61.5	0.7	11%	**11%**
	- PM Peak Hour		TS	D	55.0	103.8		104.7	0.9	2%	
15	Bedford Cyn. Rd. / Hudson House Dr.										
	• Delay										
	- AM Peak Hour		RDB	C	25.0	4.9	**100%**	5.3	0.4	-2%	**N/A**
	- PM Peak Hour		RDB	C	25.0	5.9		6.2	0.3	-2%	
18	Masters Dr. / Christopher Ln.										
	• Delay (With Roundabout)										
	- AM Peak Hour		AWS	C	25.0	41.6	**27%**	43.7	2.1	11%	**11%**
	- PM Peak Hour		AWS	C	25.0	106.7		111.4	4.7	5%	
19	Via Castilla St. / Masters Dr.										
	• Delay (With Roundabout)										
	- AM Peak Hour		AWS	C	25.0	16.0	**100%**	16.8	0.8	-10%	**17%**
	- PM Peak Hour		AWS	C	25.0	45.6		49.7	4.1	17%	
20	Morales Wy. / Masters Dr.										
	• Delay (With Roundabout)										
	- AM Peak Hour		AWS	C	25.0	17.2	**100%**	18.3	1.1	-16%	**17%**
	- PM Peak Hour		AWS	C	25.0	52.9		58.5	5.6	17%	

1 Approved Project Fair Share Source: Arantine Hills Modified Project Traffic Study (September 2015). Prepared by Urban Crossroads, Inc.
2 Project Delay Source: Bedford Marketplace Traffic Study (September 2019). Prepared by Urban Crossroads, Inc.
3 Study area intersection Level of Service threshold as presented in Section 4.7 of this report.
4 Acceptable intersection vehicle delay based on the LOS standards shown in Table 4-1 and Table 4-2.
5 Appendix 6.1 & 6.2 include intersection LOS Without Improvements
6 Project only average intersection delay increase (With Project - Without Project).
7 Project Fair Share Calculation based on the City of Corona Traffic Study Guidelines: [Project Only/(With Project - Acceptable Delay)]
8 Improvements are included for intersections within Arantine Hills Specficic Plan (Int. #6 and #15). Therefore, intersection delay is not anticipated to exceed LOS Threshold.
9 TS = Traffic Signal; CSS = Cross-street Stop; AWS = All-Way Stop; RDB = Roundabout

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EXHIBIT 8-1 (1 OF 3): INTERSECTION LANE GEOMETRY AND TRAFFIC CONTROL, BY SCENARIO

1 MASTERS DR. & CALIFORNIA DR.	2 MASTERS DR. & BENNETT AV.	3 MASTERS DR. & EAGLE GLEN PKWY.	4 BEDFORD CYN. RD. & EL CERRITO RD.	5 BEDFORD CYN. RD. & GEORGETOWN DR.	6 BEDFORD CYN. RD. & EAGLE GLEN PKWY.	7 I-15 SB RAMPS & EL CERRITO RD.	8 I-15 SB RAMPS & CAJALCO RD.	
								EXISTING (2017/2018)
SAME AS EXISTING	***SAME AS EXISTING***			***SAME AS EXISTING***		***SAME AS EXISTING***		IY (2021) WITHOUT IMPROVEMENTS LANE CONFIGURATION
	***NO IMPROVEMENTS***			***NO IMPROVEMENTS***		***NO IMPROVEMENTS***		IY (2021) WITHOUT PROJECT WITH IMPROVEMENTS
SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENT		***NO IMPROVEMENTS***	***NO IMPROVEMENTS***		***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***		***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	HY 2035 WITHOUT PROJECT WITH IMPROVEMENTS
SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENT	***NO IMPROVEMENTS***	***NO IMPROVEMENTS***	***NO IMPROVEMENTS***	***NO IMPROVEMENTS***	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	***NO IMPROVEMENTS***	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	IY (2021) WITH PROJECT WITH IMPROVEMENTS
SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENT	***SAME AS HY 2035 WITHOUT PROJECT IMPROVEMENT***	***NO IMPROVEMENTS***	***NO IMPROVEMENTS***	***SAME AS HY 2035 WITHOUT PROJECT IMPROVEMENT***	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	***SAME AS HY 2035 WITHOUT PROJECT IMPROVEMENT***	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	HY 2035 WITH PROJECT WITH IMPROVEMENTS

LEGEND:

- = EXISTING TRAFFIC SIGNAL
- = APPROVED TRAFFIC SIGNAL IMPROVEMENT
- = RECENTLY INSTALLED TRAFFIC SIGNAL
- = EXISTING ALL WAY STOP

- = EXISTING LANE
- = EXISTING FREE-RIGHT TURN LANE
- = RECENTLY BUILT LANE IMPROVEMENT
- = LANE REDUCTION/CONFIGURATION DURING INTERCHANGE CONSTRUCTION
- = APPROVED (CURRENT PHASE) LANE IMPROVEMENT
- = APPROVED (CURRENT PHASE) PLANNED LANE IMPROVEMENT
- = APPROVED (CURRENT PHASE) LANE RESTRIPING

RTO = EXISTING RIGHT TURN OVERLAP

RTO = APPROVED (CURRENT PHASE) RIGHT TURN OVERLAP PHASING IMPROVEMENT

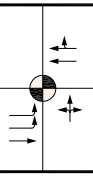
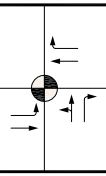
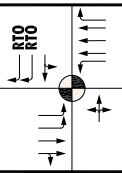
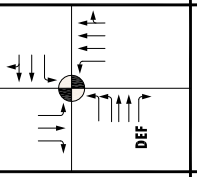
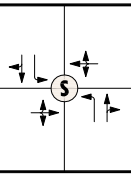
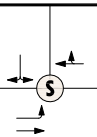
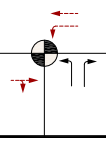
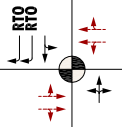
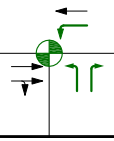
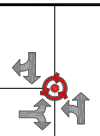
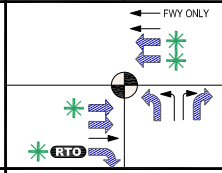
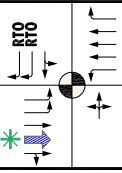
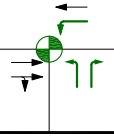
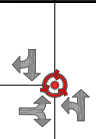
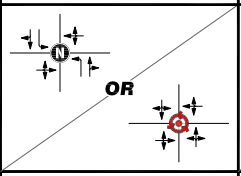
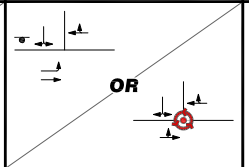
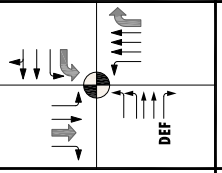
= APPROVED (CURRENT PHASE) PROVIDE RECEIVING LANE

NOTE: "APPROVED" IMPROVEMENTS ARE CONSISTENT WITH THE IMPROVEMENTS IDENTIFIED IN THE ARANTINE HILLS MODIFIED TRAFFIC STUDY (SEPT. 2015).

12554 - 003_improvements.dwg

URBAN CROSSROADS

EXHIBIT 8-1 (2 OF 3): INTERSECTION LANE GEOMETRY AND TRAFFIC CONTROL, BY SCENARIO

9 I-15 NB RAMPS & EL CERRITO RD.	10 I-15 NB RAMPS & CAJALCO RD.	11 GRAND OAKS & CAJALCO RD.	12 TEMESCAL CYN. RD. & CAJALCO RD.	13 CLEMENTINE WY. & EAGLE GLEN PKWY.	15 BEDFORD CYN. RD. & HUDSON HOUSE DR.	18 MASTERS DR. & CHRISTOPHER LN.	19 VIA CASTILLA ST. & MASTERS DR.	
				***FUTURE***	***FUTURE***			EXISTING (2017/2018)
SAME AS EXISTING			***SAME AS EXISTING***			***SAME AS EXISTING***	***SAME AS EXISTING***	IY (2021) WITHOUT IMPROVEMENTS LANE CONFIGURATION
NO IMPROVEMENTS			***NO IMPROVEMENTS***					IY (2021) WITHOUT PROJECT WITH IMPROVEMENTS
NO IMPROVEMENTS	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***		***NO IMPROVEMENTS***	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	HY 2035 WITHOUT PROJECT WITH IMPROVEMENTS
NO IMPROVEMENTS	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	***NO IMPROVEMENTS***	***NO IMPROVEMENTS***	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	IY (2021) WITH PROJECT WITH IMPROVEMENTS
NO IMPROVEMENTS	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	***SAME AS HY 2035 WITHOUT PROJECT IMPROVEMENTS***	***NO IMPROVEMENTS***	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	HY 2035 WITH PROJECT WITH IMPROVEMENTS

LEGEND:

- = EXISTING TRAFFIC SIGNAL
- = APPROVED TRAFFIC SIGNAL IMPROVEMENT
- = RECENTLY INSTALLED TRAFFIC SIGNAL
- = EXISTING ALL WAY STOP
- = STOP SIGN CONTROL
- = APPROVED ROUNDABOUT IMPROVEMENT

- = EXISTING LANE
- = EXISTING FREE-RIGHT TURN LANE
- = RECENTLY BUILT LANE IMPROVEMENT
- = LANE REDUCTION/CONFIGURATION DURING INTERCHANGE CONSTRUCTION
- = APPROVED (CURRENT PHASE) LANE IMPROVEMENT
- = APPROVED (CURRENT PHASE) PLANNED LANE IMPROVEMENT
- = APPROVED (CURRENT PHASE) LANE RESTRIPING

RTO = EXISTING RIGHT TURN OVERLAP

RTO = APPROVED (CURRENT PHASE) RIGHT TURN OVERLAP PHASING IMPROVEMENT

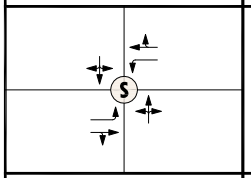
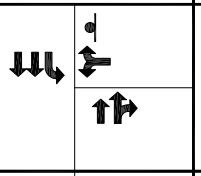
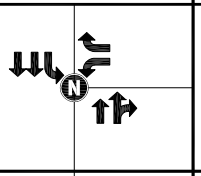
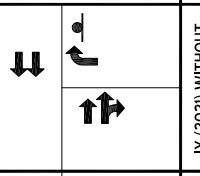
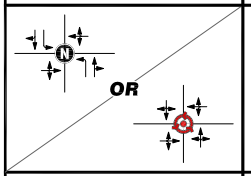
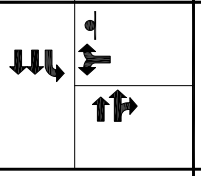
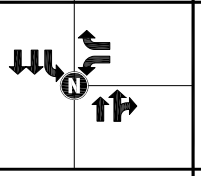
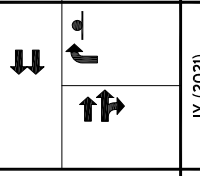
= APPROVED (CURRENT PHASE) PROVIDE RECEIVING LANE

NOTE: "APPROVED" IMPROVEMENTS ARE CONSISTENT WITH THE IMPROVEMENTS IDENTIFIED IN THE ARANTINE HILLS MODIFIED TRAFFIC STUDY (SEPT. 2015).

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URBAN CROSSROADS

EXHIBIT 8-1 (3 OF 3): INTERSECTION LANE GEOMETRY AND TRAFFIC CONTROL, BY SCENARIO

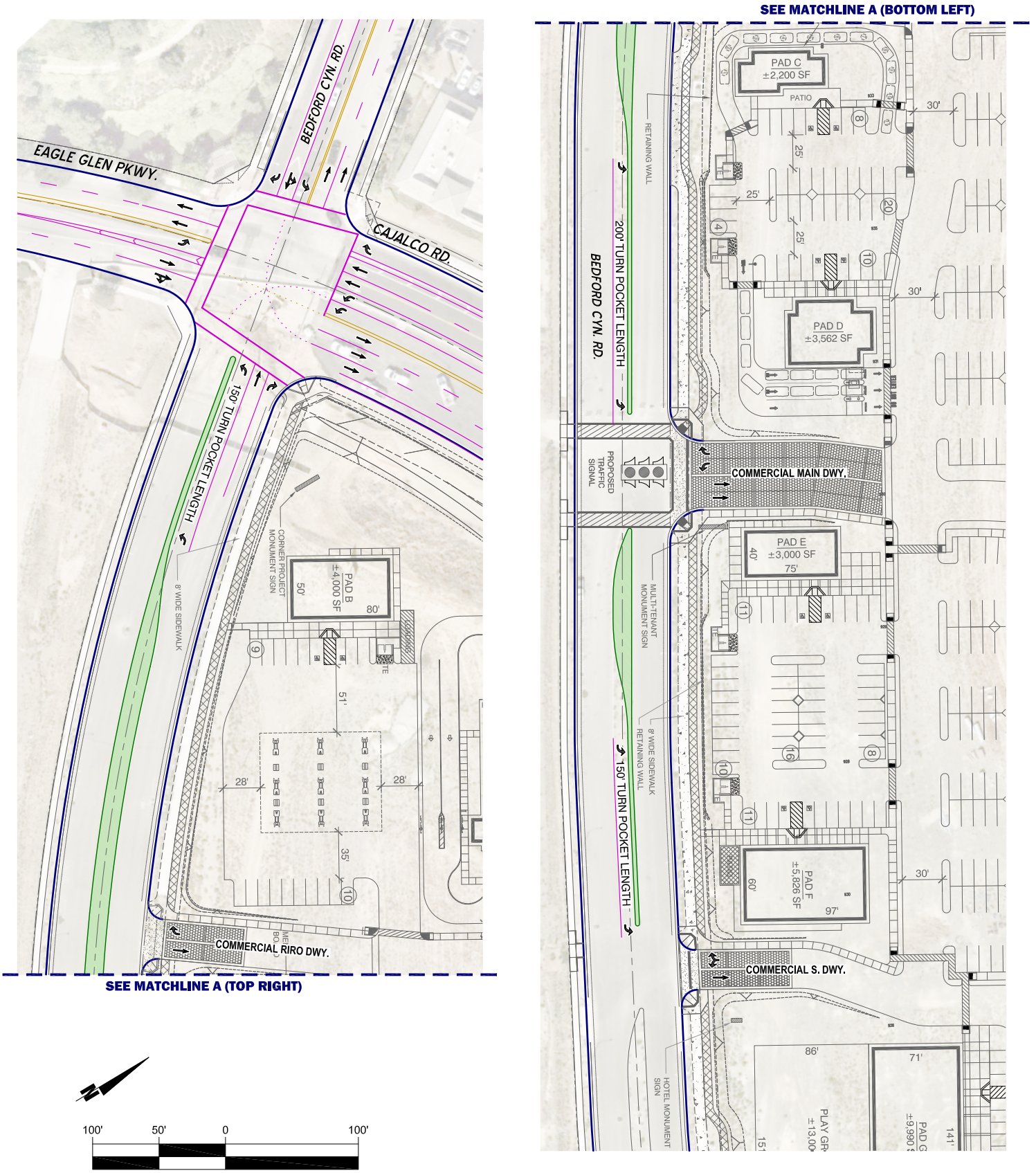
20 MORALES WY. & MASTERS DR.	22 BEDFORD CYN. RD. & COMMERCIAL S. DWY.	23 BEDFORD CYN. RD. & COMMERCIAL MAIN DWY.	24 BEDFORD CYN. RD. & COMMERCIAL (RIRO) DWY.	
	***FUTURE***	***FUTURE***	***FUTURE***	EXISTING (2017/2018)
SAME AS EXISTING				IY (2021) WITHOUT IMPROVEMENTS LANE CONFIGURATION
				IY (2021) WITHOUT PROJECT WITH IMPROVEMENTS
SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	HY 2035 WITHOUT PROJECT WITH IMPROVEMENTS
SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	IY (2021) WITH PROJECT WITH IMPROVEMENTS
SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	***SAME AS IY (2021) WITHOUT PROJECT IMPROVEMENTS***	HY 2035 WITH PROJECT WITH IMPROVEMENTS

LEGEND:

- = EXISTING TRAFFIC SIGNAL
- = APPROVED TRAFFIC SIGNAL IMPROVEMENT
- = EXISTING ALL WAY STOP
- = STOP SIGN CONTROL
- = APPROVED ROUNDABOUT IMPROVEMENT
- = EXISTING LANE
- = APPROVED (CURRENT PHASE) LANE IMPROVEMENT

NOTE: "APPROVED" IMPROVEMENTS ARE CONSISTENT WITH THE IMPROVEMENTS IDENTIFIED IN THE ARANTINE HILLS MODIFIED TRAFFIC STUDY (SEPT. 2015).

EXHIBIT 8-2: BEDFORD CANYON ROAD MEDIAN DESIGN WITH PROJECT LEFT TURN POCKETS



100' 50' 0 100'

SCALE: 1" = 100'

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URBAN CROSSROADS

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APPENDIX 1.1:

I-15 / CAJALCO INTERCHANGE AREA IMPROVEMENT PLANS

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	36.4/37.6		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — GARY HANSEN — No. 26543 — Exp. 3-31-16 — CIVIL — STATE OF CALIFORNIA

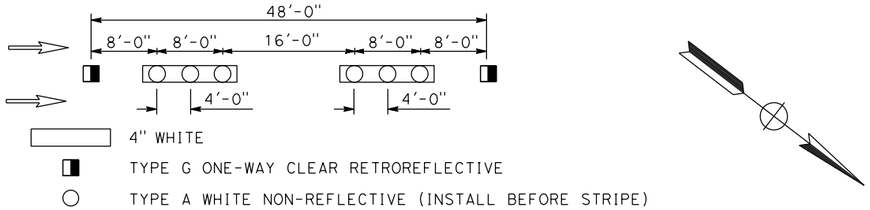
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

LIN CONSULTING, INC.
1432 EDINGER AVE
SUITE 230
TUSTIN, CA 92780

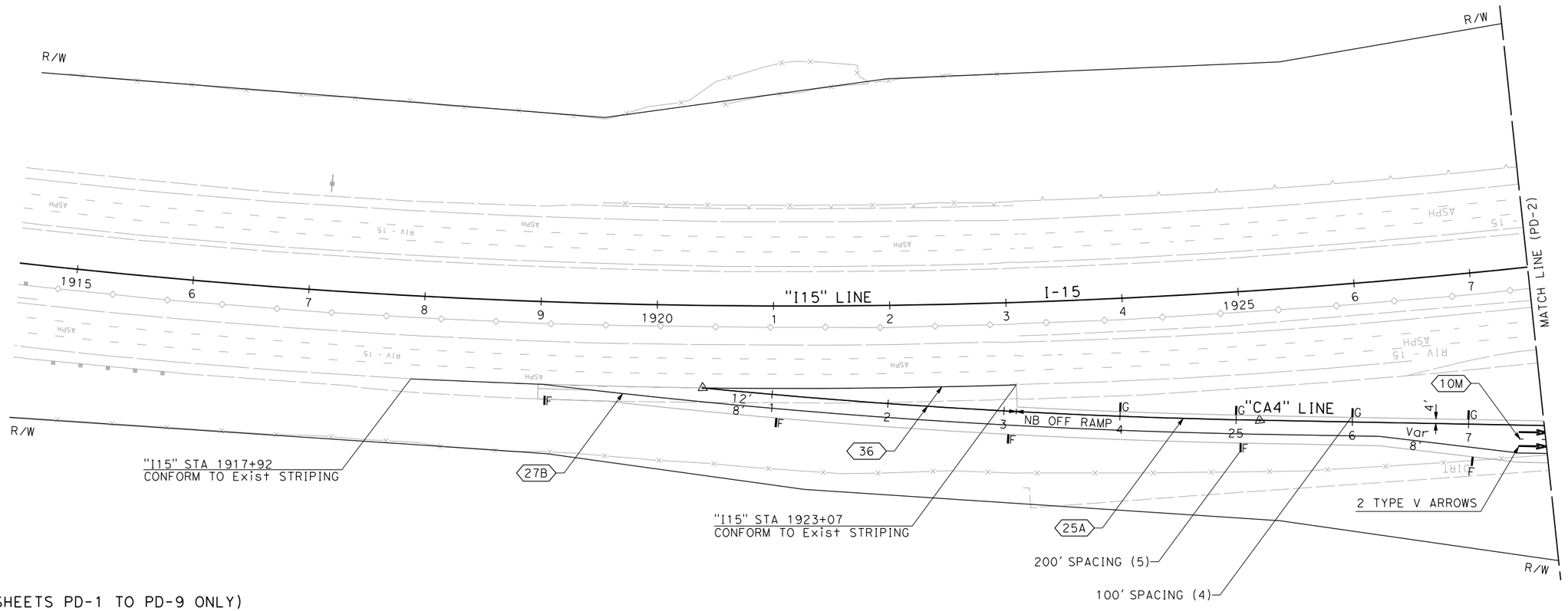
CITY OF CORONA
400 S. VICENTIA Ave
CORONA, CA 92882

GENERAL NOTES: (FOR SHEETS PD-1 TO PD-9 ONLY)

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. REMOVE ALL CONFLICTING TRAFFIC STRIPES, PAVEMENT MARKINGS AND PAVEMENT MARKERS.
3. DIMENSIONS ALONG MEDIAN BARRIER ARE GIVEN TO FACE OF BARRIER, DIMENSIONS ALONG CURB AND GUTTER ARE GIVEN TO FACE OF CURB.
4. ALL TRAFFIC STRIPES AND PAVEMENT MARKINGS ARE THERMOPLASTIC UNLESS OTHERWISE NOTED.
5. PLACE ARROWS 8' BEFORE LIMIT LINE/CROSSWALK.
6. EXACT LOCATION OF PAVEMENT MARKINGS SHALL BE DETERMINED BY THE ENGINEER.
7. REFRESH ALL STRIPING ON I-15 AFFECTED DURING STAGE CONSTRUCTION.



DETAIL 10M
NO SCALE



LEGEND: (FOR SHEETS PD-1 TO PD-9 ONLY)

XX	PAVEMENT DELINEATION DETAIL No.	◊	DIAMOND SYMBOL PAVEMENT MARKING (SEE CALTRANS STD PLAN A24C)
A	12" SOLID WHITE LINE	H	"HOV" PAVEMENT MARKING
	CHANGE IN PAVEMENT DELINEATION DETAIL	L	"LANE" (96") PAVEMENT MARKING (SEE CALTRANS STD PLAN A24E)
F	TYPE F DELINEATOR (CLASS 1)	S	"SIGNAL" PAVEMENT MARKING
G	TYPE G DELINEATOR (CLASS 1)	A	"AHEAD" PAVEMENT MARKING
	BIKE LANE ARROW (SEE CALTRANS STD PLAN A24A)	F	"FWY" PAVEMENT MARKING
L	"LANE" (48") PAVEMENT MARKING (SEE CALTRANS STD PLAN A24D)	O	"ONLY" PAVEMENT MARKING
B	"BIKE" PAVEMENT MARKING (SEE CALTRANS STD PLAN A24D)		

APPROVED FOR PAVEMENT DELINEATION WORK ONLY
1.1-1

PAVEMENT DELINEATION PLAN

SCALE: 1" = 50'

PD-1

REVISED BY | DATE REVISED
RYAN WALBERT | RAY KOMMIDI
CALCULATED-DESIGNED BY | CHECKED BY
CONSULTANT FUNCTIONAL SUPERVISOR: GARY HANSEN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION | Caltrans

LAST REVISION 00-00-00 | DATE PLOTTED => 6/9/2014 | TIME PLOTTED => 9:22:16 AM

BORDER LAST REVISED 7/2/2010 | USERNAME => rwalbert | DGN FILE => 0800000308ua101 (PD-1).dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 08000003081

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	36.4/37.6		

REGISTERED CIVIL ENGINEER DATE

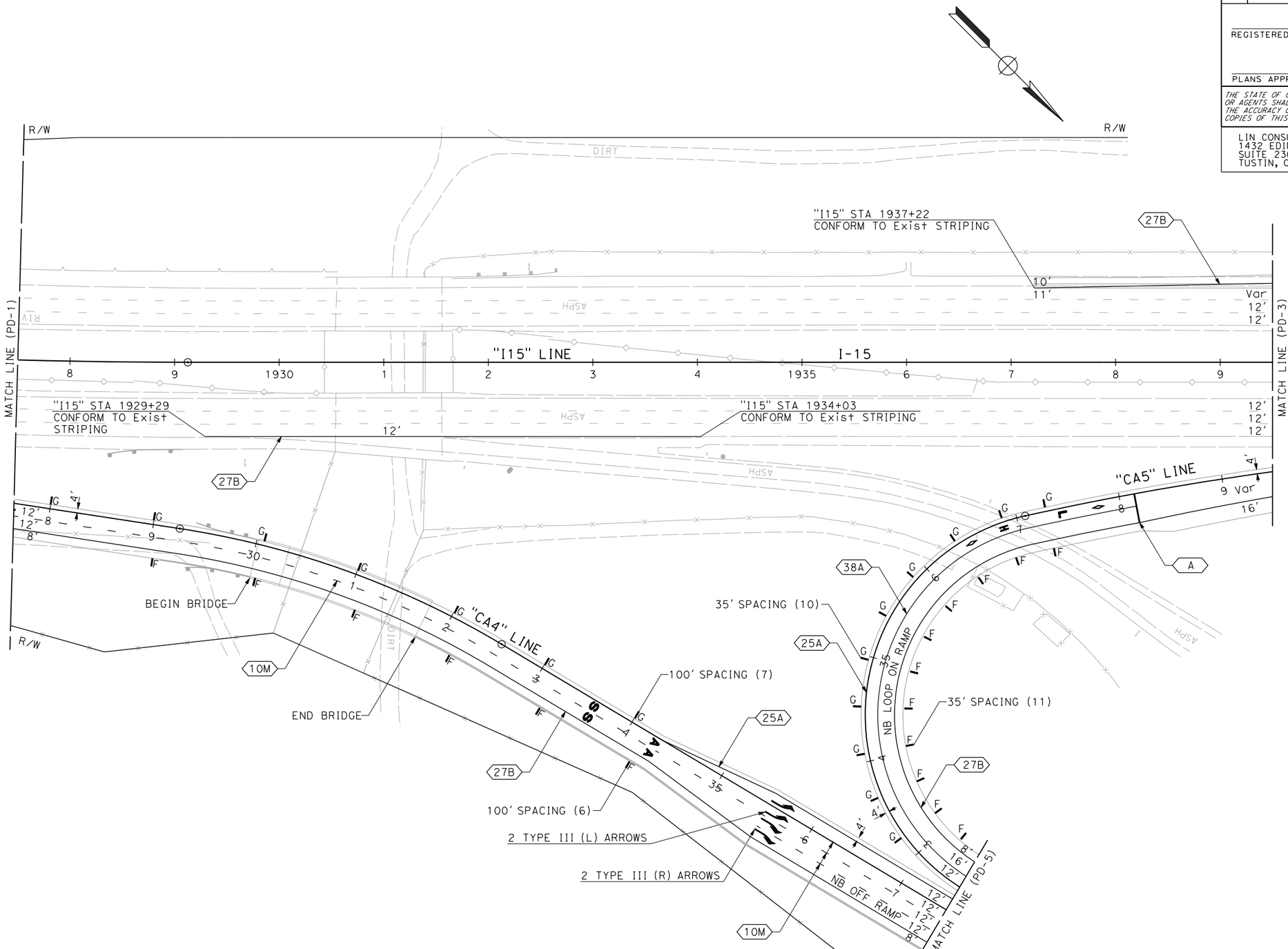
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — GARY HANSEN — No. 26543 — Exp. 3-31-16 — CIVIL — STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

LIN CONSULTING, INC.
1432 EDINGER AVE
SUITE 230
TUSTIN, CA 92780

CITY OF CORONA
400 S. VICENTIA Ave
CORONA, CA 92882



APPROVED FOR PAVEMENT DELINEATION WORK ONLY
1.1-2

PAVEMENT DELINEATION PLAN

SCALE: 1" = 50'

PD-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR: GARY HANSEN

CALCULATED-DESIGNED BY: RYAN WALBERT
CHECKED BY: RAY KOMMIDI

REVISED BY	DATE REVISED

LAST REVISION: 00-00-00
DATE PLOTTED => 6/9/2014
TIME PLOTTED => 9:22:17 AM

BORDER LAST REVISED 7/2/2010

USERNAME => rwalbert
DGN FILE => 0800000308ua102 (PD-2).dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08000003081

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	36.4/37.6		

REGISTERED CIVIL ENGINEER DATE

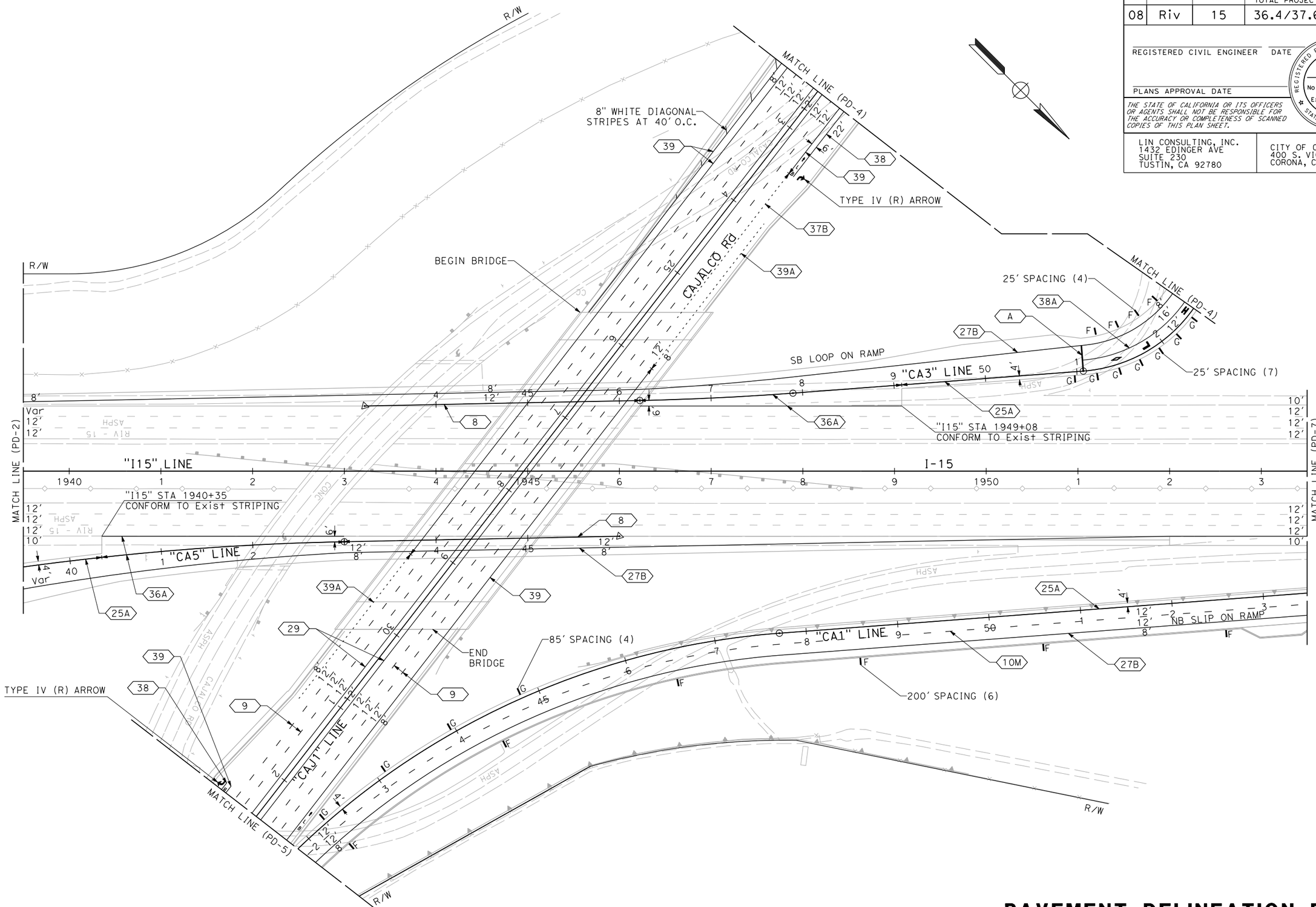
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — GARY HANSEN — No. 26543 — Exp. 3-31-16 — CIVIL — STATE OF CALIFORNIA

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LIN CONSULTING, INC.
1432 EDINGER AVE
SUITE 230
TUSTIN, CA 92780

CITY OF CORONA
400 S. VICENTIA Ave
CORONA, CA 92882



PAVEMENT DELINEATION PLAN

SCALE: 1" = 50'

PD-3

APPROVED FOR PAVEMENT DELINEATION WORK ONLY
1.1-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
CONSULTANT FUNCTIONAL SUPERVISOR: GARY HANSEN
CALCULATED-DESIGNED BY: RYAN WALBERT
CHECKED BY: RAY KOMMIDI
REVISED BY
DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 6/9/2014
TIME PLOTTED => 9:22:18 AM

BORDER LAST REVISED 7/2/2010
USERNAME => rwalbert
DGN FILE => 0800000308ua103 (PD-3).dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0000
PROJECT NUMBER & PHASE 08000003081

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	36.4/37.6		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — GARY HANSEN — No. 26543 — Exp. 3-31-16 — CIVIL — STATE OF CALIFORNIA

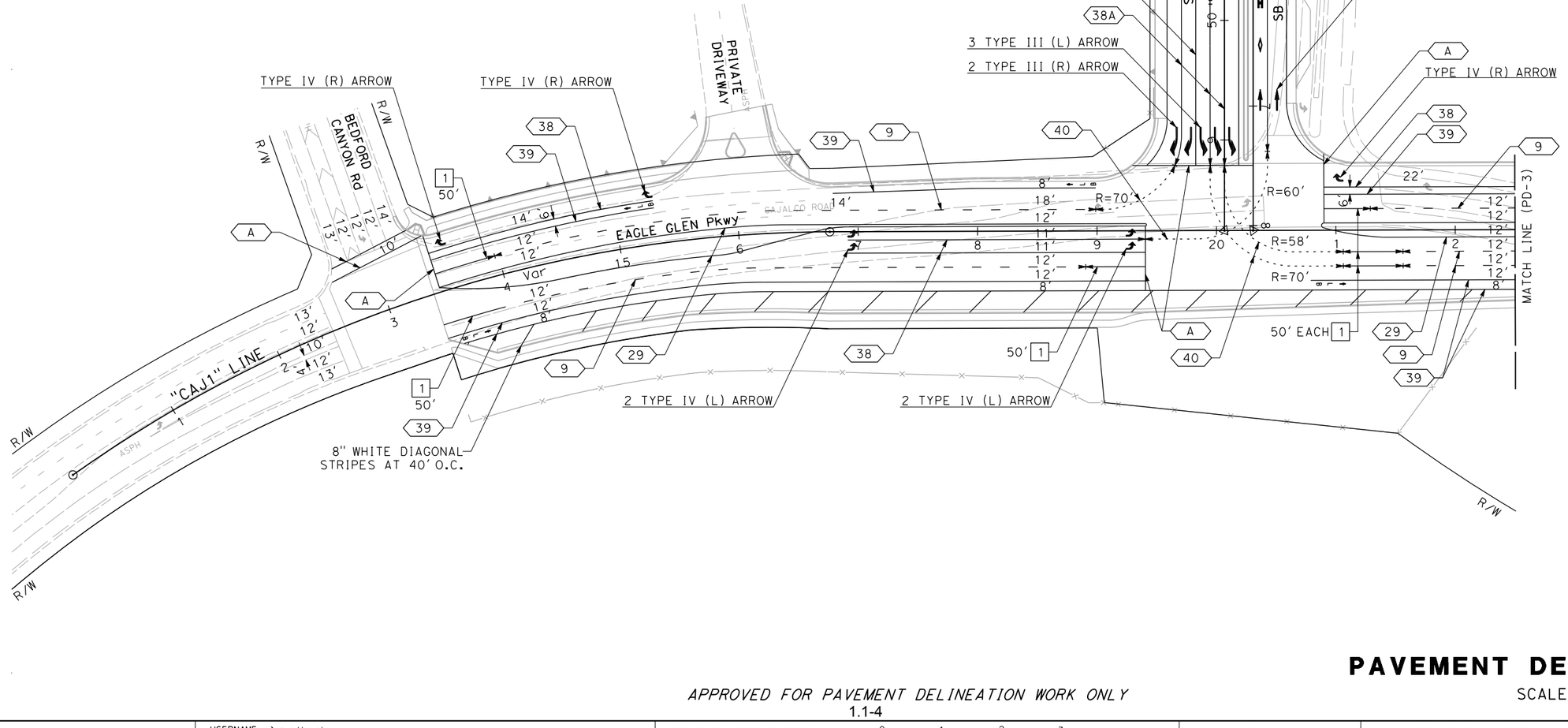
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SUITE 230
TUSTIN, CA 92780

CITY OF CORONA
400 S. VICENTIA Ave
CORONA, CA 92882

CONSTRUCTION NOTES: (FOR THIS SHEET ONLY)

1 INSTALL 4" SOLID WHITE LINE AS SHOWN ON PLAN.



APPROVED FOR PAVEMENT DELINEATION WORK ONLY
1.1-4

PAVEMENT DELINEATION PLAN

SCALE: 1" = 50'

PD-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR: GARY HANSEN

CALCULATED-DESIGNED BY: RYAN WALBERT
CHECKED BY: RAY KOMMIDI

REVISED BY | DATE REVISED

LAST REVISION 00-00-00 | DATE PLOTTED => 6/9/2014 | TIME PLOTTED => 9:22:25 AM

BORDER LAST REVISED 7/2/2010 | USERNAME => rwalbert | DGN FILE => 0800000308ua104 (PD-4).dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 08000003081

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	36.4/37.6		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — GARY HANSEN — No. 26543 — Exp. 3-31-16 — CIVIL — STATE OF CALIFORNIA

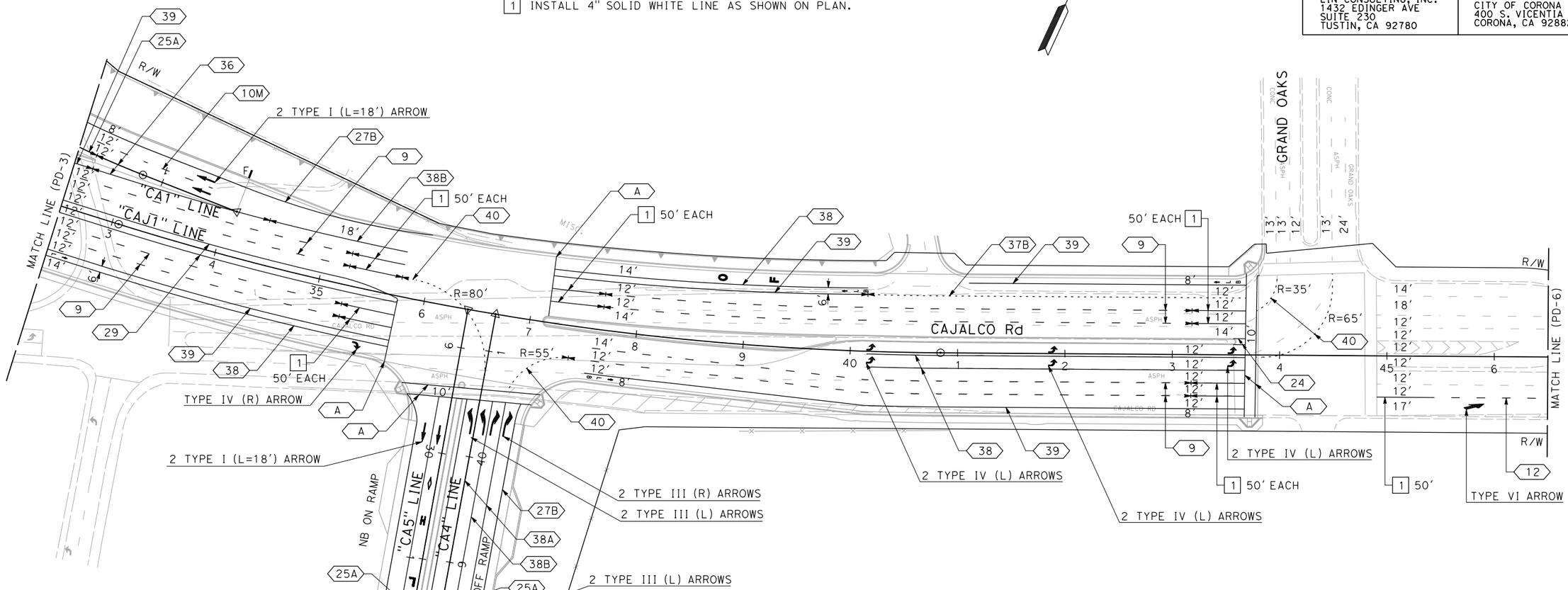
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CITY OF CORONA
400 S. VICENTIA Ave
CORONA, CA 92882

CONSTRUCTION NOTES: (FOR THIS SHEET ONLY)

[1] INSTALL 4" SOLID WHITE LINE AS SHOWN ON PLAN.



APPROVED FOR PAVEMENT DELINEATION WORK ONLY
1.1-5

PAVEMENT DELINEATION PLAN

SCALE: 1" = 50'

PD-5

REVISED BY	DATE REVISED
RYAN WALBERT	RAY KOMMIDI

CALCULATED-DESIGNED BY | CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR: GARY HANSEN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

LAST REVISION 00-00-00 | DATE PLOTTED => 6/9/2014 | TIME PLOTTED => 9:22:26 AM

BORDER LAST REVISED 7/2/2010 | USERNAME => rwalbert | DGN FILE => 0800000308ua105 (PD-5).dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 08000003081

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	36.4/37.6		

REGISTERED CIVIL ENGINEER DATE

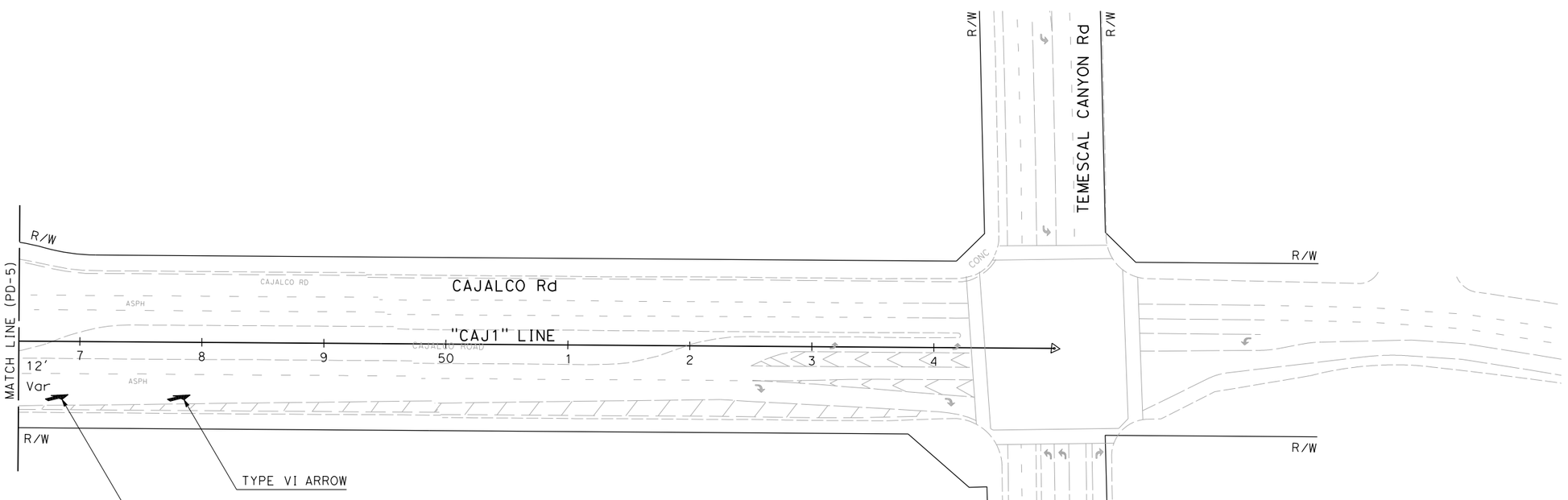
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
GARY HANSEN
No. 26543
Exp. 3-31-16
CIVIL
STATE OF CALIFORNIA

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PAVEMENT DELINEATION PLAN

SCALE: 1" = 50'

PD-6

APPROVED FOR PAVEMENT DELINEATION WORK ONLY
1.1-6

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY: RYAN WALBERT
CHECKED BY: RAY KOMMIDI
CONSULTANT FUNCTIONAL SUPERVISOR: GARY HANSEN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00
DATE PLOTTED => 6/9/2014
TIME PLOTTED => 9:22:27 AM

BORDER LAST REVISED 7/2/2010
USERNAME => rwalbert
DGN FILE => 0800000308ua106 (PD-6).dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0000
PROJECT NUMBER & PHASE 08000003081

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	36.4/37.6		

REGISTERED CIVIL ENGINEER DATE

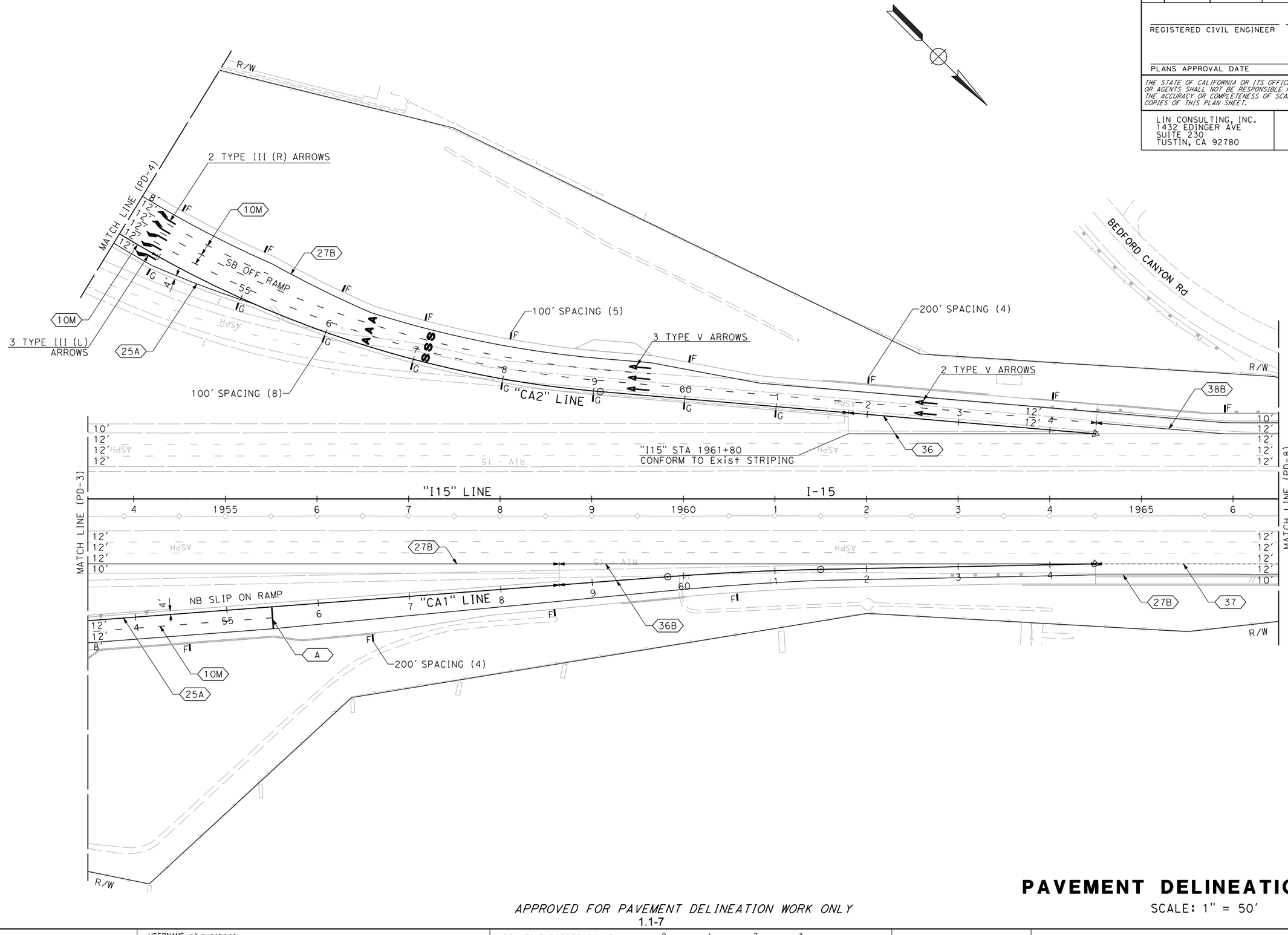
PLANS APPROVAL DATE

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CITY OF CORONA
400 S. VICENTIA Ave
CORONA, CA 92882



APPROVED FOR PAVEMENT DELINEATION WORK ONLY
1.1-7

PAVEMENT DELINEATION PLAN

SCALE: 1" = 50'

PD-7

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR: GARY HANSEN

REVISED BY	DATE REVISED
RYAN WALBERT	
RAY KOMMIDI	

CALCULATED-DESIGNED BY

CHECKED BY

LAST REVISION 00-00-00

DATE PLOTTED => 6/9/2014
TIME PLOTTED => 9:22:32 AM

BORDER LAST REVISED 7/2/2010

USERNAME => rwalbert
DGN FILE => 0800000308ua107 (PD-7).dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08000003081

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	36.4/37.6		

REGISTERED CIVIL ENGINEER DATE

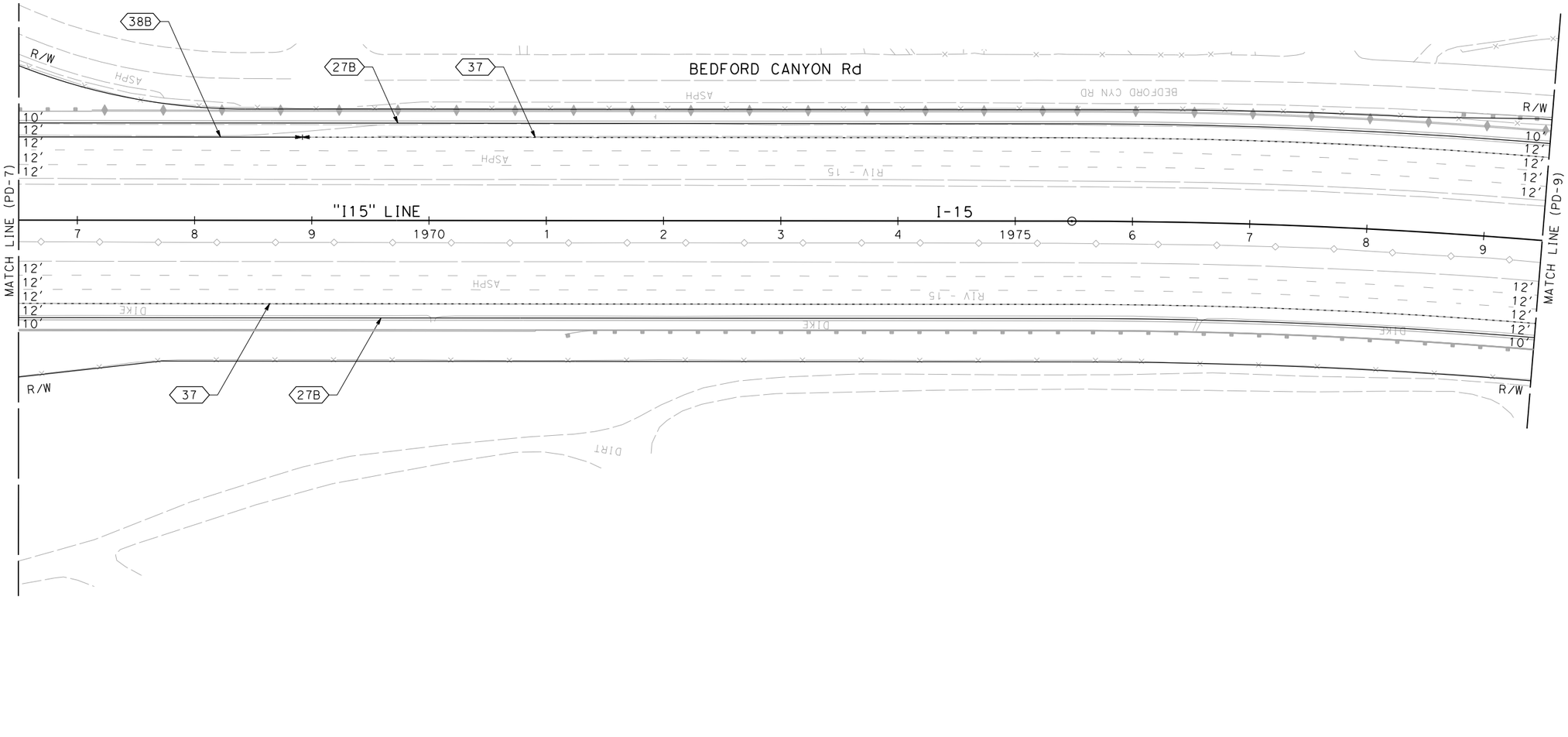
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
GARY HANSEN
No. 26543
Exp. 3-31-16
CIVIL
STATE OF CALIFORNIA

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SUITE 230
TUSTIN, CA 92780

CITY OF CORONA
400 S. VICENTIA Ave
CORONA, CA 92882



APPROVED FOR PAVEMENT DELINEATION WORK ONLY
1.1-8

PAVEMENT DELINEATION PLAN

SCALE: 1" = 50'

PD-8

LAST REVISION 00-00-00 | DATE PLOTTED => 6/9/2014 | TIME PLOTTED => 9:22:33 AM

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION | CONSULTANT FUNCTIONAL SUPERVISOR: GARY HANSEN | CALCULATED-DESIGNED BY: RYAN WALBERT | CHECKED BY: RAY KOMMIDI | REVISED BY | DATE REVISED

BORDER LAST REVISED 7/2/2010 | USERNAME => rwalbert | DGN FILE => 0800000308ua108 (PD-8).dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 08000003081

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	36.4/37.6		

REGISTERED CIVIL ENGINEER DATE

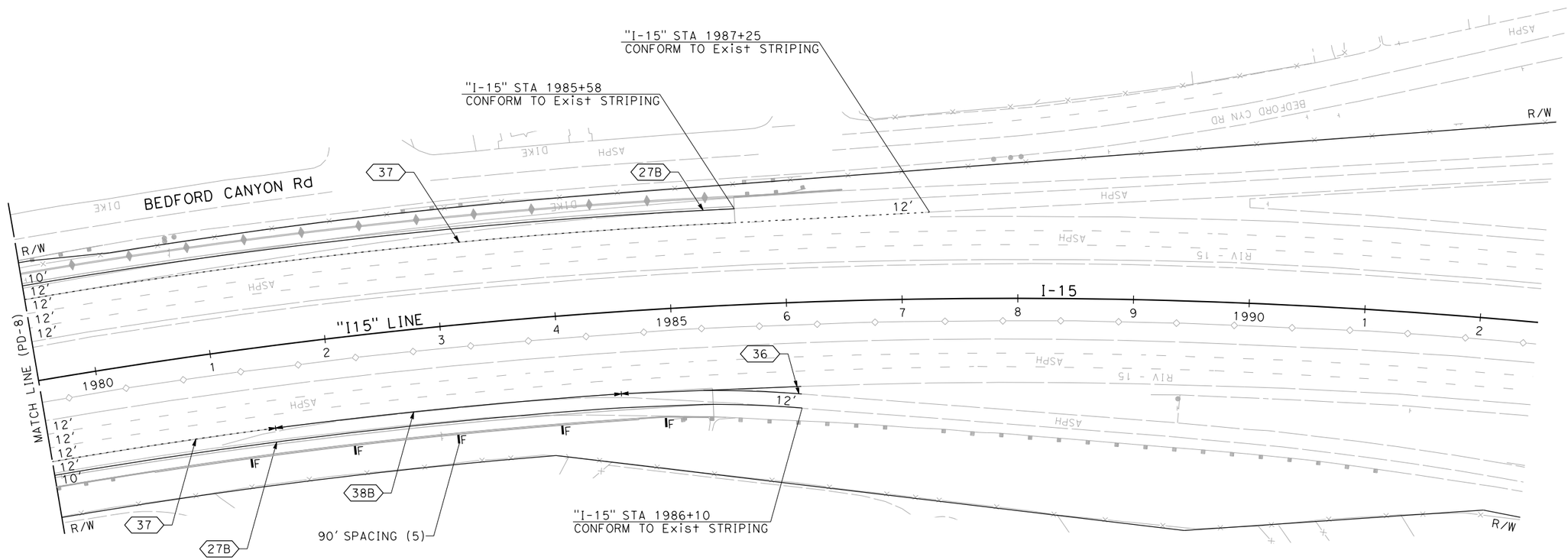
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
GARY HANSEN
No. 26543
Exp. 3-31-16
CIVIL
STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

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SUITE 230
TUSTIN, CA 92780

CITY OF CORONA
400 S. VICENTIA Ave
CORONA, CA 92882



PAVEMENT DELINEATION PLAN

SCALE: 1" = 50'

PD-9

APPROVED FOR PAVEMENT DELINEATION WORK ONLY
1.1-9

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR: GARY HANSEN

CALCULATED-DESIGNED BY: RYAN WALBERT
CHECKED BY: RAY KOMMIDI

REVISED BY | DATE REVISED

LAST REVISION: 00-00-00
DATE PLOTTED => 6/9/2014
TIME PLOTTED => 9:22:34 AM

BORDER LAST REVISED 7/2/2010

USERNAME => rwalbert
DGN FILE => 0800000308ua109 (PD-9).dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08000003081

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APPENDIX 2.1:

TRAFFIC COUNT DATA SHEETS

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Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Corona
N/S: Valencia Road/Masters Drive
E/W: East Upper Drive/California Avenue
Weather: Clear

File Name : 01_COR_Valencia_Masters_Upper_California AM
Site Code : 05118203
Start Date : 3/27/2018
Page No : 1

Groups Printed- Total Volume

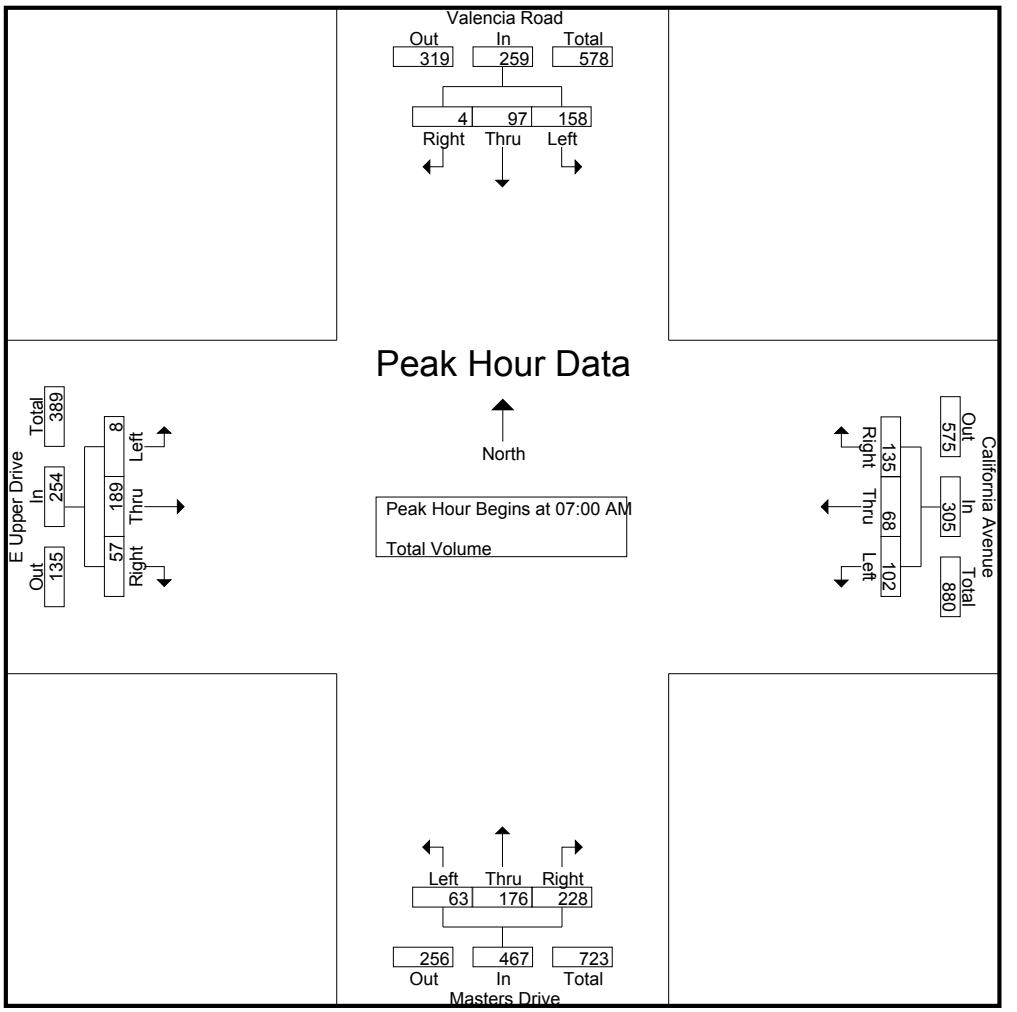
	Valencia Road Southbound				California Avenue Westbound				Masters Drive Northbound				E Upper Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	30	7	0	37	8	7	16	31	20	38	72	130	1	41	10	52	250
07:15 AM	53	27	0	80	16	15	41	72	12	52	80	144	2	71	7	80	376
07:30 AM	41	34	2	77	52	34	70	156	17	62	38	117	4	50	25	79	429
07:45 AM	34	29	2	65	26	12	8	46	14	24	38	76	1	27	15	43	230
Total	158	97	4	259	102	68	135	305	63	176	228	467	8	189	57	254	1285
08:00 AM	12	16	0	28	19	6	8	33	17	24	39	80	0	23	12	35	176
08:15 AM	7	11	0	18	14	11	2	27	10	32	37	79	0	23	11	34	158
08:30 AM	4	11	0	15	14	10	2	26	12	22	41	75	0	28	8	36	152
08:45 AM	8	9	0	17	9	16	2	27	17	11	37	65	0	20	5	25	134
Total	31	47	0	78	56	43	14	113	56	89	154	299	0	94	36	130	620
Grand Total	189	144	4	337	158	111	149	418	119	265	382	766	8	283	93	384	1905
Apprch %	56.1	42.7	1.2		37.8	26.6	35.6		15.5	34.6	49.9		2.1	73.7	24.2		
Total %	9.9	7.6	0.2	17.7	8.3	5.8	7.8	21.9	6.2	13.9	20.1	40.2	0.4	14.9	4.9	20.2	

	Valencia Road Southbound				California Avenue Westbound				Masters Drive Northbound				E Upper Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	30	7	0	37	8	7	16	31	**20**	38	72	130	1	41	10	52	250
07:15 AM	**53**	27	0	**80**	16	15	41	72	12	52	**80**	**144**	2	**71**	7	**80**	376
07:30 AM	41	**34**	**2**	77	**52**	**34**	**70**	**156**	17	**62**	38	117	**4**	50	**25**	79	**429**
07:45 AM	34	29	2	65	26	12	8	46	14	24	38	76	1	27	15	43	230
Total Volume	158	97	4	259	102	68	135	305	63	176	228	467	8	189	57	254	1285
% App. Total	61	37.5	1.5		33.4	22.3	44.3		13.5	37.7	48.8		3.1	74.4	22.4		
PHF	.745	.713	.500	.809	.490	.500	.482	.489	.788	.710	.713	.811	.500	.665	.570	.794	.749

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Corona
N/S: Valencia Road/Masters Drive
E/W: East Upper Drive/California Avenue
Weather: Clear

File Name : 01_COR_Valencia_Masters_Upper_California AM
Site Code : 05118203
Start Date : 3/27/2018
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:15 AM				07:00 AM				07:00 AM			
+0 mins.	30	7	0	37	16	15	41	72	**20**	38	72	130	1	41	10	52
+15 mins.	**53**	27	0	**80**	**52**	**34**	**70**	**156**	12	52	**80**	**144**	2	**71**	7	**80**
+30 mins.	41	**34**	**2**	77	26	12	8	46	17	**62**	38	117	**4**	50	**25**	79
+45 mins.	34	29	2	65	19	6	8	33	14	24	38	76	1	27	15	43
Total Volume	158	97	4	259	113	67	127	307	63	176	228	467	8	189	57	254
% App. Total	61	37.5	1.5		36.8	21.8	41.4		13.5	37.7	48.8		3.1	74.4	22.4	
PHF	.745	.713	.500	.809	.543	.493	.454	.492	.788	.710	.713	.811	.500	.665	.570	.794

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Corona
N/S: Valencia Road/Masters Drive
E/W: East Upper Drive/California Avenue
Weather: Clear

File Name : 01_COR_Valencia_Masters_Upper_California PM
Site Code : 05118203
Start Date : 3/27/2018
Page No : 1

Groups Printed- Total Volume

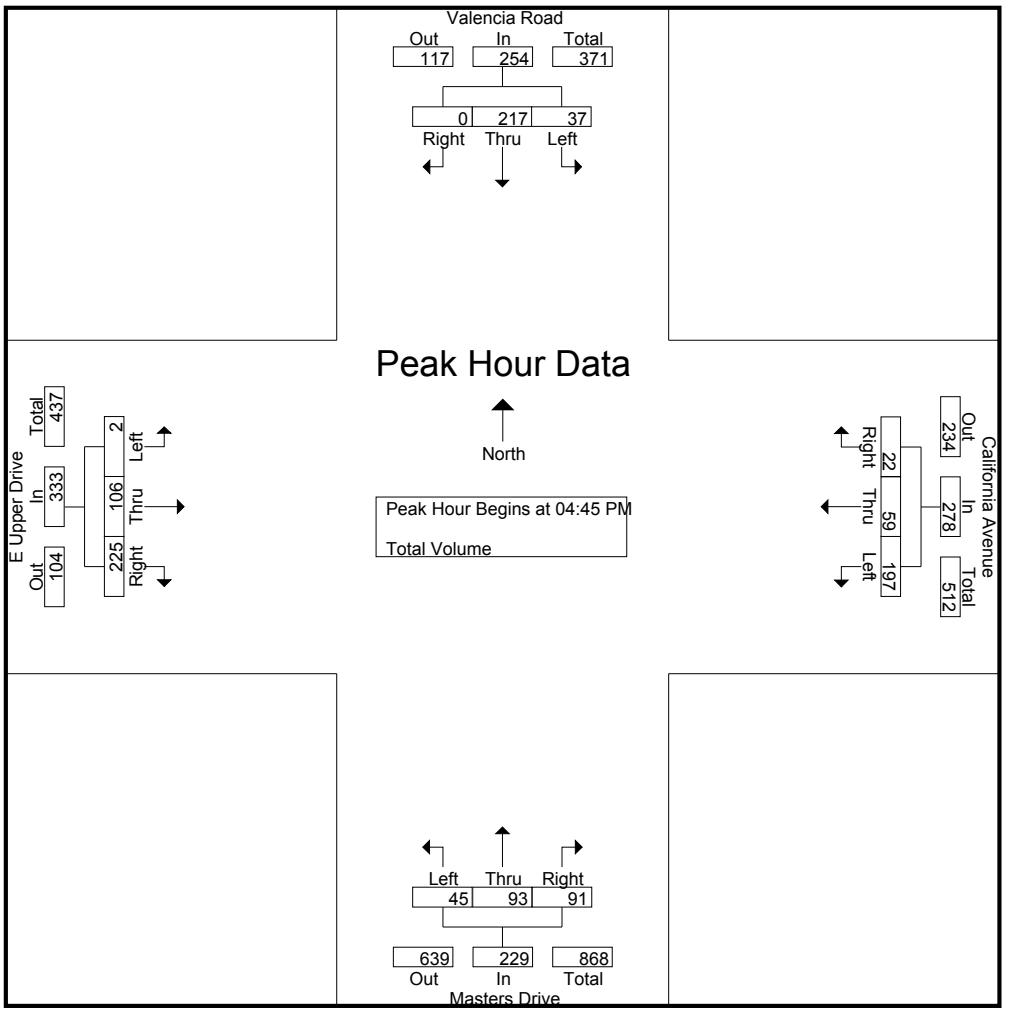
	Valencia Road Southbound				California Avenue Westbound				Masters Drive Northbound				E Upper Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	6	39	1	46	52	17	6	75	9	18	22	49	1	19	49	69	239
04:15 PM	5	37	0	42	49	25	5	79	11	21	17	49	0	23	48	71	241
04:30 PM	7	31	0	38	46	18	11	75	6	19	21	46	3	18	54	75	234
04:45 PM	8	60	0	68	42	16	6	64	9	25	32	66	0	25	55	80	278
Total	26	167	1	194	189	76	28	293	35	83	92	210	4	85	206	295	992
05:00 PM	6	37	0	43	59	14	4	77	8	27	25	60	1	32	54	87	267
05:15 PM	14	69	0	83	53	16	5	74	12	27	20	59	0	24	59	83	299
05:30 PM	9	51	0	60	43	13	7	63	16	14	14	44	1	25	57	83	250
05:45 PM	10	41	1	52	55	14	7	76	14	20	31	65	0	13	59	72	265
Total	39	198	1	238	210	57	23	290	50	88	90	228	2	94	229	325	1081
Grand Total	65	365	2	432	399	133	51	583	85	171	182	438	6	179	435	620	2073
Apprch %	15	84.5	0.5		68.4	22.8	8.7		19.4	39	41.6		1	28.9	70.2		
Total %	3.1	17.6	0.1	20.8	19.2	6.4	2.5	28.1	4.1	8.2	8.8	21.1	0.3	8.6	21	29.9	

	Valencia Road Southbound				California Avenue Westbound				Masters Drive Northbound				E Upper Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	8	60	0	68	42	**16**	6	64	9	25	**32**	**66**	0	25	55	80	278
05:00 PM	6	37	0	43	**59**	14	4	**77**	8	**27**	25	60	**1**	**32**	54	**87**	267
05:15 PM	**14**	**69**	0	**83**	53	16	5	74	12	27	20	59	0	24	**59**	83	**299**
05:30 PM	9	51	0	60	43	13	**7**	63	**16**	14	14	44	1	25	57	83	250
Total Volume	37	217	0	254	197	59	22	278	45	93	91	229	2	106	225	333	1094
% App. Total	14.6	85.4	0		70.9	21.2	7.9		19.7	40.6	39.7		0.6	31.8	67.6		
PHF	.661	.786	.000	.765	.835	.922	.786	.903	.703	.861	.711	.867	.500	.828	.953	.957	.915

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Corona
N/S: Valencia Road/Masters Drive
E/W: East Upper Drive/California Avenue
Weather: Clear

File Name : 01_COR_Valencia_Masters_Upper_California PM
Site Code : 05118203
Start Date : 3/27/2018
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:15 PM				04:30 PM				04:45 PM			
+0 mins.	8	60	0	68	49	**25**	5	**79**	6	19	21	46	0	25	55	80
+15 mins.	6	37	0	43	46	18	**11**	75	9	25	**32**	**66**	**1**	**32**	54	**87**
+30 mins.	**14**	**69**	0	**83**	42	16	6	64	8	**27**	25	60	0	24	**59**	83
+45 mins.	9	51	0	60	**59**	14	4	77	**12**	27	20	59	1	25	57	83
Total Volume	37	217	0	254	196	73	26	295	35	98	98	231	2	106	225	333
% App. Total	14.6	85.4	0		66.4	24.7	8.8		15.2	42.4	42.4		0.6	31.8	67.6	
PHF	.661	.786	.000	.765	.831	.730	.591	.934	.729	.907	.766	.875	.500	.828	.953	.957

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Corona
N/S: Bennett Avenue
E/W: Masters Drive
Weather: Clear

File Name : 135_COR_Bennett_Masters AM
Site Code : 05617610
Start Date : 10/4/2017
Page No : 1

Groups Printed- Total Volume

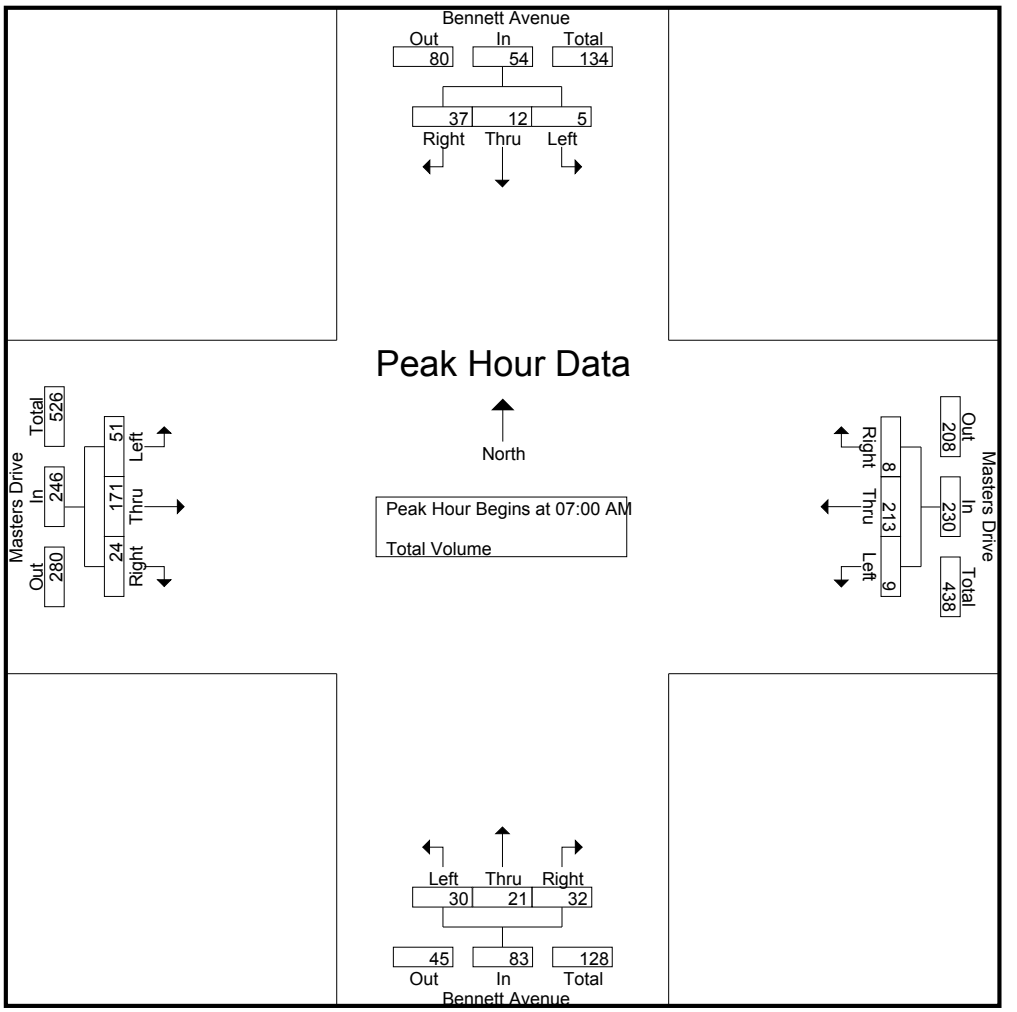
	Bennett Avenue Southbound				Masters Drive Westbound				Bennett Avenue Northbound				Masters Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:00 AM	1	2	1	4	0	17	2	19	2	0	8	10	0	14	0	14	47
06:15 AM	1	0	1	2	3	18	0	21	4	4	5	13	1	13	0	14	50
06:30 AM	0	1	1	2	2	22	0	24	2	1	4	7	0	18	0	18	51
06:45 AM	3	3	3	9	0	48	1	49	4	6	5	15	4	34	0	38	111
Total	5	6	6	17	5	105	3	113	12	11	22	45	5	79	0	84	259
07:00 AM	1	1	10	12	1	64	1	66	17	6	5	28	20	35	1	56	162
07:15 AM	0	2	13	15	2	62	4	68	9	10	6	25	16	44	5	65	173
07:30 AM	2	3	12	17	1	48	2	51	1	3	12	16	12	51	6	69	153
07:45 AM	2	6	2	10	5	39	1	45	3	2	9	14	3	41	12	56	125
Total	5	12	37	54	9	213	8	230	30	21	32	83	51	171	24	246	613
Grand Total	10	18	43	71	14	318	11	343	42	32	54	128	56	250	24	330	872
Apprch %	14.1	25.4	60.6		4.1	92.7	3.2		32.8	25	42.2		17	75.8	7.3		
Total %	1.1	2.1	4.9	8.1	1.6	36.5	1.3	39.3	4.8	3.7	6.2	14.7	6.4	28.7	2.8	37.8	

	Bennett Avenue Southbound				Masters Drive Westbound				Bennett Avenue Northbound				Masters Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	1	1	10	12	1	**64**	1	66	**17**	6	5	**28**	**20**	35	1	56	162
07:15 AM	0	2	**13**	15	2	62	**4**	**68**	9	**10**	6	25	16	44	5	65	**173**
07:30 AM	**2**	3	12	**17**	1	48	2	51	1	3	**12**	16	12	**51**	6	**69**	153
07:45 AM	2	**6**	2	10	**5**	39	1	45	3	2	9	14	3	41	**12**	56	125
Total Volume	5	12	37	54	9	213	8	230	30	21	32	83	51	171	24	246	613
% App. Total	9.3	22.2	68.5		3.9	92.6	3.5		36.1	25.3	38.6		20.7	69.5	9.8		
PHF	.625	.500	.712	.794	.450	.832	.500	.846	.441	.525	.667	.741	.638	.838	.500	.891	.886

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City of Corona
N/S: Bennett Avenue
E/W: Masters Drive
Weather: Clear

File Name : 135_COR_Bennett_Masters AM
Site Code : 05617610
Start Date : 10/4/2017
Page No : 2



Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				06:45 AM				06:45 AM				07:00 AM			
+0 mins.	1	1	10	12	0	48	1	49	4	6	5	15	**20**	35	1	56
+15 mins.	0	2	**13**	15	1	**64**	1	66	**17**	6	5	**28**	16	44	5	65
+30 mins.	**2**	3	12	**17**	**2**	62	**4**	**68**	9	**10**	6	25	12	**51**	6	**69**
+45 mins.	2	**6**	2	10	1	48	2	51	1	3	**12**	16	3	41	**12**	56
Total Volume	5	12	37	54	4	222	8	234	31	25	28	84	51	171	24	246
% App. Total	9.3	22.2	68.5		1.7	94.9	3.4		36.9	29.8	33.3		20.7	69.5	9.8	
PHF	.625	.500	.712	.794	.500	.867	.500	.860	.456	.625	.583	.750	.638	.838	.500	.891

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City of Corona
N/S: Bennett Avenue
E/W: Masters Drive
Weather: Clear

File Name : 135_COR_Bennett_Masters PM
Site Code : 05617610
Start Date : 10/4/2017
Page No : 1

Groups Printed- Total Volume

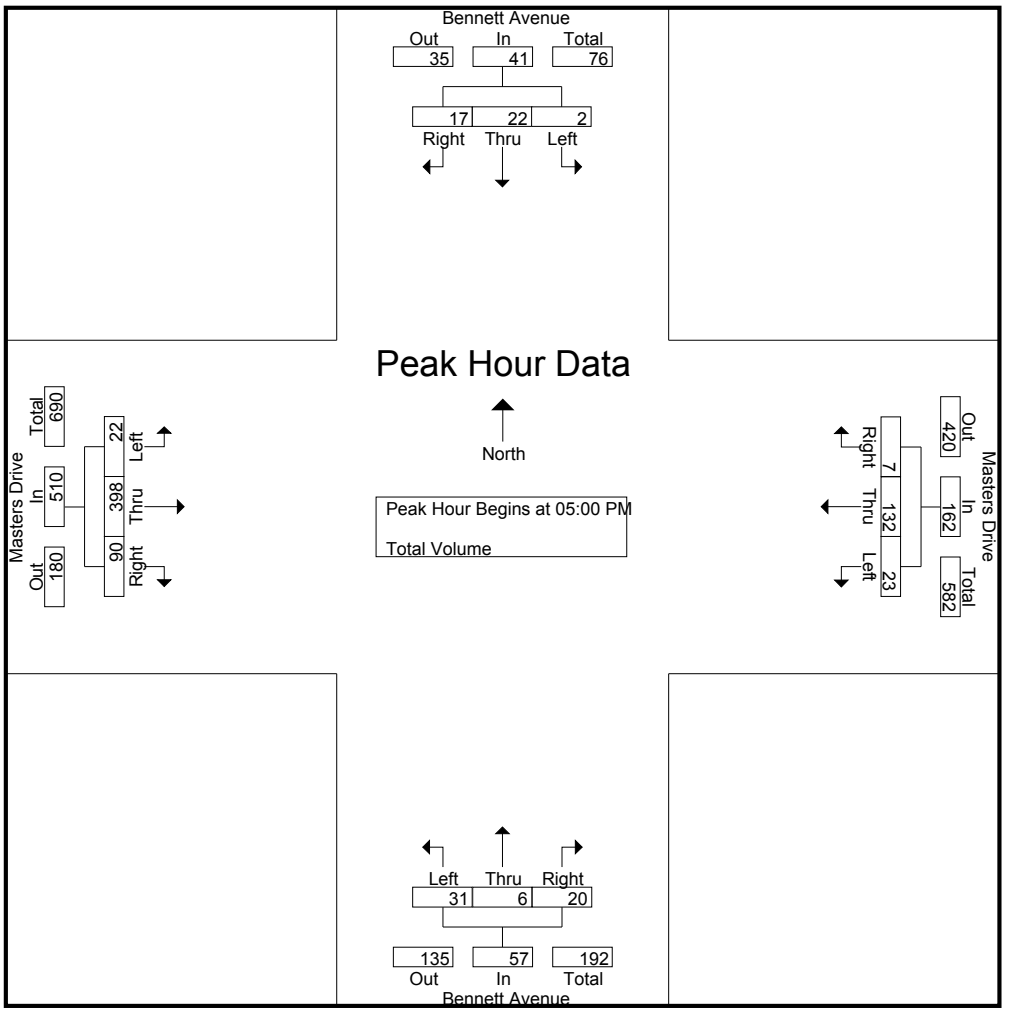
	Bennett Avenue Southbound				Masters Drive Westbound				Bennett Avenue Northbound				Masters Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	3	1	3	7	3	30	1	34	8	2	5	15	4	67	5	76	132
04:15 PM	3	4	2	9	5	36	2	43	3	0	4	7	3	99	8	110	169
04:30 PM	1	5	6	12	4	23	0	27	3	0	4	7	7	97	7	111	157
04:45 PM	0	2	6	8	5	27	1	33	1	2	7	10	5	96	11	112	163
Total	7	12	17	36	17	116	4	137	15	4	20	39	19	359	31	409	621
05:00 PM	0	0	2	2	3	30	2	35	10	1	8	19	4	88	28	120	176
05:15 PM	1	11	3	15	9	27	3	39	6	2	2	10	4	114	25	143	207
05:30 PM	0	8	8	16	9	38	1	48	7	1	4	12	7	100	24	131	207
05:45 PM	1	3	4	8	2	37	1	40	8	2	6	16	7	96	13	116	180
Total	2	22	17	41	23	132	7	162	31	6	20	57	22	398	90	510	770
Grand Total	9	34	34	77	40	248	11	299	46	10	40	96	41	757	121	919	1391
Apprch %	11.7	44.2	44.2		13.4	82.9	3.7		47.9	10.4	41.7		4.5	82.4	13.2		
Total %	0.6	2.4	2.4	5.5	2.9	17.8	0.8	21.5	3.3	0.7	2.9	6.9	2.9	54.4	8.7	66.1	

	Bennett Avenue Southbound				Masters Drive Westbound				Bennett Avenue Northbound				Masters Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	2	2	3	30	2	35	**10**	1	**8**	**19**	4	88	**28**	120	176
05:15 PM	**1**	**11**	3	15	**9**	27	**3**	39	6	**2**	2	10	4	**114**	25	**143**	**207**
05:30 PM	0	8	**8**	**16**	9	**38**	1	**48**	7	1	4	12	**7**	100	24	131	207
05:45 PM	1	3	4	8	2	37	1	40	8	2	6	16	7	96	13	116	180
Total Volume	2	22	17	41	23	132	7	162	31	6	20	57	22	398	90	510	770
% App. Total	4.9	53.7	41.5		14.2	81.5	4.3		54.4	10.5	35.1		4.3	78	17.6		
PHF	.500	.500	.531	.641	.639	.868	.583	.844	.775	.750	.625	.750	.786	.873	.804	.892	.930

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City of Corona
N/S: Bennett Avenue
E/W: Masters Drive
Weather: Clear

File Name : 135_COR_Bennett_Masters PM
Site Code : 05617610
Start Date : 10/4/2017
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	2	6	8	3	30	2	35	**10**	1	**8**	**19**	4	88	**28**	120
+15 mins.	0	0	2	2	**9**	27	**3**	39	6	**2**	2	10	4	**114**	25	**143**
+30 mins.	**1**	**11**	3	15	9	**38**	1	**48**	7	1	4	12	**7**	100	24	131
+45 mins.	0	8	**8**	**16**	2	37	1	40	8	2	6	16	7	96	13	116
Total Volume	1	21	19	41	23	132	7	162	31	6	20	57	22	398	90	510
% App. Total	2.4	51.2	46.3		14.2	81.5	4.3		54.4	10.5	35.1		4.3	78	17.6	
PHF	.250	.477	.594	.641	.639	.868	.583	.844	.775	.750	.625	.750	.786	.873	.804	.892

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City of Corona
N/S: Eagle Glen Parkway
E/W: Masters Drive
Weather: Clear

File Name : 19_COR_EG_Mast AM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 1

Groups Printed- Total Volume

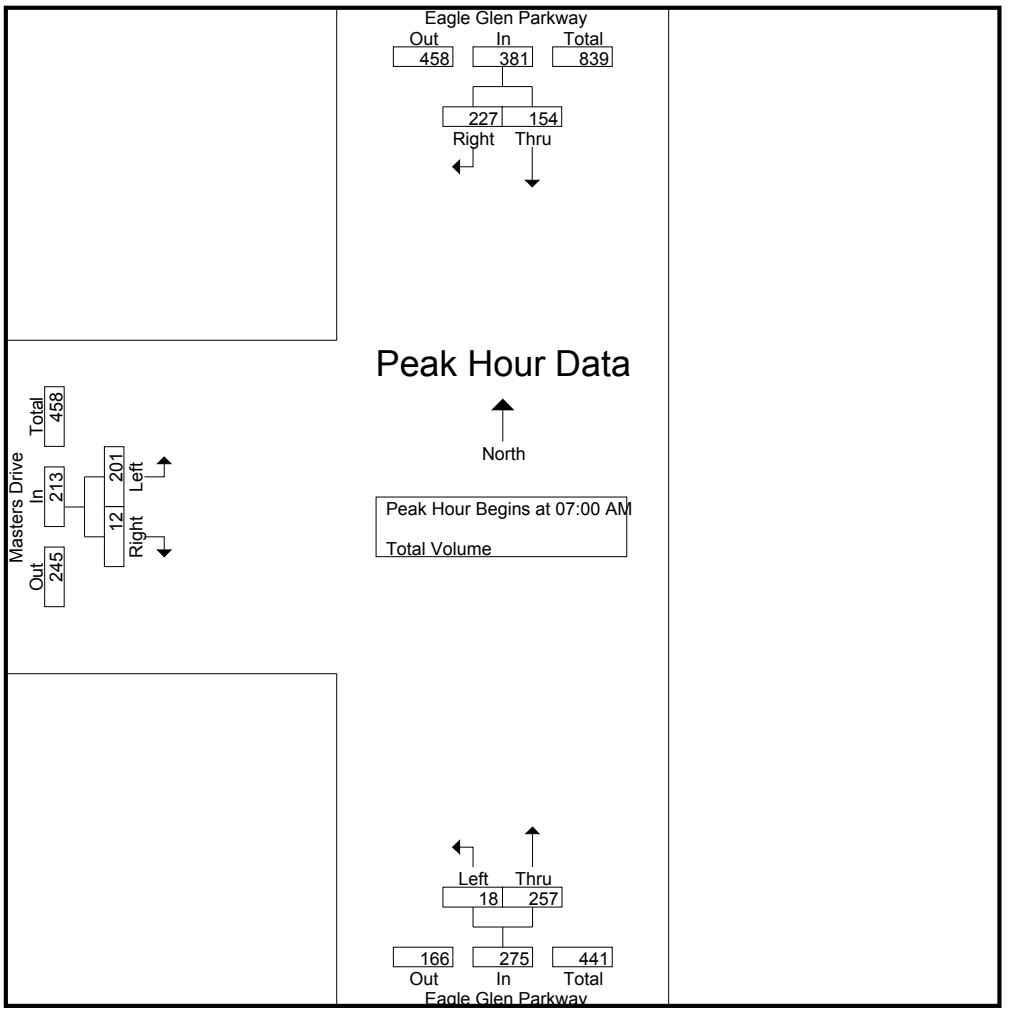
	Eagle Glen Parkway Southbound			Eagle Glen Parkway Northbound			Masters Drive Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
06:00 AM	10	15	25	0	37	37	22	1	23	85
06:15 AM	18	18	36	1	33	34	20	0	20	90
06:30 AM	15	40	55	1	35	36	17	0	17	108
06:45 AM	25	37	62	6	34	40	43	0	43	145
Total	68	110	178	8	139	147	102	1	103	428
07:00 AM	12	51	63	10	59	69	37	2	39	171
07:15 AM	27	71	98	4	90	94	50	2	52	244
07:30 AM	42	68	110	2	58	60	60	6	66	236
07:45 AM	73	37	110	2	50	52	54	2	56	218
Total	154	227	381	18	257	275	201	12	213	869
Grand Total	222	337	559	26	396	422	303	13	316	1297
Apprch %	39.7	60.3		6.2	93.8		95.9	4.1		
Total %	17.1	26	43.1	2	30.5	32.5	23.4	1	24.4	

	Eagle Glen Parkway Southbound			Eagle Glen Parkway Northbound			Masters Drive Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	12	51	63	**10**	59	69	37	2	39	171
07:15 AM	27	**71**	98	4	**90**	**94**	50	2	52	**244**
07:30 AM	42	68	**110**	2	58	60	**60**	**6**	**66**	236
07:45 AM	**73**	37	110	2	50	52	54	2	56	218
Total Volume	154	227	381	18	257	275	201	12	213	869
% App. Total	40.4	59.6		6.5	93.5		94.4	5.6		
PHF	.527	.799	.866	.450	.714	.731	.838	.500	.807	.890

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City of Corona
N/S: Eagle Glen Parkway
E/W: Masters Drive
Weather: Clear

File Name : 19_COR_EG_Mast AM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 2



Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	12	51	63	**10**	59	69	37	2	39
+15 mins.	27	**71**	98	4	**90**	**94**	50	2	52
+30 mins.	42	68	**110**	2	58	60	**60**	**6**	**66**
+45 mins.	**73**	37	110	2	50	52	54	2	56
Total Volume	154	227	381	18	257	275	201	12	213
% App. Total	40.4	59.6		6.5	93.5		94.4	5.6	
PHF	.527	.799	.866	.450	.714	.731	.838	.500	.807

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City of Corona
N/S: Eagle Glen Parkway
E/W: Masters Drive
Weather: Clear

File Name : 19_COR_EG_Mast PM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 1

Groups Printed- Total Volume

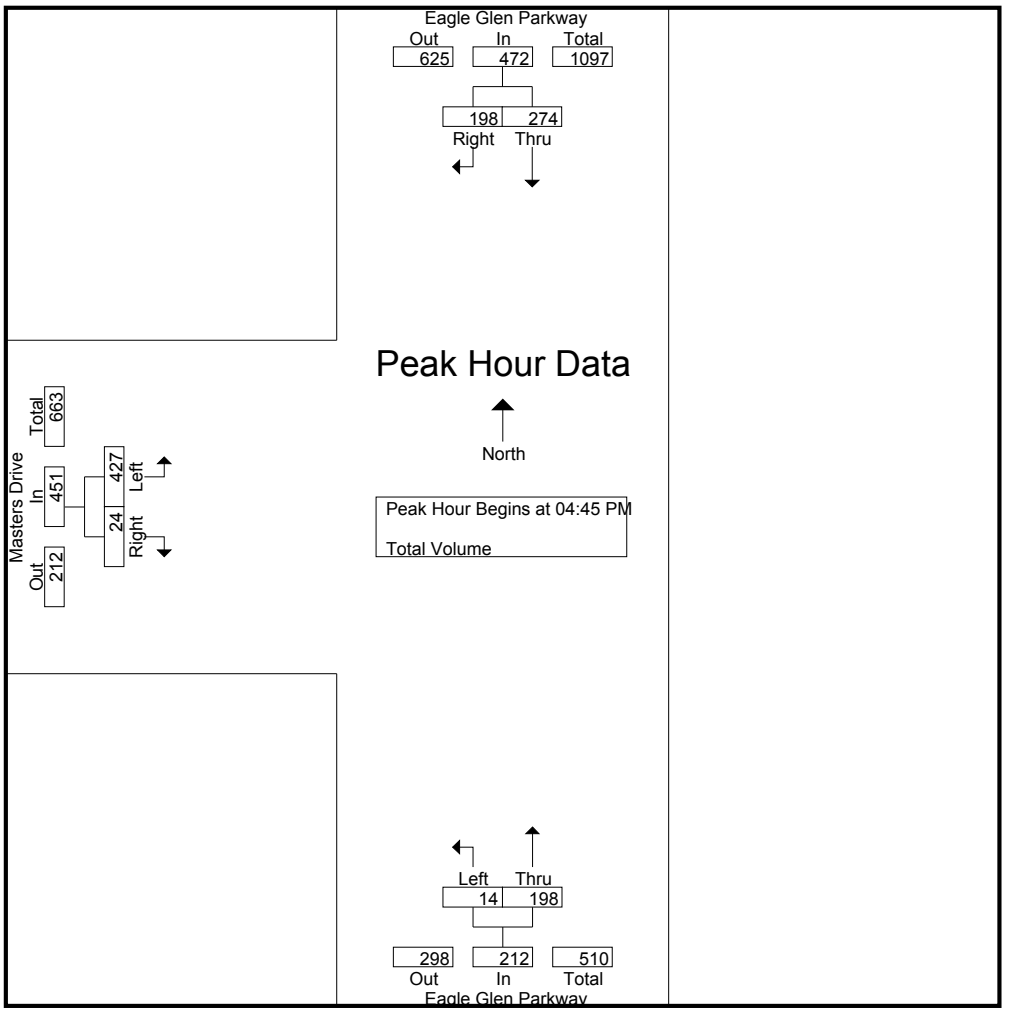
	Eagle Glen Parkway Southbound			Eagle Glen Parkway Northbound			Masters Drive Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	36	34	70	4	39	43	92	2	94	207
04:15 PM	45	41	86	0	42	42	79	6	85	213
04:30 PM	56	51	107	2	44	46	86	7	93	246
04:45 PM	64	49	113	4	61	65	114	7	121	299
Total	201	175	376	10	186	196	371	22	393	965
05:00 PM	59	42	101	5	48	53	104	4	108	262
05:15 PM	76	64	140	1	45	46	105	7	112	298
05:30 PM	75	43	118	4	44	48	104	6	110	276
05:45 PM	57	47	104	3	46	49	95	4	99	252
Total	267	196	463	13	183	196	408	21	429	1088
Grand Total	468	371	839	23	369	392	779	43	822	2053
Apprch %	55.8	44.2		5.9	94.1		94.8	5.2		
Total %	22.8	18.1	40.9	1.1	18	19.1	37.9	2.1	40	

	Eagle Glen Parkway Southbound			Eagle Glen Parkway Northbound			Masters Drive Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	64	49	113	4	**61**	**65**	**114**	**7**	**121**	**299**
05:00 PM	59	42	101	**5**	48	53	104	4	108	262
05:15 PM	**76**	**64**	**140**	1	45	46	105	7	112	298
05:30 PM	75	43	118	4	44	48	104	6	110	276
Total Volume	274	198	472	14	198	212	427	24	451	1135
% App. Total	58.1	41.9		6.6	93.4		94.7	5.3		
PHF	.901	.773	.843	.700	.811	.815	.936	.857	.932	.949

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City of Corona
N/S: Eagle Glen Parkway
E/W: Masters Drive
Weather: Clear

File Name : 19_COR_EG_Mast PM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	64	49	113	4	**61**	**65**	**114**	**7**	**121**
+15 mins.	59	42	101	**5**	48	53	104	4	108
+30 mins.	**76**	**64**	**140**	1	45	46	105	7	112
+45 mins.	75	43	118	4	44	48	104	6	110
Total Volume	274	198	472	14	198	212	427	24	451
% App. Total	58.1	41.9		6.6	93.4		94.7	5.3	
PHF	.901	.773	.843	.700	.811	.815	.936	.857	.932

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City of Corona
N/S: Bedford Canyon Road
E/W: Foothill Parkway
Weather: Clear

File Name : 39_COR_Bedford_Foothill AM
Site Code : 05617610
Start Date : 10/3/2017
Page No : 1

Groups Printed- Total Volume

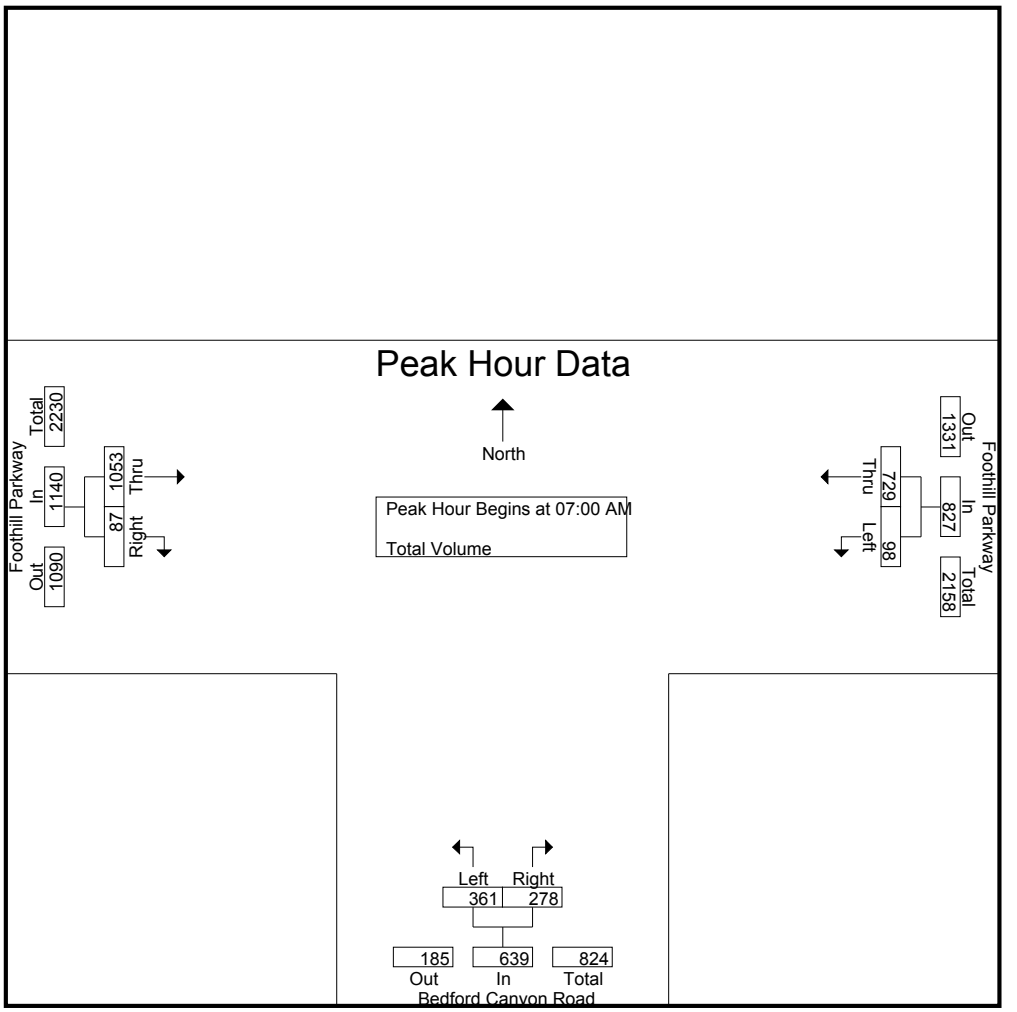
	Foothill Parkway Westbound			Bedford Canyon Road Northbound			Foothill Parkway Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:00 AM	5	113	118	43	32	75	74	6	80	273
06:15 AM	4	123	127	96	25	121	92	3	95	343
06:30 AM	3	114	117	84	31	115	113	6	119	351
06:45 AM	11	136	147	92	54	146	140	8	148	441
Total	23	486	509	315	142	457	419	23	442	1408
07:00 AM	14	216	230	136	71	207	178	9	187	624
07:15 AM	24	230	254	127	102	229	289	22	311	794
07:30 AM	37	161	198	57	74	131	315	30	345	674
07:45 AM	23	122	145	41	31	72	271	26	297	514
Total	98	729	827	361	278	639	1053	87	1140	2606
Grand Total	121	1215	1336	676	420	1096	1472	110	1582	4014
Apprch %	9.1	90.9		61.7	38.3		93	7		
Total %	3	30.3	33.3	16.8	10.5	27.3	36.7	2.7	39.4	

	Foothill Parkway Westbound			Bedford Canyon Road Northbound			Foothill Parkway Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	14	216	230	**136**	71	207	178	9	187	624
07:15 AM	24	**230**	**254**	127	**102**	**229**	289	22	311	**794**
07:30 AM	**37**	161	198	57	74	131	**315**	**30**	**345**	674
07:45 AM	23	122	145	41	31	72	271	26	297	514
Total Volume	98	729	827	361	278	639	1053	87	1140	2606
% App. Total	11.9	88.1		56.5	43.5		92.4	7.6		
PHF	.662	.792	.814	.664	.681	.698	.836	.725	.826	.821

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City of Corona
N/S: Bedford Canyon Road
E/W: Foothill Parkway
Weather: Clear

File Name : 39_COR_Bedford_Foothill AM
Site Code : 05617610
Start Date : 10/3/2017
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Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	06:45 AM			06:45 AM			07:00 AM		
+0 mins.	11	136	147	92	54	146	178	9	187
+15 mins.	14	216	230	**136**	71	207	289	22	311
+30 mins.	24	**230**	**254**	127	**102**	**229**	**315**	**30**	**345**
+45 mins.	**37**	161	198	57	74	131	271	26	297
Total Volume	86	743	829	412	301	713	1053	87	1140
% App. Total	10.4	89.6		57.8	42.2		92.4	7.6	
PHF	.581	.808	.816	.757	.738	.778	.836	.725	.826

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City of Corona
N/S: Bedford Canyon Road
E/W: Foothill Parkway
Weather: Clear

File Name : 39_COR_Bedford_Foothill PM
Site Code : 05617610
Start Date : 10/3/2017
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Groups Printed- Total Volume

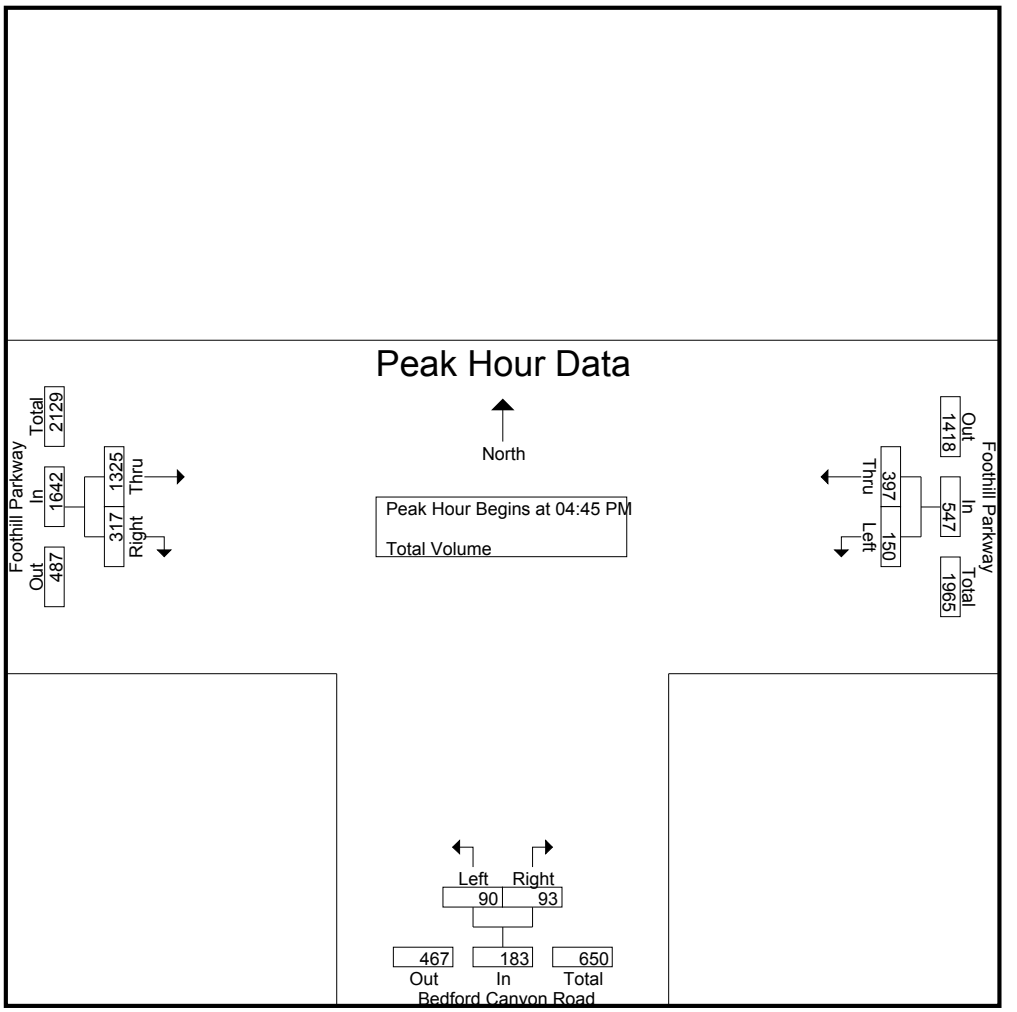
	Foothill Parkway Westbound			Bedford Canyon Road Northbound			Foothill Parkway Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	23	84	107	30	22	52	353	63	416	575
04:15 PM	40	87	127	28	33	61	301	68	369	557
04:30 PM	33	95	128	15	25	40	290	64	354	522
04:45 PM	40	89	129	29	24	53	323	82	405	587
Total	136	355	491	102	104	206	1267	277	1544	2241
05:00 PM	39	114	153	23	24	47	335	64	399	599
05:15 PM	32	84	116	20	22	42	364	85	449	607
05:30 PM	39	110	149	18	23	41	303	86	389	579
05:45 PM	43	118	161	24	22	46	298	68	366	573
Total	153	426	579	85	91	176	1300	303	1603	2358
Grand Total	289	781	1070	187	195	382	2567	580	3147	4599
Apprch %	27	73		49	51		81.6	18.4		
Total %	6.3	17	23.3	4.1	4.2	8.3	55.8	12.6	68.4	

	Foothill Parkway Westbound			Bedford Canyon Road Northbound			Foothill Parkway Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	**40**	89	129	**29**	**24**	**53**	323	82	405	587
05:00 PM	39	**114**	**153**	23	24	47	335	64	399	599
05:15 PM	32	84	116	20	22	42	**364**	85	**449**	**607**
05:30 PM	39	110	149	18	23	41	303	**86**	389	579
Total Volume	150	397	547	90	93	183	1325	317	1642	2372
% App. Total	27.4	72.6		49.2	50.8		80.7	19.3		
PHF	.938	.871	.894	.776	.969	.863	.910	.922	.914	.977

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City of Corona
N/S: Bedford Canyon Road
E/W: Foothill Parkway
Weather: Clear

File Name : 39_COR_Bedford_Foothill PM
Site Code : 05617610
Start Date : 10/3/2017
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			04:00 PM			04:45 PM		
+0 mins.	39	114	153	**30**	22	52	323	82	405
+15 mins.	32	84	116	28	**33**	**61**	335	64	399
+30 mins.	39	110	149	15	25	40	**364**	85	**449**
+45 mins.	**43**	**118**	**161**	29	24	53	303	**86**	389
Total Volume	153	426	579	102	104	206	1325	317	1642
% App. Total	26.4	73.6		49.5	50.5		80.7	19.3	
PHF	.890	.903	.899	.850	.788	.844	.910	.922	.914

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(951) 268-6268

City of Corona
N/S: Bedford Canyon Road
E/W: Eagle Glen Parkway
Weather: Clear

File Name : 20_COR_Bed_EG AM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 1

Groups Printed- Total Volume

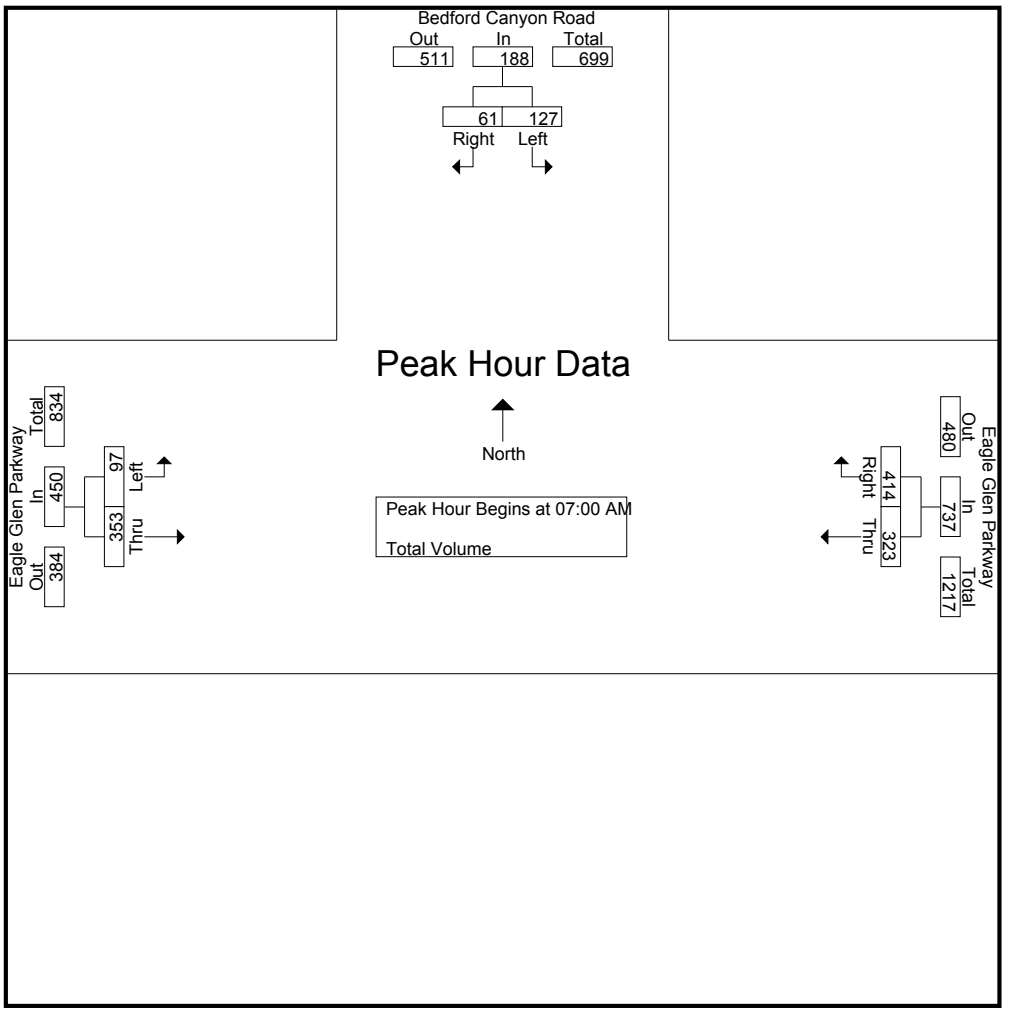
	Bedford Canyon Road Southbound			Eagle Glen Parkway Westbound			Eagle Glen Parkway Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
06:00 AM	8	4	12	22	78	100	14	48	62	174
06:15 AM	12	4	16	39	112	151	11	41	52	219
06:30 AM	18	6	24	57	160	217	14	38	52	293
06:45 AM	10	9	19	52	157	209	13	64	77	305
Total	48	23	71	170	507	677	52	191	243	991
07:00 AM	17	8	25	61	137	198	26	68	94	317
07:15 AM	33	9	42	89	117	206	37	99	136	384
07:30 AM	35	12	47	89	93	182	22	95	117	346
07:45 AM	42	32	74	84	67	151	12	91	103	328
Total	127	61	188	323	414	737	97	353	450	1375
Grand Total	175	84	259	493	921	1414	149	544	693	2366
Apprch %	67.6	32.4		34.9	65.1		21.5	78.5		
Total %	7.4	3.6	10.9	20.8	38.9	59.8	6.3	23	29.3	

	Bedford Canyon Road Southbound			Eagle Glen Parkway Westbound			Eagle Glen Parkway Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	17	8	25	61	**137**	198	26	68	94	317
07:15 AM	33	9	42	**89**	117	**206**	**37**	**99**	**136**	**384**
07:30 AM	35	12	47	89	93	182	22	95	117	346
07:45 AM	**42**	**32**	**74**	84	67	151	12	91	103	328
Total Volume	127	61	188	323	414	737	97	353	450	1375
% App. Total	67.6	32.4		43.8	56.2		21.6	78.4		
PHF	.756	.477	.635	.907	.755	.894	.655	.891	.827	.895

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City of Corona
N/S: Bedford Canyon Road
E/W: Eagle Glen Parkway
Weather: Clear

File Name : 20_COR_Bed_EG AM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 2



Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			06:30 AM			07:00 AM		
+0 mins.	17	8	25	57	**160**	**217**	26	68	94
+15 mins.	33	9	42	52	157	209	**37**	**99**	**136**
+30 mins.	35	12	47	61	137	198	22	95	117
+45 mins.	**42**	**32**	**74**	**89**	117	206	12	91	103
Total Volume	127	61	188	259	571	830	97	353	450
% App. Total	67.6	32.4		31.2	68.8		21.6	78.4	
PHF	.756	.477	.635	.728	.892	.956	.655	.891	.827

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City of Corona
N/S: Bedford Canyon Road
E/W: Eagle Glen Parkway
Weather: Clear

File Name : 20_COR_Bed_EG PM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 1

Groups Printed- Total Volume

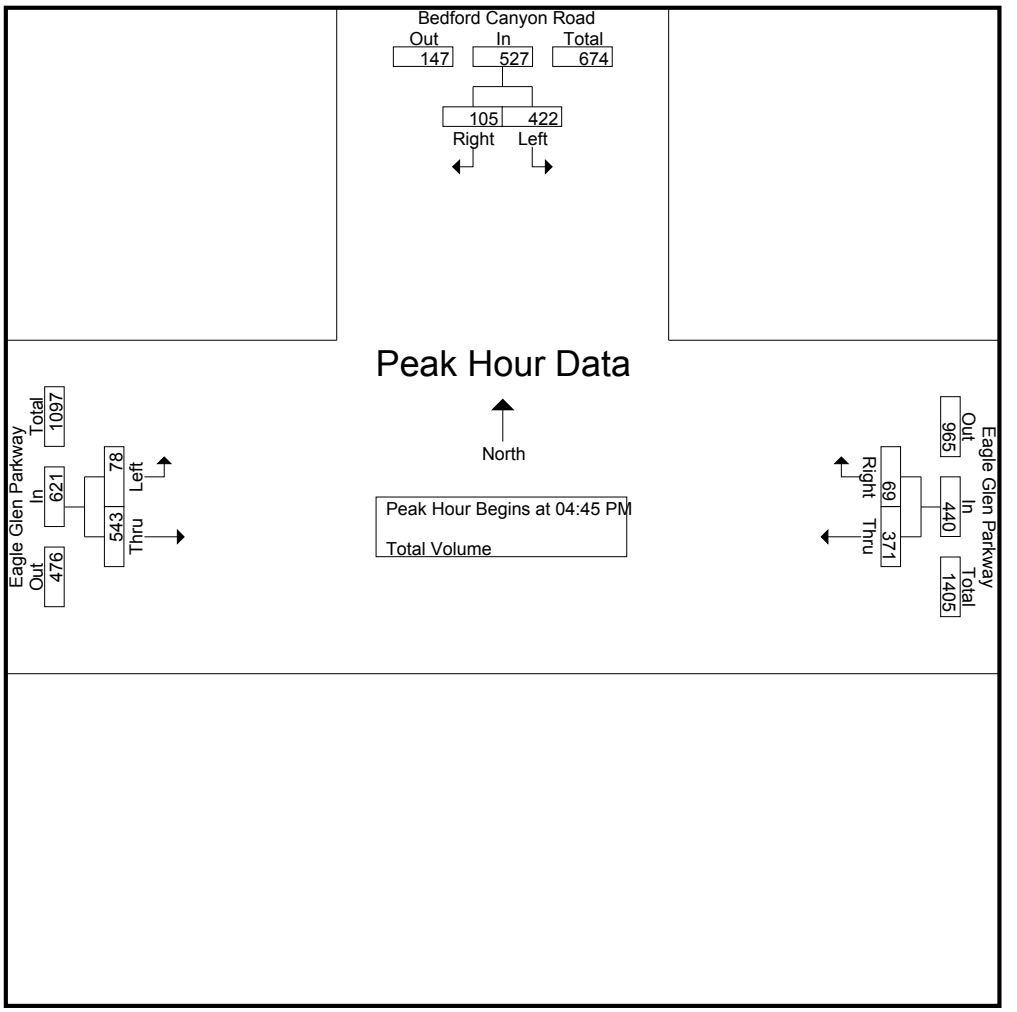
	Bedford Canyon Road Southbound			Eagle Glen Parkway Westbound			Eagle Glen Parkway Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	97	20	117	59	14	73	7	126	133	323
04:15 PM	98	21	119	66	9	75	6	121	127	321
04:30 PM	107	28	135	71	19	90	15	117	132	357
04:45 PM	113	26	139	88	18	106	24	145	169	414
Total	415	95	510	284	60	344	52	509	561	1415
05:00 PM	99	25	124	70	20	90	29	129	158	372
05:15 PM	126	29	155	111	19	130	11	132	143	428
05:30 PM	84	25	109	102	12	114	14	137	151	374
05:45 PM	94	25	119	70	19	89	16	128	144	352
Total	403	104	507	353	70	423	70	526	596	1526
Grand Total	818	199	1017	637	130	767	122	1035	1157	2941
Apprch %	80.4	19.6		83.1	16.9		10.5	89.5		
Total %	27.8	6.8	34.6	21.7	4.4	26.1	4.1	35.2	39.3	

	Bedford Canyon Road Southbound			Eagle Glen Parkway Westbound			Eagle Glen Parkway Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	113	26	139	88	18	106	24	**145**	**169**	414
05:00 PM	99	25	124	70	**20**	90	**29**	129	158	372
05:15 PM	**126**	**29**	**155**	**111**	19	**130**	11	132	143	**428**
05:30 PM	84	25	109	102	12	114	14	137	151	374
Total Volume	422	105	527	371	69	440	78	543	621	1588
% App. Total	80.1	19.9		84.3	15.7		12.6	87.4		
PHF	.837	.905	.850	.836	.863	.846	.672	.936	.919	.928

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City of Corona
N/S: Bedford Canyon Road
E/W: Eagle Glen Parkway
Weather: Clear

File Name : 20_COR_Bed_EG PM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM			04:45 PM			04:45 PM		
+0 mins.	107	28	135	88	18	106	24	**145**	**169**
+15 mins.	113	26	139	70	**20**	90	**29**	129	158
+30 mins.	99	25	124	**111**	19	**130**	11	132	143
+45 mins.	**126**	**29**	**155**	102	12	114	14	137	151
Total Volume	445	108	553	371	69	440	78	543	621
% App. Total	80.5	19.5		84.3	15.7		12.6	87.4	
PHF	.883	.931	.892	.836	.863	.846	.672	.936	.919

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City of Corona
N/S: I-15 Southbound Ramps
E/W: Foothill Parkway/El Cerrito Road
Weather: Clear

File Name : 22_COR_15S_El Cer AM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 1

Groups Printed- Total Volume

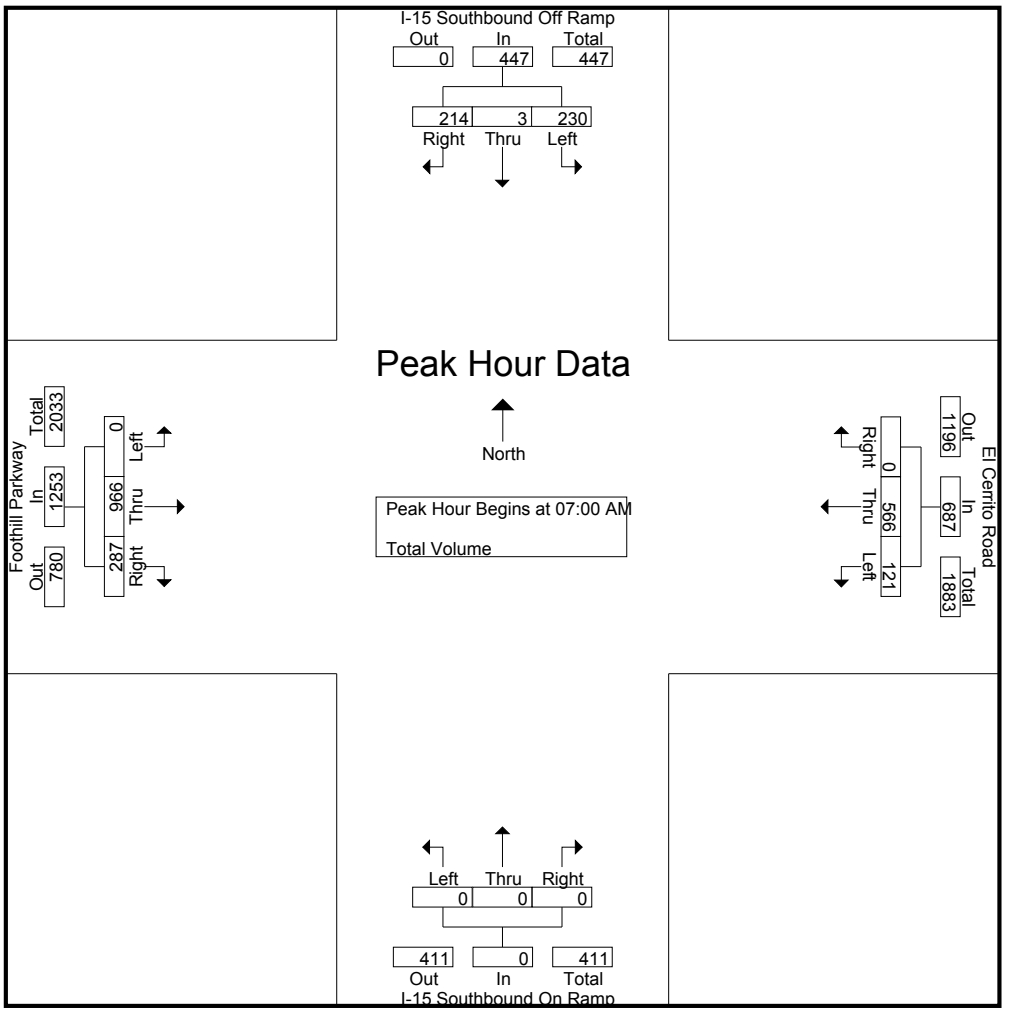
	I-15 Southbound Off Ramp Southbound				El Cerrito Road Westbound				I-15 Southbound On Ramp Northbound				Foothill Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:00 AM	26	3	20	49	2	83	0	85	0	0	0	0	0	100	26	126	260
06:15 AM	26	0	18	44	3	83	0	86	0	0	0	0	0	98	23	121	251
06:30 AM	17	1	30	48	6	91	0	97	0	0	0	0	0	134	35	169	314
06:45 AM	20	3	34	57	8	91	0	99	0	0	0	0	0	158	41	199	355
Total	89	7	102	198	19	348	0	367	0	0	0	0	0	490	125	615	1180
07:00 AM	49	0	63	112	17	115	0	132	0	0	0	0	0	197	49	246	490
07:15 AM	71	0	74	145	39	182	0	221	0	0	0	0	0	287	56	343	709
07:30 AM	80	1	43	124	34	143	0	177	0	0	0	0	0	260	71	331	632
07:45 AM	30	2	34	66	31	126	0	157	0	0	0	0	0	222	111	333	556
Total	230	3	214	447	121	566	0	687	0	0	0	0	0	966	287	1253	2387
Grand Total	319	10	316	645	140	914	0	1054	0	0	0	0	0	1456	412	1868	3567
Apprch %	49.5	1.6	49		13.3	86.7	0		0	0	0		0	77.9	22.1		
Total %	8.9	0.3	8.9	18.1	3.9	25.6	0	29.5	0	0	0	0	0	40.8	11.6	52.4	

	I-15 Southbound Off Ramp Southbound				El Cerrito Road Westbound				I-15 Southbound On Ramp Northbound				Foothill Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	49	0	63	112	17	115	0	132	0	0	0	0	0	197	49	246	490
07:15 AM	71	0	**74**	**145**	**39**	**182**	0	**221**	0	0	0	0	0	**287**	56	**343**	**709**
07:30 AM	**80**	1	43	124	34	143	0	177	0	0	0	0	0	260	71	331	632
07:45 AM	30	**2**	34	66	31	126	0	157	0	0	0	0	0	222	**111**	333	556
Total Volume	230	3	214	447	121	566	0	687	0	0	0	0	0	966	287	1253	2387
% App. Total	51.5	0.7	47.9		17.6	82.4	0		0	0	0		0	77.1	22.9		
PHF	.719	.375	.723	.771	.776	.777	.000	.777	.000	.000	.000	.000	.000	.841	.646	.913	.842

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City of Corona
N/S: I-15 Southbound Ramps
E/W: Foothill Parkway/El Cerrito Road
Weather: Clear

File Name : 22_COR_15S_El Cer AM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 2



Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				06:00 AM				07:00 AM			
+0 mins.	49	0	63	112	17	115	0	132	0	0	0	0	0	197	49	246
+15 mins.	71	0	**74**	**145**	**39**	**182**	0	**221**	0	0	0	0	0	**287**	56	**343**
+30 mins.	**80**	1	43	124	34	143	0	177	0	0	0	0	0	260	71	331
+45 mins.	30	**2**	34	66	31	126	0	157	0	0	0	0	0	222	**111**	333
Total Volume	230	3	214	447	121	566	0	687	0	0	0	0	0	966	287	1253
% App. Total	51.5	0.7	47.9		17.6	82.4	0		0	0	0		0	77.1	22.9	
PHF	.719	.375	.723	.771	.776	.777	.000	.777	.000	.000	.000	.000	.000	.841	.646	.913

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City of Corona
N/S: I-15 Southbound Ramps
E/W: Foothill Parkway/El Cerrito Road
Weather: Clear

File Name : 22_COR_15S_El Cer PM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 1

Groups Printed- Total Volume

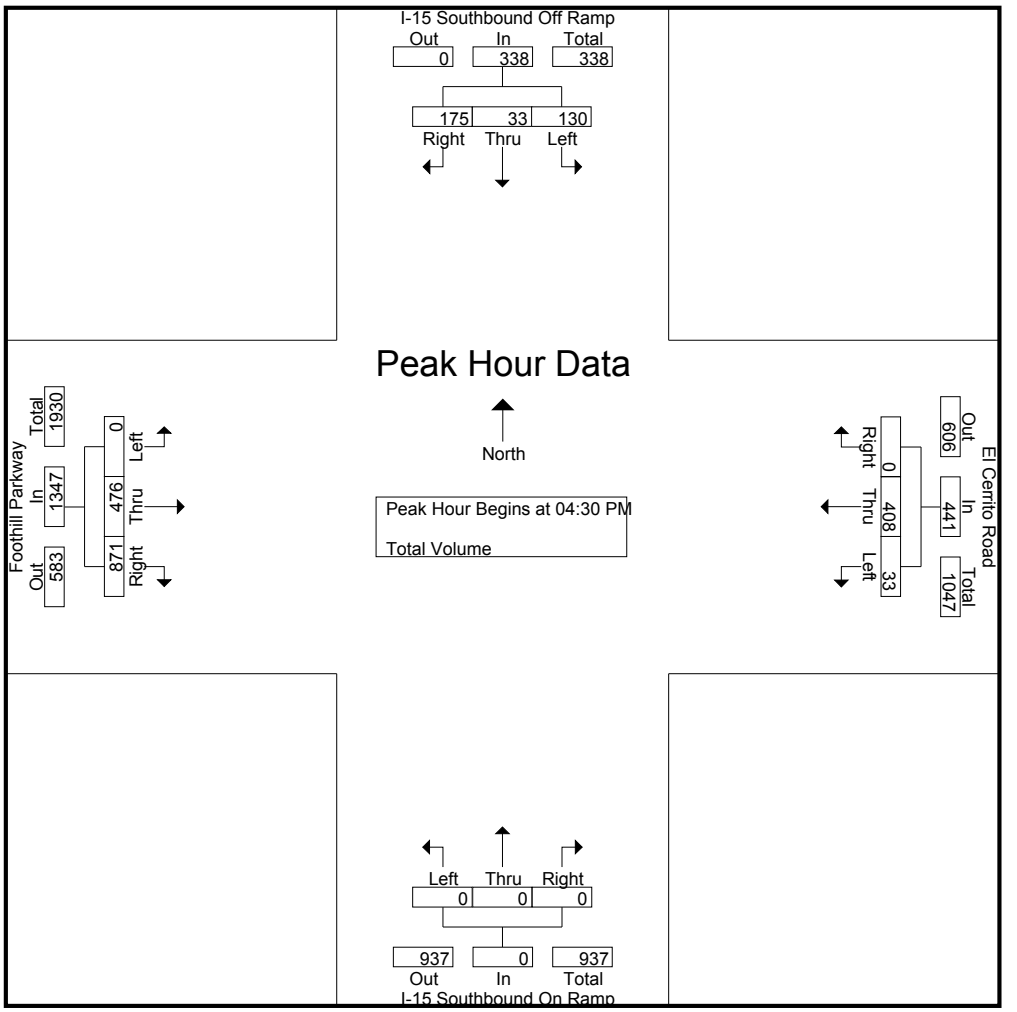
	I-15 Southbound Off Ramp Southbound				El Cerrito Road Westbound				I-15 Southbound On Ramp Northbound				Foothill Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	20	22	29	71	10	94	0	104	0	0	0	0	0	113	205	318	493
04:15 PM	28	7	37	72	14	76	0	90	0	0	0	0	0	102	217	319	481
04:30 PM	34	9	40	83	10	93	0	103	0	0	0	0	0	119	218	337	523
04:45 PM	36	12	45	93	11	104	0	115	0	0	0	0	0	112	223	335	543
Total	118	50	151	319	45	367	0	412	0	0	0	0	0	446	863	1309	2040
05:00 PM	27	8	46	81	7	100	0	107	0	0	0	0	0	134	190	324	512
05:15 PM	33	4	44	81	5	111	0	116	0	0	0	0	0	111	240	351	548
05:30 PM	29	8	38	75	8	100	0	108	0	0	0	0	0	140	169	309	492
05:45 PM	39	5	50	94	14	118	0	132	0	0	0	0	0	121	153	274	500
Total	128	25	178	331	34	429	0	463	0	0	0	0	0	506	752	1258	2052
Grand Total	246	75	329	650	79	796	0	875	0	0	0	0	0	952	1615	2567	4092
Apprch %	37.8	11.5	50.6		9	91	0		0	0	0		0	37.1	62.9		
Total %	6	1.8	8	15.9	1.9	19.5	0	21.4	0	0	0	0	0	23.3	39.5	62.7	

	I-15 Southbound Off Ramp Southbound				El Cerrito Road Westbound				I-15 Southbound On Ramp Northbound				Foothill Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	34	9	40	83	10	93	0	103	0	0	0	0	0	119	218	337	523
04:45 PM	**36**	**12**	45	**93**	**11**	104	0	115	0	0	0	0	0	112	223	335	543
05:00 PM	27	8	**46**	81	7	100	0	107	0	0	0	0	0	**134**	190	324	512
05:15 PM	33	4	44	81	5	**111**	0	**116**	0	0	0	0	0	111	**240**	**351**	**548**
Total Volume	130	33	175	338	33	408	0	441	0	0	0	0	0	476	871	1347	2126
% App. Total	38.5	9.8	51.8		7.5	92.5	0		0	0	0		0	35.3	64.7		
PHF	.903	.688	.951	.909	.750	.919	.000	.950	.000	.000	.000	.000	.000	.888	.907	.959	.970

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City of Corona
N/S: I-15 Southbound Ramps
E/W: Foothill Parkway/El Cerrito Road
Weather: Clear

File Name : 22_COR_15S_El Cer PM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				05:00 PM				04:00 PM				04:30 PM			
+0 mins.	34	9	40	83	7	100	0	107	0	0	0	0	0	119	218	337
+15 mins.	**36**	**12**	45	**93**	5	111	0	116	0	0	0	0	0	112	223	335
+30 mins.	27	8	**46**	81	8	100	0	108	0	0	0	0	0	**134**	190	324
+45 mins.	33	4	44	81	**14**	**118**	0	**132**	0	0	0	0	0	111	**240**	**351**
Total Volume	130	33	175	338	34	429	0	463	0	0	0	0	0	476	871	1347
% App. Total	38.5	9.8	51.8		7.3	92.7	0		0	0	0		0	35.3	64.7	
PHF	.903	.688	.951	.909	.607	.909	.000	.877	.000	.000	.000	.000	.000	.888	.907	.959

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City of Corona
N/S: I-15 Southbound Ramps
E/W: Cajalco Road
Weather: Clear

File Name : 07_COR_15s_Cajalco AM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

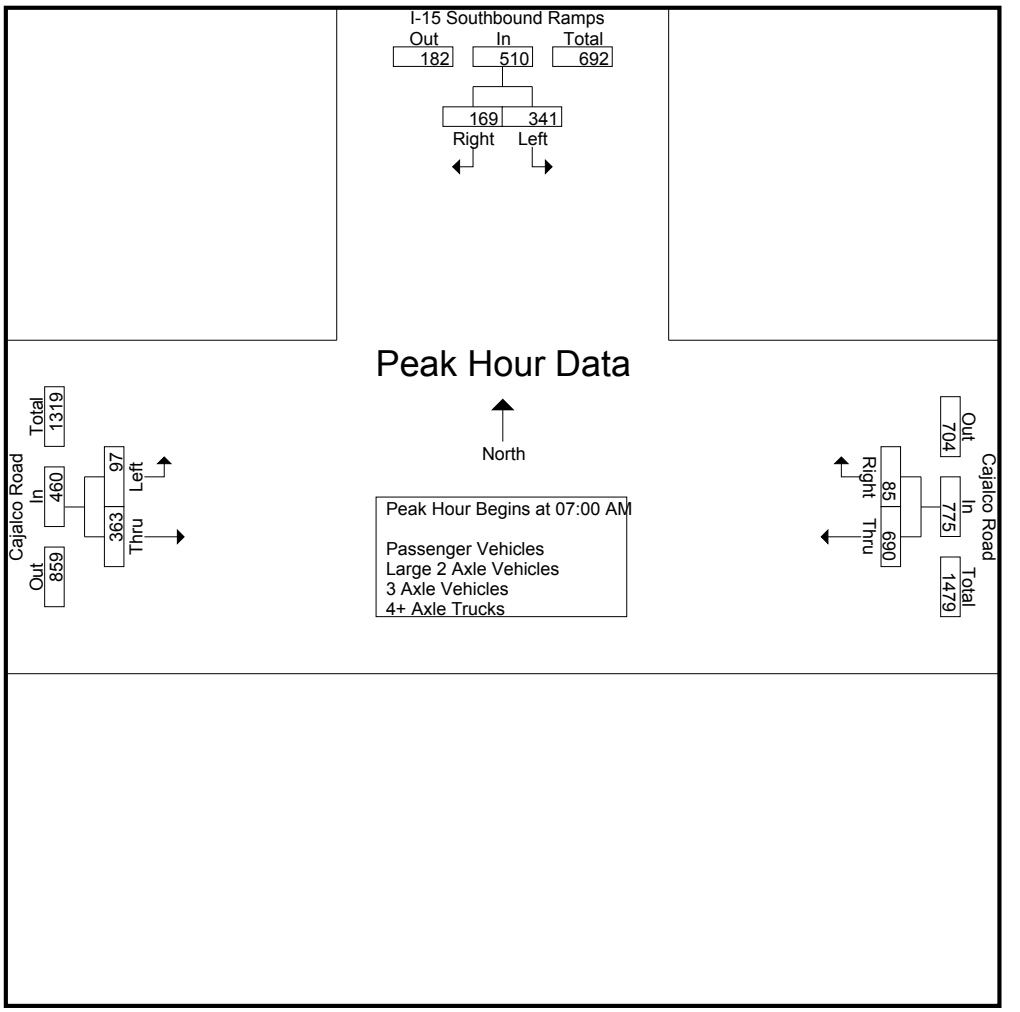
	I-15 Southbound Ramps Southbound			Cajalco Road Westbound			Cajalco Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
06:00 AM	56	25	81	97	12	109	9	42	51	241
06:15 AM	53	19	72	149	24	173	10	41	51	296
06:30 AM	67	30	97	201	19	220	8	43	51	368
06:45 AM	80	27	107	212	19	231	11	56	67	405
Total	256	101	357	659	74	733	38	182	220	1310
07:00 AM	70	23	93	203	18	221	21	61	82	396
07:15 AM	74	49	123	195	15	210	23	102	125	458
07:30 AM	71	44	115	166	27	193	30	99	129	437
07:45 AM	126	53	179	126	25	151	23	101	124	454
Total	341	169	510	690	85	775	97	363	460	1745
Grand Total	597	270	867	1349	159	1508	135	545	680	3055
Apprch %	68.9	31.1		89.5	10.5		19.9	80.1		
Total %	19.5	8.8	28.4	44.2	5.2	49.4	4.4	17.8	22.3	
Passenger Vehicles	486	249	735	1331	142	1473	130	530	660	2868
% Passenger Vehicles	81.4	92.2	84.8	98.7	89.3	97.7	96.3	97.2	97.1	93.9
Large 2 Axle Vehicles	33	16	49	12	6	18	4	12	16	83
% Large 2 Axle Vehicles	5.5	5.9	5.7	0.9	3.8	1.2	3	2.2	2.4	2.7
3 Axle Vehicles	5	0	5	1	1	2	0	0	0	7
% 3 Axle Vehicles	0.8	0	0.6	0.1	0.6	0.1	0	0	0	0.2
4+ Axle Trucks	73	5	78	5	10	15	1	3	4	97
% 4+ Axle Trucks	12.2	1.9	9	0.4	6.3	1	0.7	0.6	0.6	3.2

	I-15 Southbound Ramps Southbound			Cajalco Road Westbound			Cajalco Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	70	23	93	**203**	18	**221**	21	61	82	396
07:15 AM	74	49	123	195	15	210	23	**102**	125	**458**
07:30 AM	71	44	115	166	**27**	193	**30**	99	**129**	437
07:45 AM	**126**	**53**	**179**	126	25	151	23	101	124	454
Total Volume	341	169	510	690	85	775	97	363	460	1745
% App. Total	66.9	33.1		89	11		21.1	78.9		
PHF	.677	.797	.712	.850	.787	.877	.808	.890	.891	.953

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City of Corona
N/S: I-15 Southbound Ramps
E/W: Cajalco Road
Weather: Clear

File Name : 07_COR_15s_Cajalco AM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 2



Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			06:30 AM			07:00 AM		
+0 mins.	70	23	93	201	**19**	220	21	61	82
+15 mins.	74	49	123	**212**	19	**231**	23	**102**	125
+30 mins.	71	44	115	203	18	221	**30**	99	**129**
+45 mins.	**126**	**53**	**179**	195	15	210	23	101	124
Total Volume	341	169	510	811	71	882	97	363	460
% App. Total	66.9	33.1		92	8		21.1	78.9	
PHF	.677	.797	.712	.956	.934	.955	.808	.890	.891

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City of Corona
N/S: I-15 Southbound Ramps
E/W: Cajalco Road
Weather: Clear

File Name : 07_COR_15s_Cajalco PM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

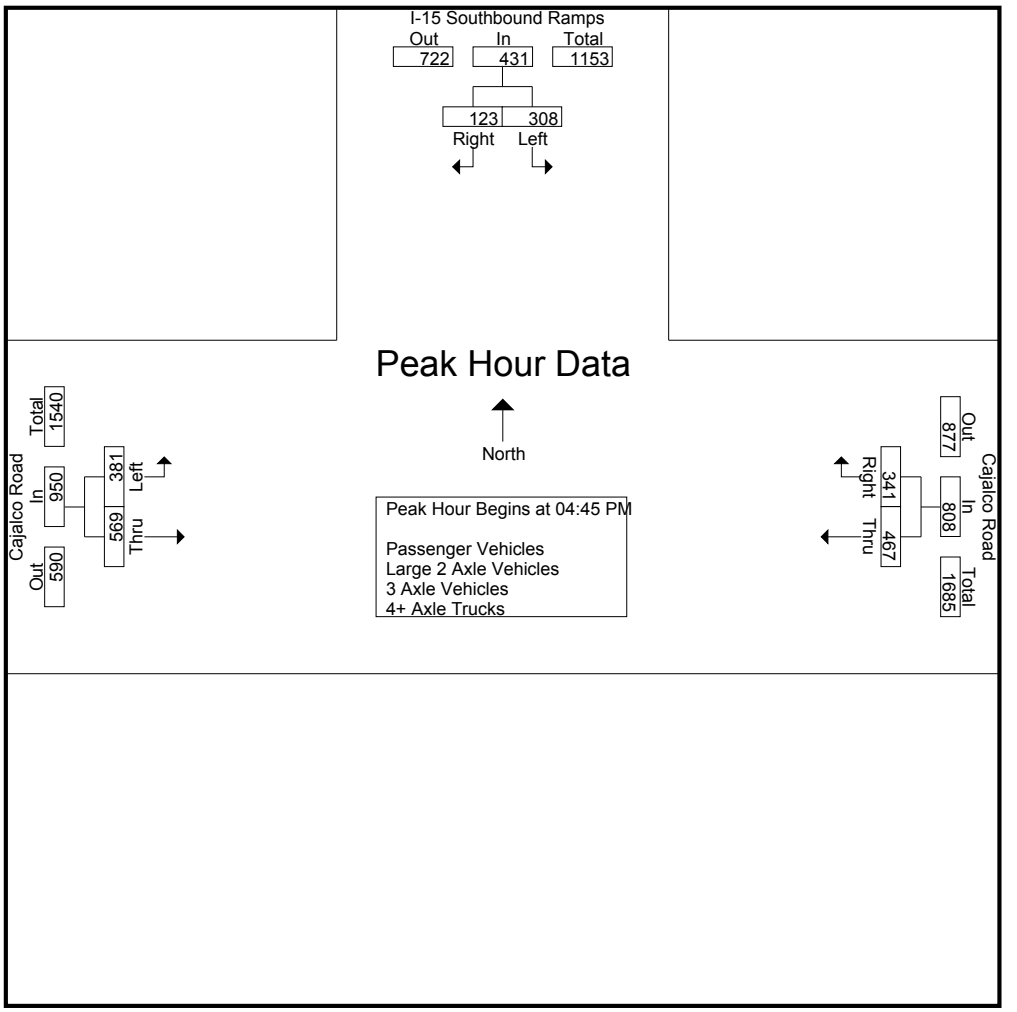
	I-15 Southbound Ramps Southbound			Cajalco Road Westbound			Cajalco Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	65	23	88	95	86	181	76	128	204	473
04:15 PM	58	29	87	98	76	174	88	121	209	470
04:30 PM	75	27	102	96	84	180	96	111	207	489
04:45 PM	62	33	95	117	82	199	89	150	239	533
Total	260	112	372	406	328	734	349	510	859	1965
05:00 PM	83	28	111	91	92	183	100	137	237	531
05:15 PM	83	33	116	141	67	208	96	138	234	558
05:30 PM	80	29	109	118	100	218	96	144	240	567
05:45 PM	108	29	137	105	90	195	67	132	199	531
Total	354	119	473	455	349	804	359	551	910	2187
Grand Total	614	231	845	861	677	1538	708	1061	1769	4152
Apprch %	72.7	27.3		56	44		40	60		
Total %	14.8	5.6	20.4	20.7	16.3	37	17.1	25.6	42.6	
Passenger Vehicles	570	226	796	851	663	1514	702	1044	1746	4056
% Passenger Vehicles	92.8	97.8	94.2	98.8	97.9	98.4	99.2	98.4	98.7	97.7
Large 2 Axle Vehicles	6	5	11	10	4	14	6	16	22	47
% Large 2 Axle Vehicles	1	2.2	1.3	1.2	0.6	0.9	0.8	1.5	1.2	1.1
3 Axle Vehicles	3	0	3	0	4	4	0	1	1	8
% 3 Axle Vehicles	0.5	0	0.4	0	0.6	0.3	0	0.1	0.1	0.2
4+ Axle Trucks	35	0	35	0	6	6	0	0	0	41
% 4+ Axle Trucks	5.7	0	4.1	0	0.9	0.4	0	0	0	1

	I-15 Southbound Ramps Southbound			Cajalco Road Westbound			Cajalco Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	62	**33**	95	117	82	199	89	**150**	239	533
05:00 PM	**83**	28	111	91	92	183	**100**	137	237	531
05:15 PM	83	33	**116**	**141**	67	208	96	138	234	558
05:30 PM	80	29	109	118	**100**	**218**	96	144	**240**	**567**
Total Volume	308	123	431	467	341	808	381	569	950	2189
% App. Total	71.5	28.5		57.8	42.2		40.1	59.9		
PHF	.928	.932	.929	.828	.853	.927	.953	.948	.990	.965

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City of Corona
N/S: I-15 Southbound Ramps
E/W: Cajalco Road
Weather: Clear

File Name : 07_COR_15s_Cajalco PM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			04:45 PM			04:45 PM		
+0 mins.	83	28	111	117	82	199	89	**150**	239
+15 mins.	83	**33**	116	91	92	183	**100**	137	237
+30 mins.	80	29	109	**141**	67	208	96	138	234
+45 mins.	**108**	29	**137**	118	**100**	**218**	96	144	**240**
Total Volume	354	119	473	467	341	808	381	569	950
% App. Total	74.8	25.2		57.8	42.2		40.1	59.9	
PHF	.819	.902	.863	.828	.853	.927	.953	.948	.990

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City of Corona
N/S: I-15 Northbound Ramps
E/W: El Cerrito Road
Weather: Clear

File Name : 23_COR_15N_El Cer AM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 1

Groups Printed- Total Volume

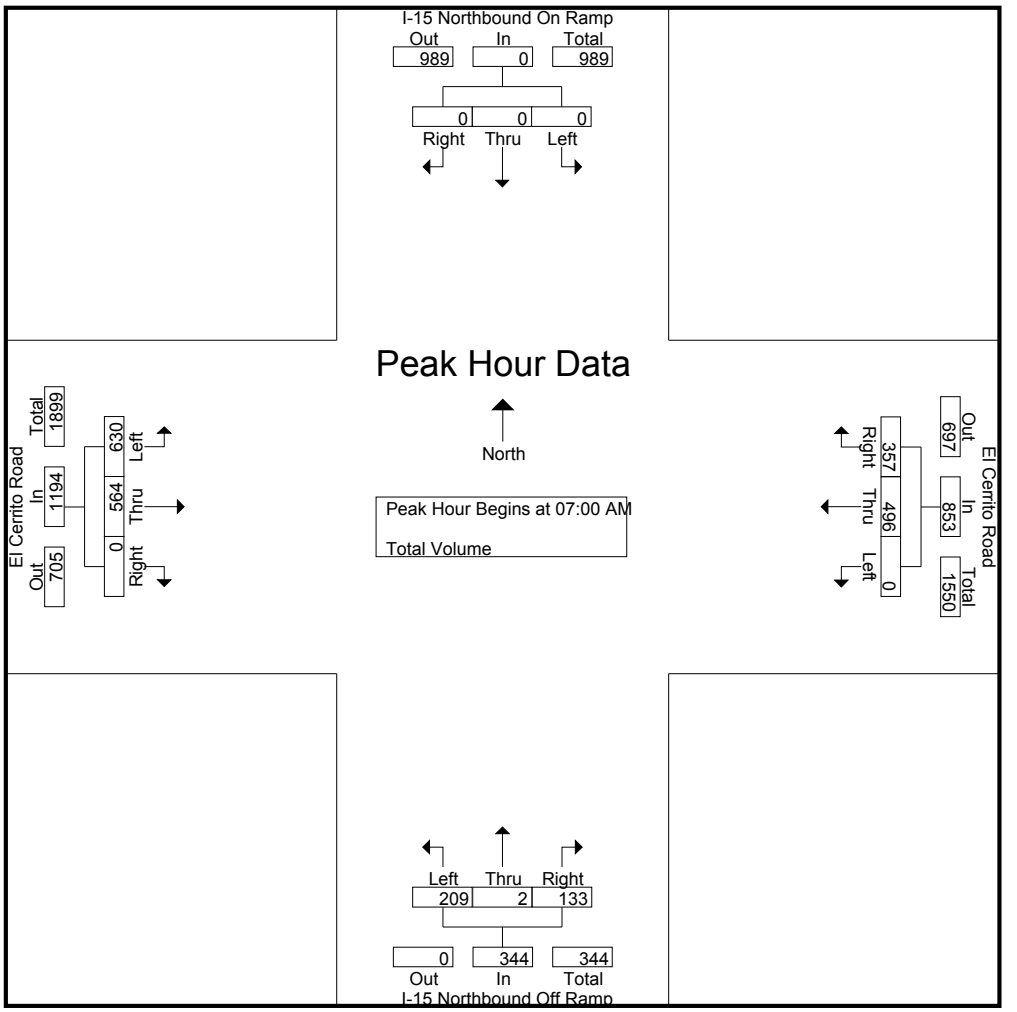
	I-15 Northbound On Ramp Southbound				El Cerrito Road Westbound				I-15 Northbound Off Ramp Northbound				El Cerrito Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:00 AM	0	0	0	0	0	44	84	128	46	0	4	50	111	9	0	120	298
06:15 AM	0	0	0	0	0	57	58	115	30	2	2	34	123	11	0	134	283
06:30 AM	0	0	0	0	0	47	64	111	43	7	3	53	129	21	0	150	314
06:45 AM	0	0	0	0	0	53	59	112	43	1	8	52	137	43	0	180	344
Total	0	0	0	0	0	201	265	466	162	10	17	189	500	84	0	584	1239
07:00 AM	0	0	0	0	0	75	81	156	59	0	15	74	161	82	0	243	473
07:15 AM	0	0	0	0	0	157	82	239	71	2	48	121	161	191	0	352	712
07:30 AM	0	0	0	0	0	137	95	232	43	0	56	99	135	204	0	339	670
07:45 AM	0	0	0	0	0	127	99	226	36	0	14	50	173	87	0	260	536
Total	0	0	0	0	0	496	357	853	209	2	133	344	630	564	0	1194	2391
Grand Total	0	0	0	0	0	697	622	1319	371	12	150	533	1130	648	0	1778	3630
Apprch %	0	0	0		0	52.8	47.2		69.6	2.3	28.1		63.6	36.4	0		
Total %	0	0	0	0	0	19.2	17.1	36.3	10.2	0.3	4.1	14.7	31.1	17.9	0	49	

	I-15 Northbound On Ramp Southbound				El Cerrito Road Westbound				I-15 Northbound Off Ramp Northbound				El Cerrito Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	75	81	156	59	0	15	74	161	82	0	243	473
07:15 AM	0	0	0	0	0	**157**	82	**239**	**71**	**2**	48	**121**	161	191	0	**352**	**712**
07:30 AM	0	0	0	0	0	137	95	232	43	0	**56**	99	135	**204**	0	339	670
07:45 AM	0	0	0	0	0	127	**99**	226	36	0	14	50	**173**	87	0	260	536
Total Volume	0	0	0	0	0	496	357	853	209	2	133	344	630	564	0	1194	2391
% App. Total	0	0	0		0	58.1	41.9		60.8	0.6	38.7		52.8	47.2	0		
PHF	.000	.000	.000	.000	.000	.790	.902	.892	.736	.250	.594	.711	.910	.691	.000	.848	.840

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City of Corona
N/S: I-15 Northbound Ramps
E/W: El Cerrito Road
Weather: Clear

File Name : 23_COR_15N_El Cer AM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 2



Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	06:00 AM				07:00 AM				06:45 AM				07:00 AM			
+0 mins.	0	0	0	0	0	75	81	156	43	1	8	52	161	82	0	243
+15 mins.	0	0	0	0	0	**157**	82	**239**	59	0	15	74	161	191	0	**352**
+30 mins.	0	0	0	0	0	137	95	232	**71**	**2**	48	**121**	135	**204**	0	339
+45 mins.	0	0	0	0	0	127	**99**	226	43	0	**56**	99	**173**	87	0	260
Total Volume	0	0	0	0	0	496	357	853	216	3	127	346	630	564	0	1194
% App. Total	0	0	0		0	58.1	41.9		62.4	0.9	36.7		52.8	47.2	0	
PHF	.000	.000	.000	.000	.000	.790	.902	.892	.761	.375	.567	.715	.910	.691	.000	.848

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City of Corona
N/S: I-15 Northbound Ramps
E/W: El Cerrito Road
Weather: Clear

File Name : 23_COR_15N_El Cer PM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 1

Groups Printed- Total Volume

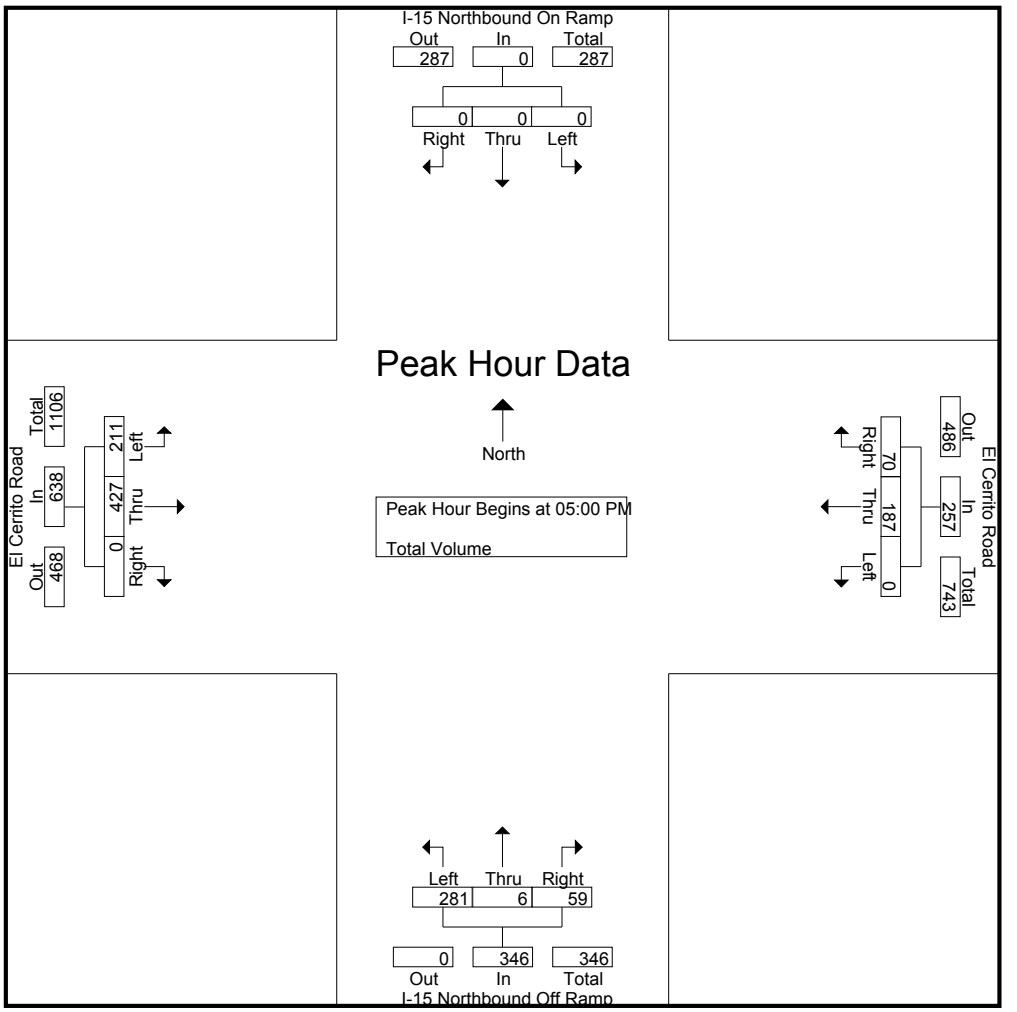
	I-15 Northbound On Ramp Southbound				El Cerrito Road Westbound				I-15 Northbound Off Ramp Northbound				El Cerrito Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	42	13	55	66	2	5	73	71	70	0	141	269
04:15 PM	0	0	0	0	0	45	10	55	51	0	14	65	55	75	0	130	250
04:30 PM	0	0	0	0	0	41	9	50	54	1	14	69	44	100	0	144	263
04:45 PM	0	0	0	0	0	50	9	59	68	1	10	79	56	99	0	155	293
Total	0	0	0	0	0	178	41	219	239	4	43	286	226	344	0	570	1075
05:00 PM	0	0	0	0	0	39	13	52	66	1	13	80	51	113	0	164	296
05:15 PM	0	0	0	0	0	45	27	72	73	0	11	84	42	107	0	149	305
05:30 PM	0	0	0	0	0	47	14	61	61	3	14	78	70	91	0	161	300
05:45 PM	0	0	0	0	0	56	16	72	81	2	21	104	48	116	0	164	340
Total	0	0	0	0	0	187	70	257	281	6	59	346	211	427	0	638	1241
Grand Total	0	0	0	0	0	365	111	476	520	10	102	632	437	771	0	1208	2316
Apprch %	0	0	0		0	76.7	23.3		82.3	1.6	16.1		36.2	63.8	0		
Total %	0	0	0	0	0	15.8	4.8	20.6	22.5	0.4	4.4	27.3	18.9	33.3	0	52.2	

	I-15 Northbound On Ramp Southbound				El Cerrito Road Westbound				I-15 Northbound Off Ramp Northbound				El Cerrito Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	39	13	52	66	1	13	80	51	113	0	**164**	296
05:15 PM	0	0	0	0	0	45	**27**	**72**	73	0	11	84	42	107	0	149	305
05:30 PM	0	0	0	0	0	47	14	61	61	**3**	14	78	**70**	91	0	161	300
05:45 PM	0	0	0	0	0	**56**	16	72	**81**	2	**21**	**104**	48	**116**	0	164	**340**
Total Volume	0	0	0	0	0	187	70	257	281	6	59	346	211	427	0	638	1241
% App. Total	0	0	0		0	72.8	27.2		81.2	1.7	17.1		33.1	66.9	0		
PHF	.000	.000	.000	.000	.000	.835	.648	.892	.867	.500	.702	.832	.754	.920	.000	.973	.913

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City of Corona
N/S: I-15 Northbound Ramps
E/W: El Cerrito Road
Weather: Clear

File Name : 23_COR_15N_El Cer PM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	39	13	52	66	1	13	80	51	113	0	**164**
+15 mins.	0	0	0	0	0	45	**27**	**72**	73	0	11	84	42	107	0	149
+30 mins.	0	0	0	0	0	47	14	61	61	**3**	14	78	**70**	91	0	161
+45 mins.	0	0	0	0	0	**56**	16	72	**81**	2	**21**	**104**	48	**116**	0	164
Total Volume	0	0	0	0	0	187	70	257	281	6	59	346	211	427	0	638
% App. Total	0	0	0		0	72.8	27.2		81.2	1.7	17.1		33.1	66.9	0	
PHF	.000	.000	.000	.000	.000	.835	.648	.892	.867	.500	.702	.832	.754	.920	.000	.973

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City of Corona
N/S: I-15 Northbound Ramps
E/W: Cajalco Road
Weather: Clear

File Name : 08_COR_15N_Cajalco AM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

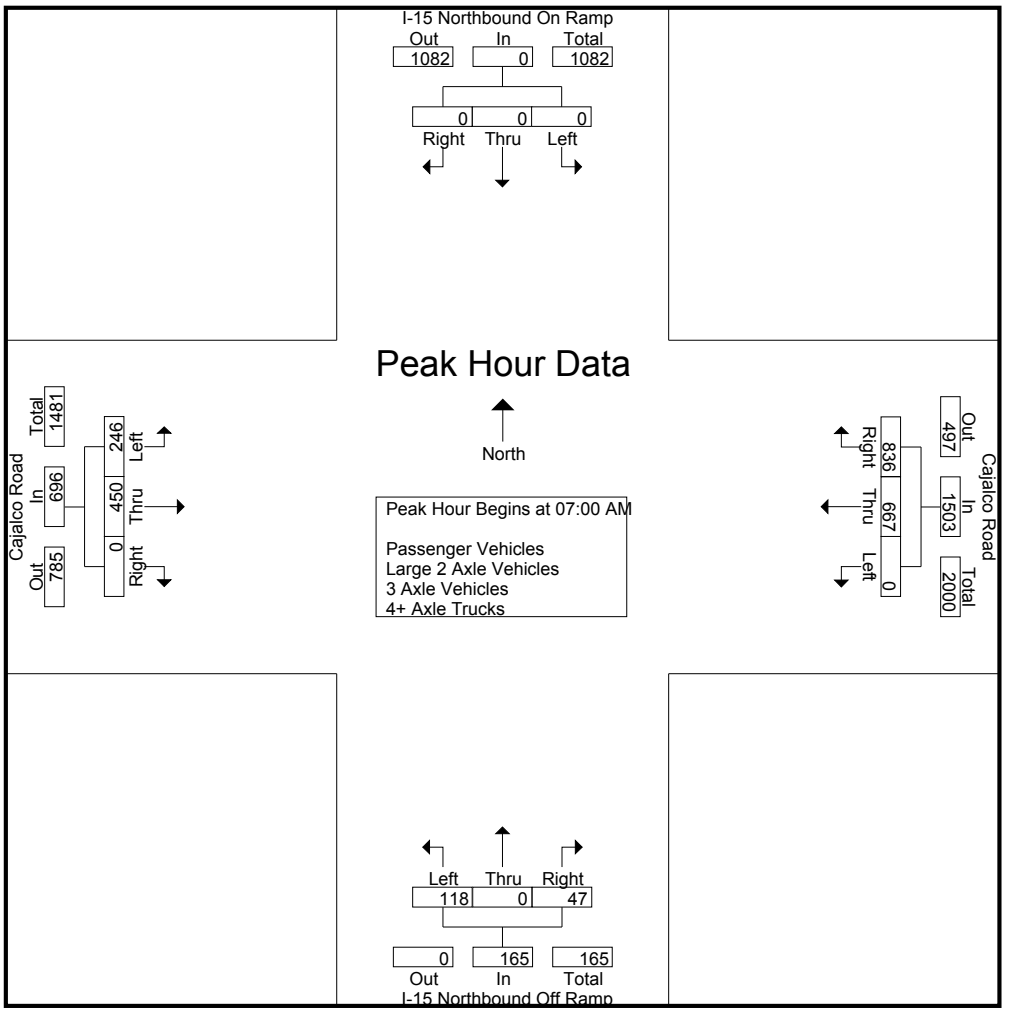
	I-15 Northbound On Ramp Southbound				Cajalco Road Westbound				I-15 Northbound Off Ramp Northbound				Cajalco Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:00 AM	0	0	0	0	0	82	155	237	28	2	12	42	34	62	0	96	375
06:15 AM	0	0	0	0	0	129	113	242	44	1	14	59	27	71	0	98	399
06:30 AM	0	0	0	0	0	209	139	348	29	0	11	40	20	83	0	103	491
06:45 AM	0	0	0	0	0	164	145	309	57	0	9	66	35	104	0	139	514
Total	0	0	0	0	0	584	552	1136	158	3	46	207	116	320	0	436	1779
07:00 AM	0	0	0	0	0	181	182	363	42	0	9	51	47	85	0	132	546
07:15 AM	0	0	0	0	0	185	214	399	29	0	9	38	71	99	0	170	607
07:30 AM	0	0	0	0	0	160	194	354	26	0	21	47	69	103	0	172	573
07:45 AM	0	0	0	0	0	141	246	387	21	0	8	29	59	163	0	222	638
Total	0	0	0	0	0	667	836	1503	118	0	47	165	246	450	0	696	2364
Grand Total	0	0	0	0	0	1251	1388	2639	276	3	93	372	362	770	0	1132	4143
Apprch %	0	0	0		0	47.4	52.6		74.2	0.8	25		32	68	0		
Total %	0	0	0	0	0	30.2	33.5	63.7	6.7	0.1	2.2	9	8.7	18.6	0	27.3	
Passenger Vehicles	0	0	0	0	0	1211	1243	2454	269	2	76	347	354	648	0	1002	3803
% Passenger Vehicles	0	0	0	0	0	96.8	89.6	93	97.5	66.7	81.7	93.3	97.8	84.2	0	88.5	91.8
Large 2 Axle Vehicles	0	0	0	0	0	24	41	65	5	1	2	8	5	43	0	48	121
% Large 2 Axle Vehicles	0	0	0	0	0	1.9	3	2.5	1.8	33.3	2.2	2.2	1.4	5.6	0	4.2	2.9
3 Axle Vehicles	0	0	0	0	0	1	14	15	1	0	2	3	1	6	0	7	25
% 3 Axle Vehicles	0	0	0	0	0	0.1	1	0.6	0.4	0	2.2	0.8	0.3	0.8	0	0.6	0.6
4+ Axle Trucks	0	0	0	0	0	15	90	105	1	0	13	14	2	73	0	75	194
% 4+ Axle Trucks	0	0	0	0	0	1.2	6.5	4	0.4	0	14	3.8	0.6	9.5	0	6.6	4.7

	I-15 Northbound On Ramp Southbound				Cajalco Road Westbound				I-15 Northbound Off Ramp Northbound				Cajalco Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	181	182	363	**42**	0	9	**51**	47	85	0	132	546
07:15 AM	0	0	0	0	0	**185**	214	**399**	29	0	9	38	**71**	99	0	170	607
07:30 AM	0	0	0	0	0	160	194	354	26	0	**21**	47	69	103	0	172	573
07:45 AM	0	0	0	0	0	141	**246**	387	21	0	8	29	59	**163**	0	**222**	**638**
Total Volume	0	0	0	0	0	667	836	1503	118	0	47	165	246	450	0	696	2364
% App. Total	0	0	0		0	44.4	55.6		71.5	0	28.5		35.3	64.7	0		
PHF	.000	.000	.000	.000	.000	.901	.850	.942	.702	.000	.560	.809	.866	.690	.000	.784	.926

Counts Unlimited
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City of Corona
N/S: I-15 Northbound Ramps
E/W: Cajalco Road
Weather: Clear

File Name : 08_COR_15N_Cajalco AM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 2



Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	06:00 AM				07:00 AM				06:15 AM				07:00 AM			
+0 mins.	0	0	0	0	0	181	182	363	44	**1**	**14**	59	47	85	0	132
+15 mins.	0	0	0	0	0	**185**	214	**399**	29	0	11	40	**71**	99	0	170
+30 mins.	0	0	0	0	0	160	194	354	**57**	0	9	**66**	69	103	0	172
+45 mins.	0	0	0	0	0	141	**246**	387	42	0	9	51	59	**163**	0	**222**
Total Volume	0	0	0	0	0	667	836	1503	172	1	43	216	246	450	0	696
% App. Total	0	0	0		0	44.4	55.6		79.6	0.5	19.9		35.3	64.7	0	
PHF	.000	.000	.000	.000	.000	.901	.850	.942	.754	.250	.768	.818	.866	.690	.000	.784

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City of Corona
N/S: I-15 Northbound Ramps
E/W: Cajalco Road
Weather: Clear

File Name : 08_COR_15N_Cajalco PM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

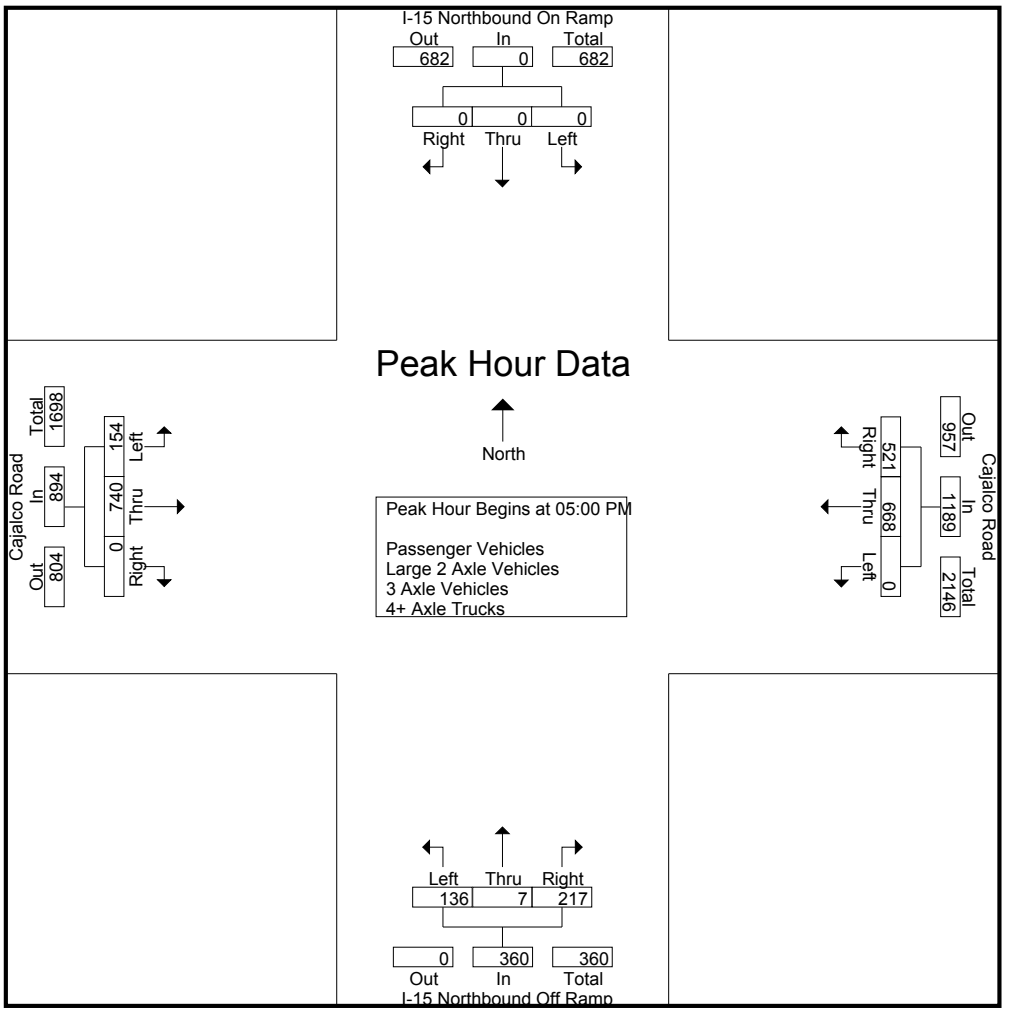
	I-15 Northbound On Ramp Southbound				Cajalco Road Westbound				I-15 Northbound Off Ramp Northbound				Cajalco Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	150	146	296	28	0	50	78	49	137	0	186	560
04:15 PM	0	0	0	0	0	145	108	253	34	0	56	90	52	124	0	176	519
04:30 PM	0	0	0	0	0	148	141	289	36	0	50	86	32	147	0	179	554
04:45 PM	0	0	0	0	0	159	123	282	34	1	52	87	40	164	0	204	573
Total	0	0	0	0	0	602	518	1120	132	1	208	341	173	572	0	745	2206
05:00 PM	0	0	0	0	0	149	139	288	28	1	58	87	45	165	0	210	585
05:15 PM	0	0	0	0	0	165	145	310	49	1	56	106	37	186	0	223	639
05:30 PM	0	0	0	0	0	185	125	310	28	3	49	80	36	189	0	225	615
05:45 PM	0	0	0	0	0	169	112	281	31	2	54	87	36	200	0	236	604
Total	0	0	0	0	0	668	521	1189	136	7	217	360	154	740	0	894	2443
Grand Total	0	0	0	0	0	1270	1039	2309	268	8	425	701	327	1312	0	1639	4649
Apprch %	0	0	0		0	55	45		38.2	1.1	60.6		20	80	0		
Total %	0	0	0	0	0	27.3	22.3	49.7	5.8	0.2	9.1	15.1	7	28.2	0	35.3	
Passenger Vehicles	0	0	0	0	0	1248	977	2225	263	6	401	670	316	1266	0	1582	4477
% Passenger Vehicles	0	0	0	0	0	98.3	94	96.4	98.1	75	94.4	95.6	96.6	96.5	0	96.5	96.3
Large 2 Axle Vehicles	0	0	0	0	0	11	25	36	5	2	12	19	10	9	0	19	74
% Large 2 Axle Vehicles	0	0	0	0	0	0.9	2.4	1.6	1.9	25	2.8	2.7	3.1	0.7	0	1.2	1.6
3 Axle Vehicles	0	0	0	0	0	4	7	11	0	0	2	2	1	4	0	5	18
% 3 Axle Vehicles	0	0	0	0	0	0.3	0.7	0.5	0	0	0.5	0.3	0.3	0.3	0	0.3	0.4
4+ Axle Trucks	0	0	0	0	0	7	30	37	0	0	10	10	0	33	0	33	80
% 4+ Axle Trucks	0	0	0	0	0	0.6	2.9	1.6	0	0	2.4	1.4	0	2.5	0	2	1.7

	I-15 Northbound On Ramp Southbound				Cajalco Road Westbound				I-15 Northbound Off Ramp Northbound				Cajalco Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	149	139	288	28	1	**58**	87	**45**	165	0	210	585
05:15 PM	0	0	0	0	0	165	**145**	**310**	**49**	1	56	**106**	37	186	0	223	**639**
05:30 PM	0	0	0	0	0	**185**	125	310	28	**3**	49	80	36	189	0	225	615
05:45 PM	0	0	0	0	0	169	112	281	31	2	54	87	36	**200**	0	**236**	604
Total Volume	0	0	0	0	0	668	521	1189	136	7	217	360	154	740	0	894	2443
% App. Total	0	0	0		0	56.2	43.8		37.8	1.9	60.3		17.2	82.8	0		
PHF	.000	.000	.000	.000	.000	.903	.898	.959	.694	.583	.935	.849	.856	.925	.000	.947	.956

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City of Corona
N/S: I-15 Northbound Ramps
E/W: Cajalco Road
Weather: Clear

File Name : 08_COR_15N_Cajalco PM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:45 PM				04:30 PM				05:00 PM			
+0 mins.	0	0	0	0	0	159	123	282	36	0	50	86	**45**	165	0	210
+15 mins.	0	0	0	0	0	149	139	288	34	**1**	52	87	37	186	0	223
+30 mins.	0	0	0	0	0	165	**145**	**310**	28	1	**58**	87	36	189	0	225
+45 mins.	0	0	0	0	0	**185**	125	310	**49**	1	56	**106**	36	**200**	0	**236**
Total Volume	0	0	0	0	0	658	532	1190	147	3	216	366	154	740	0	894
% App. Total	0	0	0		0	55.3	44.7		40.2	0.8	59		17.2	82.8	0	
PHF	.000	.000	.000	.000	.000	.889	.917	.960	.750	.750	.931	.863	.856	.925	.000	.947

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City of Corona
N/S: Grand Oaks
E/W: Cajalco Road
Weather: Clear

File Name : 09_COR_Gr Oaks_Cajalco AM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

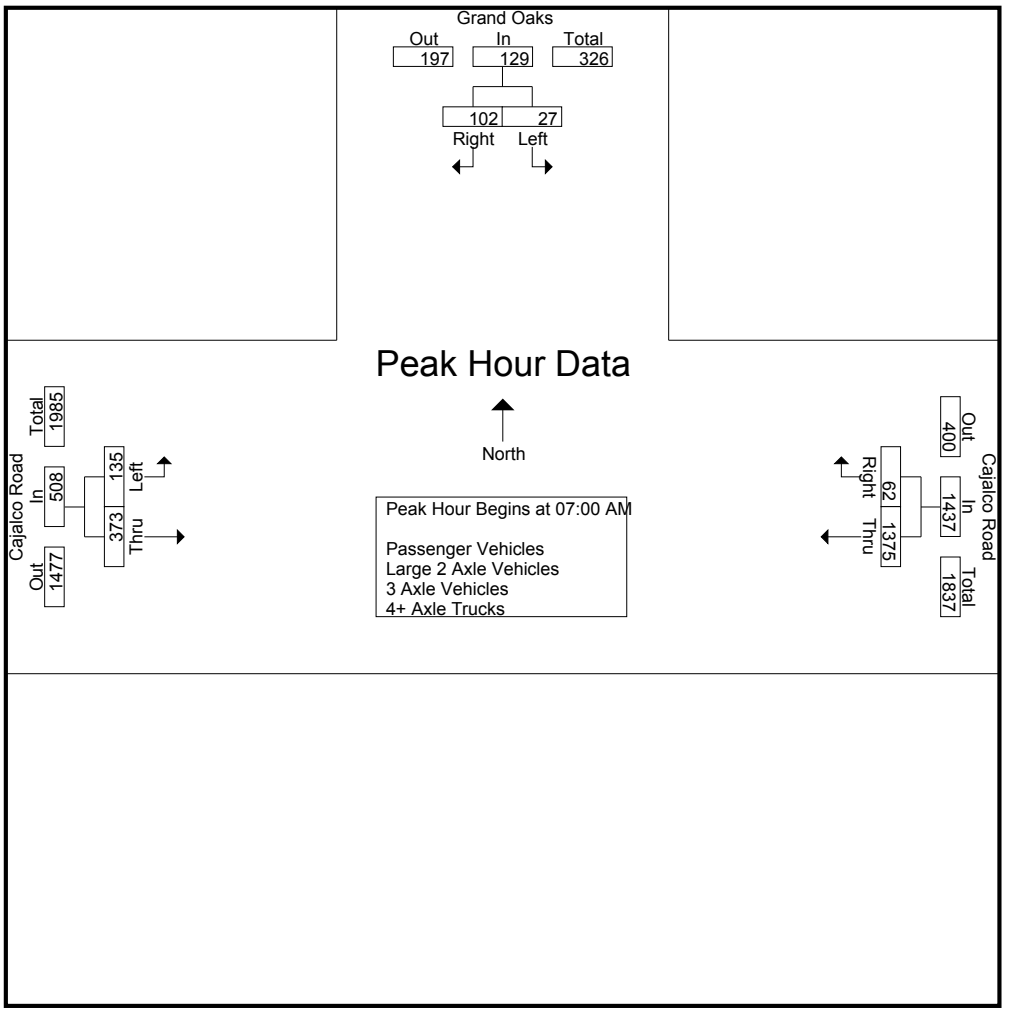
	Grand Oaks Southbound			Cajalco Road Westbound			Cajalco Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
06:00 AM	5	19	24	207	9	216	19	60	79	319
06:15 AM	3	6	9	265	10	275	18	58	76	360
06:30 AM	5	17	22	335	18	353	8	86	94	469
06:45 AM	8	10	18	271	15	286	16	92	108	412
Total	21	52	73	1078	52	1130	61	296	357	1560
07:00 AM	3	20	23	362	11	373	23	84	107	503
07:15 AM	11	24	35	363	6	369	23	81	104	508
07:30 AM	6	23	29	318	19	337	36	96	132	498
07:45 AM	7	35	42	332	26	358	53	112	165	565
Total	27	102	129	1375	62	1437	135	373	508	2074
Grand Total	48	154	202	2453	114	2567	196	669	865	3634
Apprch %	23.8	76.2		95.6	4.4		22.7	77.3		
Total %	1.3	4.2	5.6	67.5	3.1	70.6	5.4	18.4	23.8	
Passenger Vehicles	47	147	194	2291	110	2401	190	542	732	3327
% Passenger Vehicles	97.9	95.5	96	93.4	96.5	93.5	96.9	81	84.6	91.6
Large 2 Axle Vehicles	1	4	5	46	2	48	5	36	41	94
% Large 2 Axle Vehicles	2.1	2.6	2.5	1.9	1.8	1.9	2.6	5.4	4.7	2.6
3 Axle Vehicles	0	0	0	16	0	16	0	8	8	24
% 3 Axle Vehicles	0	0	0	0.7	0	0.6	0	1.2	0.9	0.7
4+ Axle Trucks	0	3	3	100	2	102	1	83	84	189
% 4+ Axle Trucks	0	1.9	1.5	4.1	1.8	4	0.5	12.4	9.7	5.2

	Grand Oaks Southbound			Cajalco Road Westbound			Cajalco Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	3	20	23	362	11	**373**	23	84	107	503
07:15 AM	**11**	24	35	**363**	6	369	23	81	104	508
07:30 AM	6	23	29	318	19	337	36	96	132	498
07:45 AM	7	**35**	**42**	332	**26**	358	**53**	**112**	**165**	**565**
Total Volume	27	102	129	1375	62	1437	135	373	508	2074
% App. Total	20.9	79.1		95.7	4.3		26.6	73.4		
PHF	.614	.729	.768	.947	.596	.963	.637	.833	.770	.918

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City of Corona
N/S: Grand Oaks
E/W: Cajalco Road
Weather: Clear

File Name : 09_COR_Gr Oaks_Cajalco AM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 2



Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	3	20	23	362	11	**373**	23	84	107
+15 mins.	**11**	24	35	**363**	6	369	23	81	104
+30 mins.	6	23	29	318	19	337	36	96	132
+45 mins.	7	**35**	**42**	332	**26**	358	**53**	**112**	**165**
Total Volume	27	102	129	1375	62	1437	135	373	508
% App. Total	20.9	79.1		95.7	4.3		26.6	73.4	
PHF	.614	.729	.768	.947	.596	.963	.637	.833	.770

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City of Corona
N/S: Grand Oaks
E/W: Cajalco Road
Weather: Clear

File Name : 09_COR_Gr Oaks_Cajalco PM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

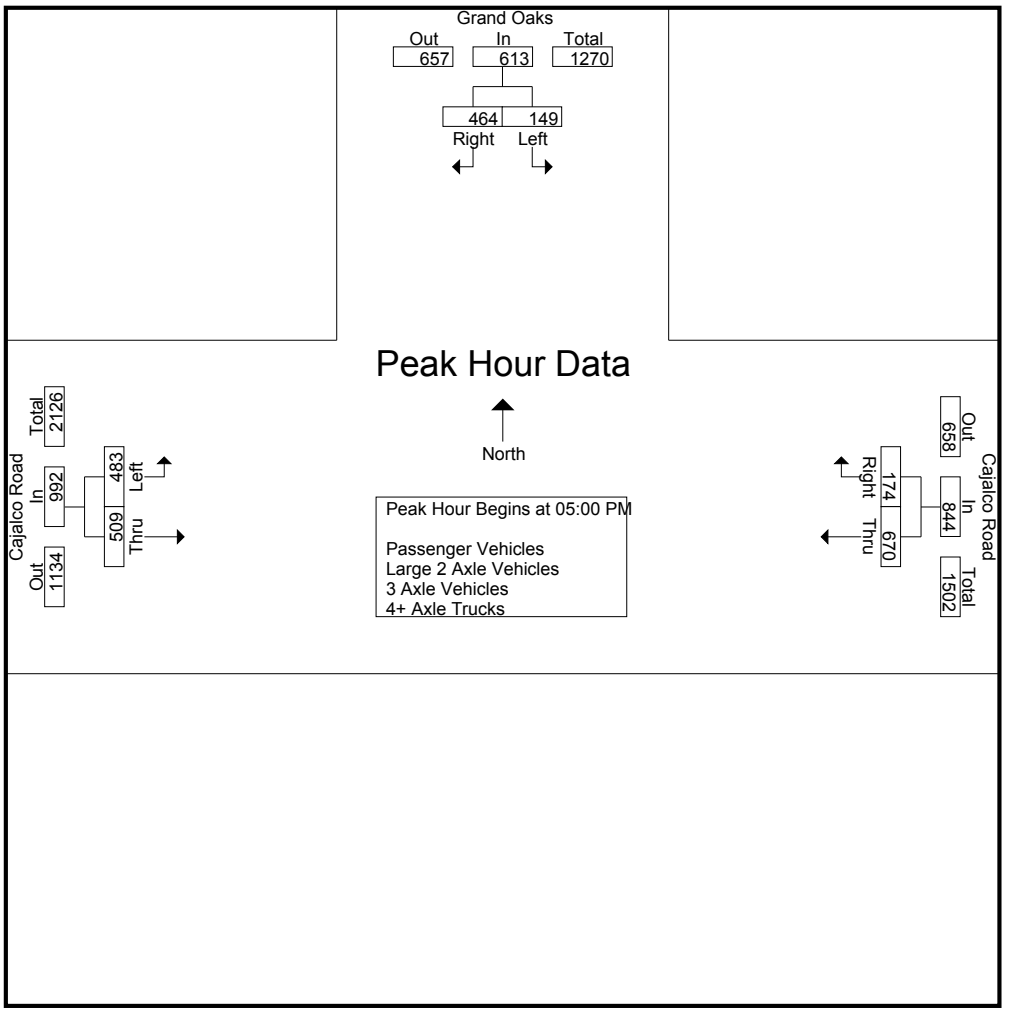
	Grand Oaks Southbound			Cajalco Road Westbound			Cajalco Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	35	91	126	191	45	236	90	105	195	557
04:15 PM	36	115	151	134	28	162	89	103	192	505
04:30 PM	29	107	136	166	40	206	94	112	206	548
04:45 PM	29	107	136	158	52	210	97	116	213	559
Total	129	420	549	649	165	814	370	436	806	2169
05:00 PM	37	123	160	172	46	218	117	127	244	622
05:15 PM	46	111	157	175	44	219	126	125	251	627
05:30 PM	29	110	139	182	50	232	108	125	233	604
05:45 PM	37	120	157	141	34	175	132	132	264	596
Total	149	464	613	670	174	844	483	509	992	2449
Grand Total	278	884	1162	1319	339	1658	853	945	1798	4618
Apprch %	23.9	76.1		79.6	20.4		47.4	52.6		
Total %	6	19.1	25.2	28.6	7.3	35.9	18.5	20.5	38.9	
Passenger Vehicles	276	876	1152	1250	335	1585	846	881	1727	4464
% Passenger Vehicles	99.3	99.1	99.1	94.8	98.8	95.6	99.2	93.2	96.1	96.7
Large 2 Axle Vehicles	2	6	8	25	4	29	4	19	23	60
% Large 2 Axle Vehicles	0.7	0.7	0.7	1.9	1.2	1.7	0.5	2	1.3	1.3
3 Axle Vehicles	0	2	2	11	0	11	2	3	5	18
% 3 Axle Vehicles	0	0.2	0.2	0.8	0	0.7	0.2	0.3	0.3	0.4
4+ Axle Trucks	0	0	0	33	0	33	1	42	43	76
% 4+ Axle Trucks	0	0	0	2.5	0	2	0.1	4.4	2.4	1.6

	Grand Oaks Southbound			Cajalco Road Westbound			Cajalco Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	37	**123**	**160**	172	46	218	117	127	244	622
05:15 PM	**46**	111	157	175	44	219	126	125	251	**627**
05:30 PM	29	110	139	**182**	**50**	**232**	108	125	233	604
05:45 PM	37	120	157	141	34	175	**132**	**132**	**264**	596
Total Volume	149	464	613	670	174	844	483	509	992	2449
% App. Total	24.3	75.7		79.4	20.6		48.7	51.3		
PHF	.810	.943	.958	.920	.870	.909	.915	.964	.939	.976

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City of Corona
N/S: Grand Oaks
E/W: Cajalco Road
Weather: Clear

File Name : 09_COR_Gr Oaks_Cajalco PM
Site Code : 05617610
Start Date : 10/17/2017
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			04:45 PM			05:00 PM		
+0 mins.	37	**123**	**160**	158	**52**	210	117	127	244
+15 mins.	**46**	111	157	172	46	218	126	125	251
+30 mins.	29	110	139	175	44	219	108	125	233
+45 mins.	37	120	157	**182**	50	**232**	**132**	**132**	**264**
Total Volume	149	464	613	687	192	879	483	509	992
% App. Total	24.3	75.7		78.2	21.8		48.7	51.3	
PHF	.810	.943	.958	.944	.923	.947	.915	.964	.939

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City of Corona
N/S: Temescal Canyon Road
E/W: Cajalco Road
Weather: Clear

File Name : 10_COR_Tem Cyn_Cajalco AM
Site Code : 05617610
Start Date : 10/3/2017
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

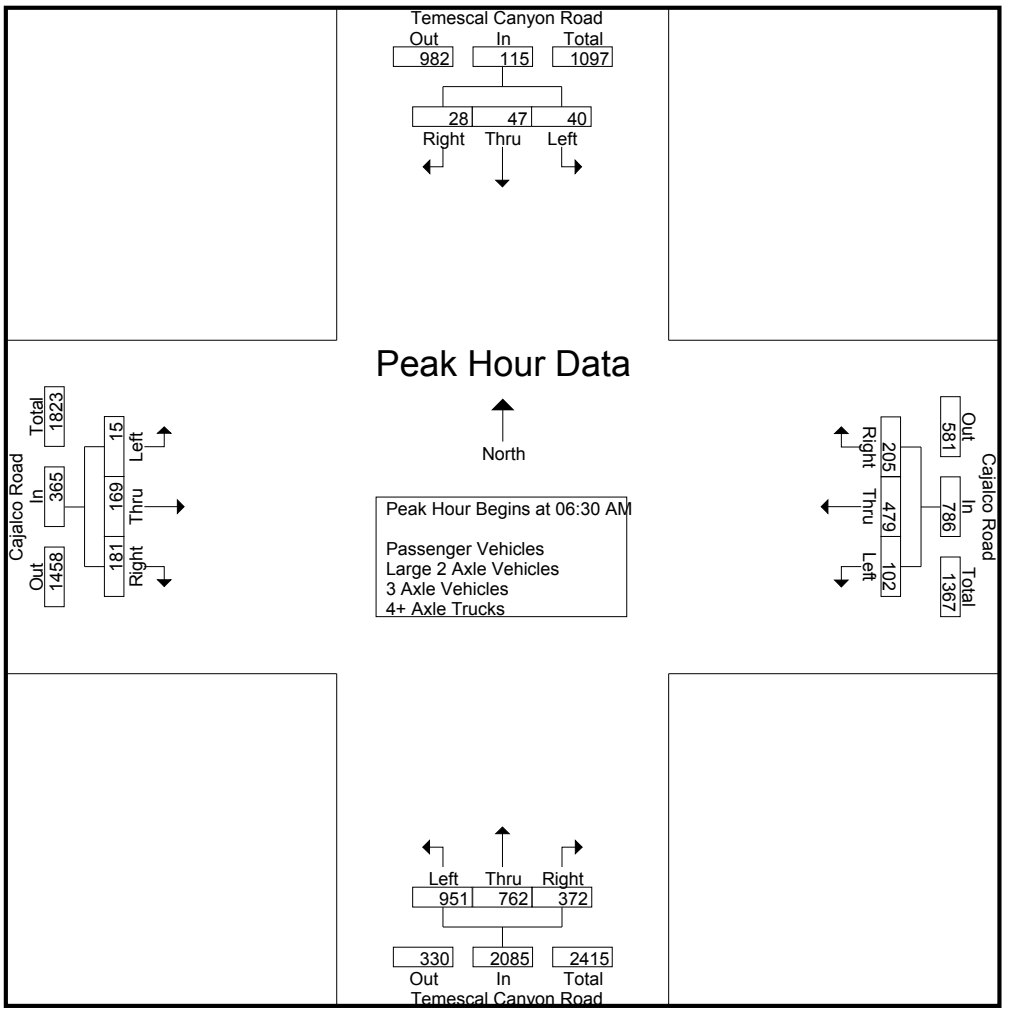
	Temescal Canyon Road Southbound				Cajalco Road Westbound				Temescal Canyon Road Northbound				Cajalco Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:00 AM	5	6	0	11	13	95	41	149	158	223	47	428	2	37	19	58	646
06:15 AM	6	3	3	12	16	130	50	196	179	222	79	480	7	43	26	76	764
06:30 AM	10	5	4	19	23	120	57	200	195	203	115	513	3	42	32	77	809
06:45 AM	6	8	1	15	34	117	46	197	252	194	93	539	7	44	59	110	861
Total	27	22	8	57	86	462	194	742	784	842	334	1960	19	166	136	321	3080
07:00 AM	8	11	3	22	22	137	63	222	264	203	71	538	0	37	41	78	860
07:15 AM	16	23	20	59	23	105	39	167	240	162	93	495	5	46	49	100	821
07:30 AM	14	22	16	52	22	127	35	184	193	148	66	407	8	53	55	116	759
07:45 AM	8	21	8	37	27	127	43	197	153	133	65	351	2	62	77	141	726
Total	46	77	47	170	94	496	180	770	850	646	295	1791	15	198	222	435	3166
Grand Total	73	99	55	227	180	958	374	1512	1634	1488	629	3751	34	364	358	756	6246
Apprch %	32.2	43.6	24.2		11.9	63.4	24.7		43.6	39.7	16.8		4.5	48.1	47.4		
Total %	1.2	1.6	0.9	3.6	2.9	15.3	6	24.2	26.2	23.8	10.1	60.1	0.5	5.8	5.7	12.1	
Passenger Vehicles	72	95	51	218	174	818	358	1350	1609	1455	615	3679	28	276	335	639	5886
% Passenger Vehicles	98.6	96	92.7	96	96.7	85.4	95.7	89.3	98.5	97.8	97.8	98.1	82.4	75.8	93.6	84.5	94.2
Large 2 Axle Vehicles	1	3	3	7	4	27	14	45	12	32	9	53	3	19	12	34	139
% Large 2 Axle Vehicles	1.4	3	5.5	3.1	2.2	2.8	3.7	3	0.7	2.2	1.4	1.4	8.8	5.2	3.4	4.5	2.2
3 Axle Vehicles	0	0	0	0	2	14	0	16	1	0	1	2	2	4	2	8	26
% 3 Axle Vehicles	0	0	0	0	1.1	1.5	0	1.1	0.1	0	0.2	0.1	5.9	1.1	0.6	1.1	0.4
4+ Axle Trucks	0	1	1	2	0	99	2	101	12	1	4	17	1	65	9	75	195
% 4+ Axle Trucks	0	1	1.8	0.9	0	10.3	0.5	6.7	0.7	0.1	0.6	0.5	2.9	17.9	2.5	9.9	3.1

	Temescal Canyon Road Southbound				Cajalco Road Westbound				Temescal Canyon Road Northbound				Cajalco Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 06:30 AM																	
06:30 AM	10	5	4	19	23	120	57	200	195	**203**	**115**	513	3	42	32	77	809
06:45 AM	6	8	1	15	**34**	117	46	197	252	194	93	**539**	**7**	44	**59**	**110**	**861**
07:00 AM	8	11	3	22	22	**137**	**63**	**222**	**264**	203	71	538	0	37	41	78	860
07:15 AM	**16**	**23**	**20**	**59**	23	105	39	167	240	162	93	495	5	**46**	49	100	821
Total Volume	40	47	28	115	102	479	205	786	951	762	372	2085	15	169	181	365	3351
% App. Total	34.8	40.9	24.3		13	60.9	26.1		45.6	36.5	17.8		4.1	46.3	49.6		
PHF	.625	.511	.350	.487	.750	.874	.813	.885	.901	.938	.809	.967	.536	.918	.767	.830	.973

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City of Corona
N/S: Temescal Canyon Road
E/W: Cajalco Road
Weather: Clear

File Name : 10_COR_Tem Cyn_Cajalco AM
Site Code : 05617610
Start Date : 10/3/2017
Page No : 2



Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				06:15 AM				06:30 AM				07:00 AM			
+0 mins.	8	11	3	22	16	130	50	196	195	**203**	**115**	513	0	37	41	78
+15 mins.	**16**	**23**	**20**	**59**	23	120	57	200	252	194	93	**539**	5	46	49	100
+30 mins.	14	22	16	52	**34**	117	46	197	**264**	203	71	538	**8**	53	55	116
+45 mins.	8	21	8	37	22	**137**	**63**	**222**	240	162	93	495	2	**62**	**77**	**141**
Total Volume	46	77	47	170	95	504	216	815	951	762	372	2085	15	198	222	435
% App. Total	27.1	45.3	27.6		11.7	61.8	26.5		45.6	36.5	17.8		3.4	45.5	51	
PHF	.719	.837	.588	.720	.699	.920	.857	.918	.901	.938	.809	.967	.469	.798	.721	.771

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City of Corona
N/S: Temescal Canyon Road
E/W: Cajalco Road
Weather: Clear

File Name : 10_COR_Tem Cyn_Cajalco PM
Site Code : 05617610
Start Date : 10/3/2017
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

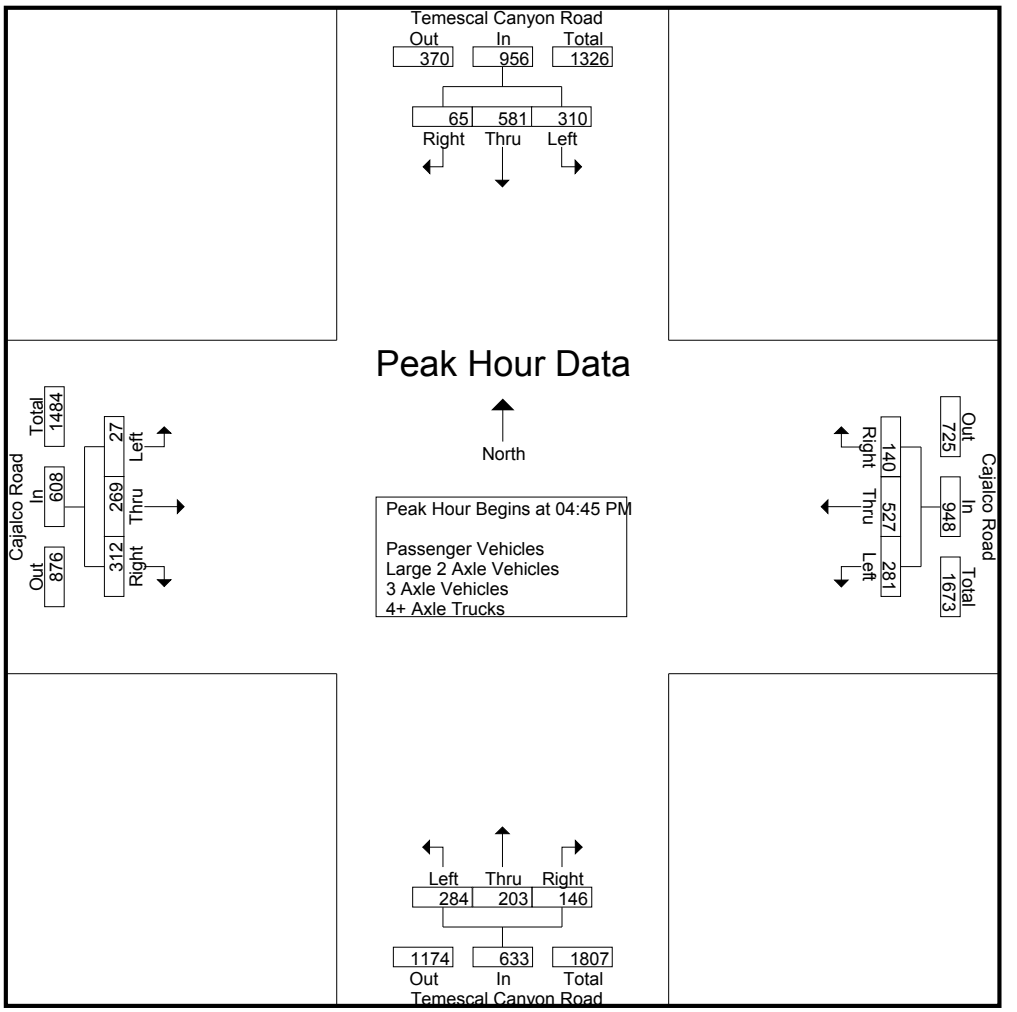
	Temescal Canyon Road Southbound				Cajalco Road Westbound				Temescal Canyon Road Northbound				Cajalco Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	82	111	10	203	50	104	31	185	78	55	41	174	0	50	74	124	686
04:15 PM	66	138	18	222	57	122	33	212	47	50	38	135	5	68	79	152	721
04:30 PM	54	151	15	220	41	126	30	197	87	53	41	181	4	68	72	144	742
04:45 PM	77	138	14	229	62	130	29	221	61	56	35	152	9	78	79	166	768
Total	279	538	57	874	210	482	123	815	273	214	155	642	18	264	304	586	2917
05:00 PM	75	141	20	236	71	134	30	235	71	61	46	178	7	53	62	122	771
05:15 PM	90	156	11	257	70	122	37	229	81	47	37	165	6	71	76	153	804
05:30 PM	68	146	20	234	78	141	44	263	71	39	28	138	5	67	95	167	802
05:45 PM	60	138	16	214	73	149	29	251	65	46	20	131	4	54	114	172	768
Total	293	581	67	941	292	546	140	978	288	193	131	612	22	245	347	614	3145
Grand Total	572	1119	124	1815	502	1028	263	1793	561	407	286	1254	40	509	651	1200	6062
Apprch %	31.5	61.7	6.8		28	57.3	14.7		44.7	32.5	22.8		3.3	42.4	54.2		
Total %	9.4	18.5	2	29.9	8.3	17	4.3	29.6	9.3	6.7	4.7	20.7	0.7	8.4	10.7	19.8	
Passenger Vehicles	536	1105	123	1764	492	981	258	1731	546	401	283	1230	37	477	631	1145	5870
% Passenger Vehicles	93.7	98.7	99.2	97.2	98	95.4	98.1	96.5	97.3	98.5	99	98.1	92.5	93.7	96.9	95.4	96.8
Large 2 Axle Vehicles	15	13	1	29	5	18	3	26	14	5	3	22	3	11	4	18	95
% Large 2 Axle Vehicles	2.6	1.2	0.8	1.6	1	1.8	1.1	1.5	2.5	1.2	1	1.8	7.5	2.2	0.6	1.5	1.6
3 Axle Vehicles	1	0	0	1	1	2	1	4	0	0	0	0	0	4	1	5	10
% 3 Axle Vehicles	0.2	0	0	0.1	0.2	0.2	0.4	0.2	0	0	0	0	0	0.8	0.2	0.4	0.2
4+ Axle Trucks	20	1	0	21	4	27	1	32	1	1	0	2	0	17	15	32	87
% 4+ Axle Trucks	3.5	0.1	0	1.2	0.8	2.6	0.4	1.8	0.2	0.2	0	0.2	0	3.3	2.3	2.7	1.4

	Temescal Canyon Road Southbound				Cajalco Road Westbound				Temescal Canyon Road Northbound				Cajalco Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	77	138	14	229	62	130	29	221	61	56	35	152	**9**	**78**	79	166	768
05:00 PM	75	141	**20**	236	71	134	30	235	71	**61**	**46**	**178**	7	53	62	122	771
05:15 PM	**90**	**156**	11	**257**	70	122	37	229	**81**	47	37	165	6	71	76	153	**804**
05:30 PM	68	146	20	234	**78**	**141**	**44**	**263**	71	39	28	138	5	67	**95**	**167**	802
Total Volume	310	581	65	956	281	527	140	948	284	203	146	633	27	269	312	608	3145
% App. Total	32.4	60.8	6.8		29.6	55.6	14.8		44.9	32.1	23.1		4.4	44.2	51.3		
PHF	.861	.931	.813	.930	.901	.934	.795	.901	.877	.832	.793	.889	.750	.862	.821	.910	.978

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City of Corona
N/S: Temescal Canyon Road
E/W: Cajalco Road
Weather: Clear

File Name : 10_COR_Tem Cyn_Cajalco PM
Site Code : 05617610
Start Date : 10/3/2017
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				05:00 PM				04:30 PM				05:00 PM			
+0 mins.	77	138	14	229	71	134	30	235	**87**	53	41	**181**	**7**	53	62	122
+15 mins.	75	141	**20**	236	70	122	37	229	61	56	35	152	6	**71**	76	153
+30 mins.	**90**	**156**	11	**257**	**78**	141	**44**	**263**	71	**61**	**46**	178	5	67	95	167
+45 mins.	68	146	20	234	73	**149**	29	251	81	47	37	165	4	54	**114**	**172**
Total Volume	310	581	65	956	292	546	140	978	300	217	159	676	22	245	347	614
% App. Total	32.4	60.8	6.8		29.9	55.8	14.3		44.4	32.1	23.5		3.6	39.9	56.5	
PHF	.861	.931	.813	.930	.936	.916	.795	.930	.862	.889	.864	.934	.786	.863	.761	.892

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City of Corona
N/S: Masters Drive
E/W: Christopher Lane
Weather: Clear

File Name : 02_COR_Masters_Christopher AM
Site Code : 05118203
Start Date : 3/27/2018
Page No : 1

Groups Printed- Total Volume

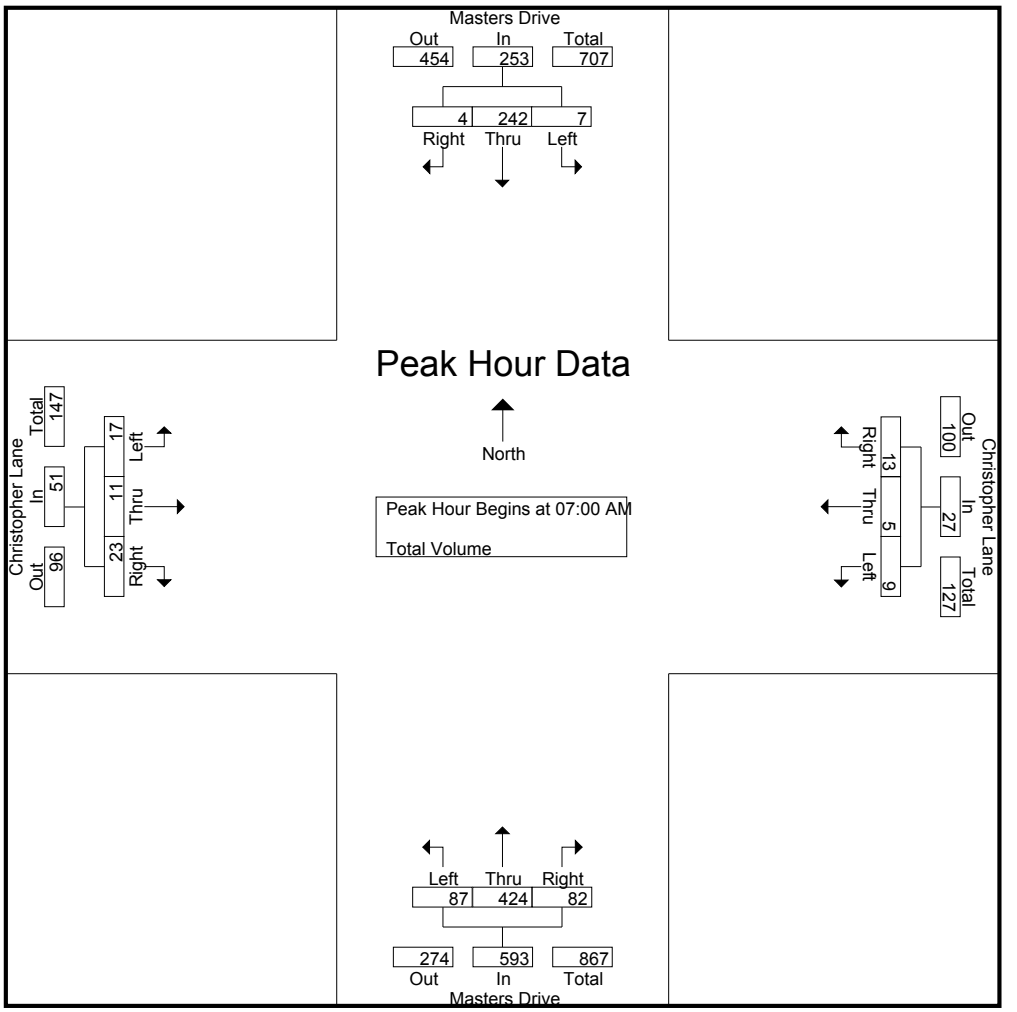
	Masters Drive Southbound				Christopher Lane Westbound				Masters Drive Northbound				Christopher Lane Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	24	0	25	1	0	4	5	9	129	9	147	4	4	3	11	188
07:15 AM	2	46	2	50	2	3	3	8	52	131	55	238	6	5	3	14	310
07:30 AM	2	104	2	108	4	2	4	10	22	97	16	135	1	2	9	12	265
07:45 AM	2	68	0	70	2	0	2	4	4	67	2	73	6	0	8	14	161
Total	7	242	4	253	9	5	13	27	87	424	82	593	17	11	23	51	924
08:00 AM	2	43	0	45	2	0	2	4	0	73	2	75	3	1	1	5	129
08:15 AM	1	33	0	34	2	0	1	3	3	64	3	70	3	0	1	4	111
08:30 AM	0	32	1	33	1	0	0	1	2	61	2	65	2	0	1	3	102
08:45 AM	1	21	0	22	2	1	2	5	0	52	1	53	0	1	0	1	81
Total	4	129	1	134	7	1	5	13	5	250	8	263	8	2	3	13	423
Grand Total	11	371	5	387	16	6	18	40	92	674	90	856	25	13	26	64	1347
Apprch %	2.8	95.9	1.3		40	15	45		10.7	78.7	10.5		39.1	20.3	40.6		
Total %	0.8	27.5	0.4	28.7	1.2	0.4	1.3	3	6.8	50	6.7	63.5	1.9	1	1.9	4.8	

	Masters Drive Southbound				Christopher Lane Westbound				Masters Drive Northbound				Christopher Lane Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	1	24	0	25	1	0	**4**	5	9	129	9	147	4	4	3	11	188
07:15 AM	**2**	46	**2**	50	2	**3**	3	8	**52**	**131**	**55**	**238**	**6**	**5**	3	**14**	**310**
07:30 AM	2	**104**	2	**108**	**4**	2	4	**10**	22	97	16	135	1	2	**9**	12	265
07:45 AM	2	68	0	70	2	0	2	4	4	67	2	73	6	0	8	14	161
Total Volume	7	242	4	253	9	5	13	27	87	424	82	593	17	11	23	51	924
% App. Total	2.8	95.7	1.6		33.3	18.5	48.1		14.7	71.5	13.8		33.3	21.6	45.1		
PHF	.875	.582	.500	.586	.563	.417	.813	.675	.418	.809	.373	.623	.708	.550	.639	.911	.745

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City of Corona
N/S: Masters Drive
E/W: Christopher Lane
Weather: Clear

File Name : 02_COR_Masters_Christopher AM
Site Code : 05118203
Start Date : 3/27/2018
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	**2**	46	**2**	50	1	0	**4**	5	9	129	9	147	4	4	3	11
+15 mins.	2	**104**	2	**108**	2	**3**	3	8	**52**	**131**	**55**	**238**	**6**	**5**	3	**14**
+30 mins.	2	68	0	70	**4**	2	4	**10**	22	97	16	135	1	2	**9**	12
+45 mins.	2	43	0	45	2	0	2	4	4	67	2	73	6	0	8	14
Total Volume	8	261	4	273	9	5	13	27	87	424	82	593	17	11	23	51
% App. Total	2.9	95.6	1.5		33.3	18.5	48.1		14.7	71.5	13.8		33.3	21.6	45.1	
PHF	1.000	.627	.500	.632	.563	.417	.813	.675	.418	.809	.373	.623	.708	.550	.639	.911

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City of Corona
N/S: Masters Drive
E/W: Christopher Lane
Weather: Clear

File Name : 02_COR_Masters_Christopher PM
Site Code : 05118203
Start Date : 3/27/2018
Page No : 1

Groups Printed- Total Volume

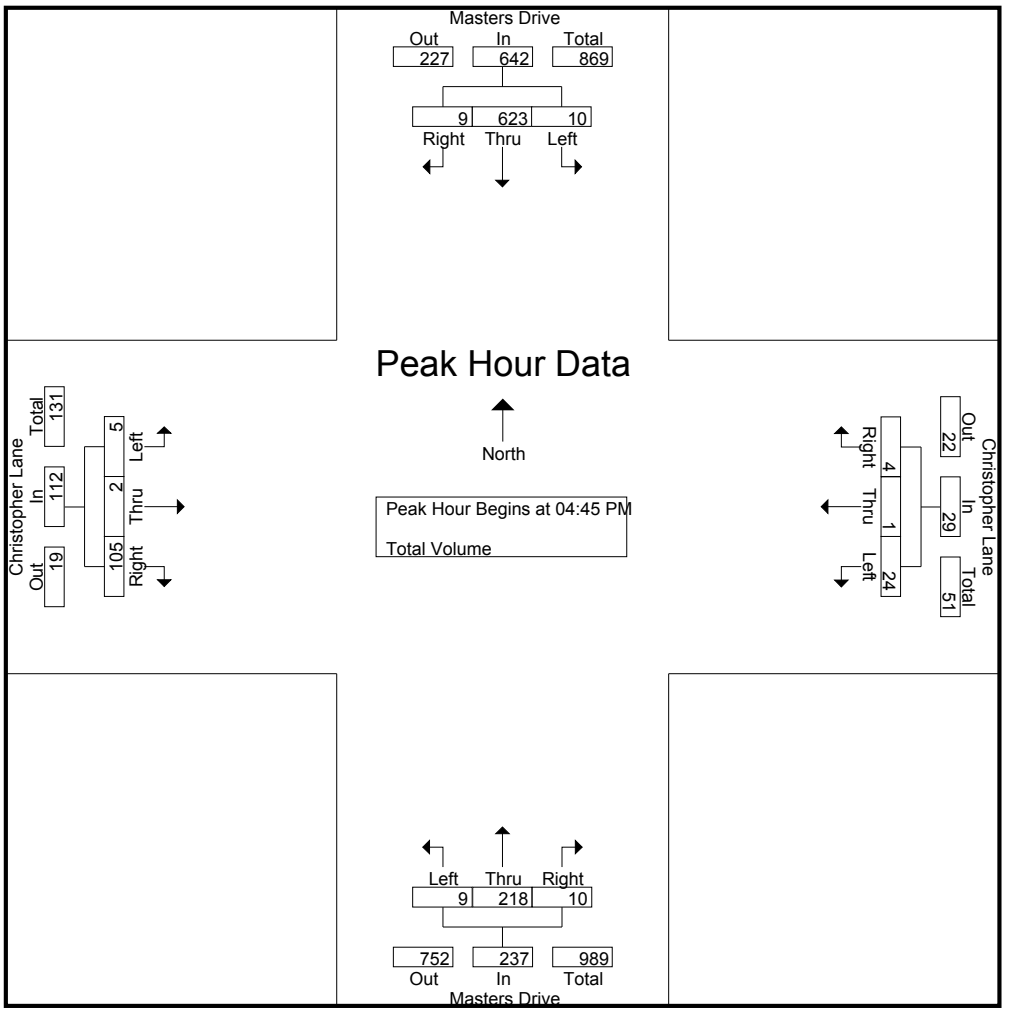
	Masters Drive Southbound				Christopher Lane Westbound				Masters Drive Northbound				Christopher Lane Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	3	129	3	135	0	0	1	1	0	43	3	46	3	0	15	18	200
04:15 PM	1	136	2	139	4	0	2	6	5	46	3	54	2	0	15	17	216
04:30 PM	2	125	2	129	6	0	1	7	3	42	4	49	1	0	17	18	203
04:45 PM	3	154	2	159	5	0	1	6	2	61	7	70	2	0	19	21	256
Total	9	544	9	562	15	0	5	20	10	192	17	219	8	0	66	74	875
05:00 PM	2	142	2	146	7	1	1	9	6	56	1	63	2	0	24	26	244
05:15 PM	3	172	2	177	4	0	1	5	1	60	0	61	1	1	30	32	275
05:30 PM	2	155	3	160	8	0	1	9	0	41	2	43	0	1	32	33	245
05:45 PM	2	151	5	158	6	1	1	8	1	67	1	69	3	0	14	17	252
Total	9	620	12	641	25	2	4	31	8	224	4	236	6	2	100	108	1016
Grand Total	18	1164	21	1203	40	2	9	51	18	416	21	455	14	2	166	182	1891
Apprch %	1.5	96.8	1.7		78.4	3.9	17.6		4	91.4	4.6		7.7	1.1	91.2		
Total %	1	61.6	1.1	63.6	2.1	0.1	0.5	2.7	1	22	1.1	24.1	0.7	0.1	8.8	9.6	

	Masters Drive Southbound				Christopher Lane Westbound				Masters Drive Northbound				Christopher Lane Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**3**	154	2	159	5	0	**1**	6	2	**61**	**7**	**70**	**2**	0	19	21	256
05:00 PM	2	142	2	146	7	**1**	1	**9**	**6**	56	1	63	2	0	24	26	244
05:15 PM	3	**172**	2	**177**	4	0	1	5	1	60	0	61	1	**1**	30	32	**275**
05:30 PM	2	155	**3**	160	**8**	0	1	9	0	41	2	43	0	1	**32**	**33**	245
Total Volume	10	623	9	642	24	1	4	29	9	218	10	237	5	2	105	112	1020
% App. Total	1.6	97	1.4		82.8	3.4	13.8		3.8	92	4.2		4.5	1.8	93.8		
PHF	.833	.906	.750	.907	.750	.250	1.00	.806	.375	.893	.357	.846	.625	.500	.820	.848	.927

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City of Corona
N/S: Masters Drive
E/W: Christopher Lane
Weather: Clear

File Name : 02_COR_Masters_Christopher PM
Site Code : 05118203
Start Date : 3/27/2018
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				05:00 PM				04:30 PM				04:45 PM			
+0 mins.	**3**	154	2	159	7	**1**	**1**	**9**	3	42	4	49	**2**	0	19	21
+15 mins.	2	142	2	146	4	0	1	5	2	**61**	**7**	**70**	2	0	24	26
+30 mins.	3	**172**	2	**177**	**8**	0	1	9	**6**	56	1	63	1	**1**	30	32
+45 mins.	2	155	**3**	160	6	1	1	8	1	60	0	61	0	1	**32**	**33**
Total Volume	10	623	9	642	25	2	4	31	12	219	12	243	5	2	105	112
% App. Total	1.6	97	1.4		80.6	6.5	12.9		4.9	90.1	4.9		4.5	1.8	93.8	
PHF	.833	.906	.750	.907	.781	.500	1.000	.861	.500	.898	.429	.868	.625	.500	.820	.848

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City of Corona
N/S: Via Castilla Street
E/W: Masters Drive
Weather: Clear

File Name : 132_COR_Castilla_Masters AM
Site Code : 05617610
Start Date : 10/3/2017
Page No : 1

Groups Printed- Total Volume

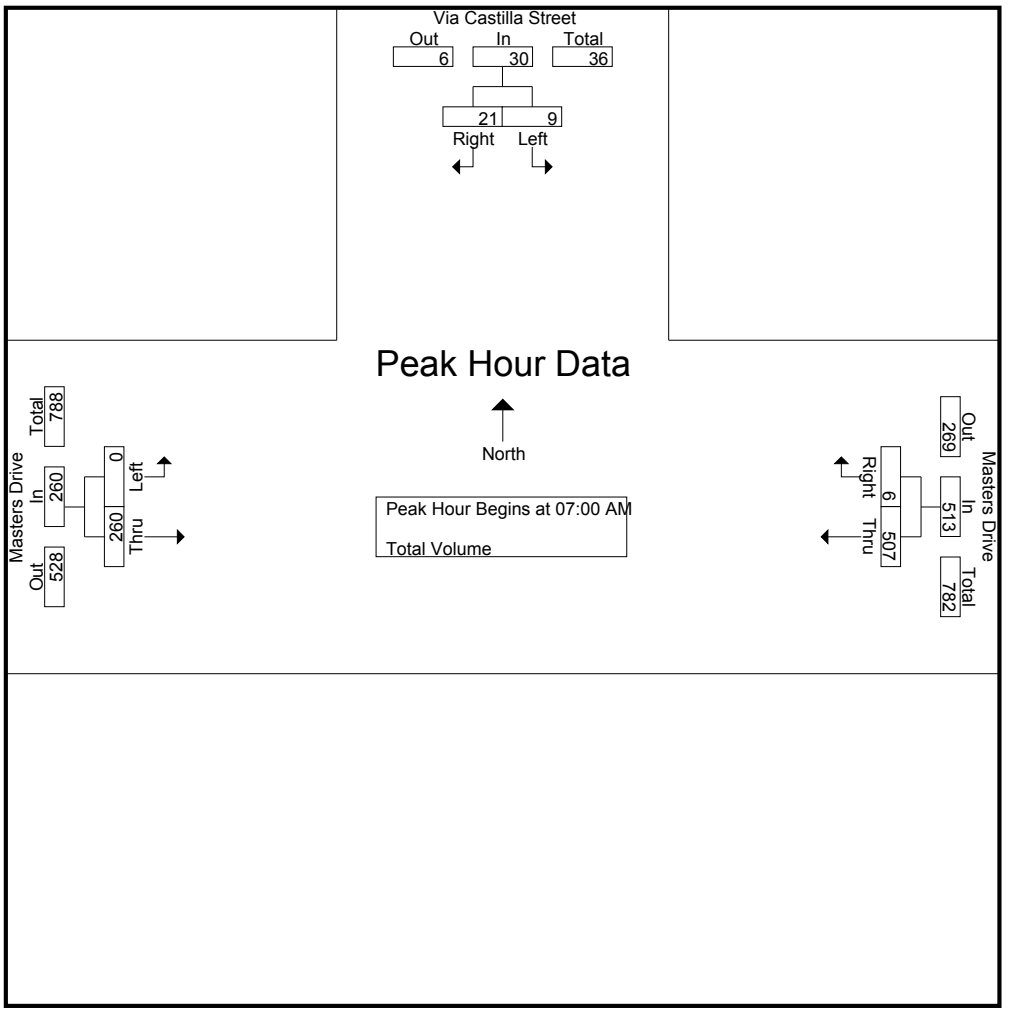
	Via Castilla Street Southbound			Masters Drive Westbound			Masters Drive Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
06:00 AM	1	1	2	25	1	26	0	5	5	33
06:15 AM	0	2	2	39	0	39	0	5	5	46
06:30 AM	1	1	2	43	1	44	0	10	10	56
06:45 AM	2	2	4	84	1	85	0	22	22	111
Total	4	6	10	191	3	194	0	42	42	246
07:00 AM	2	8	10	141	0	141	0	29	29	180
07:15 AM	1	7	8	189	1	190	0	60	60	258
07:30 AM	3	2	5	112	3	115	0	84	84	204
07:45 AM	3	4	7	65	2	67	0	87	87	161
Total	9	21	30	507	6	513	0	260	260	803
Grand Total	13	27	40	698	9	707	0	302	302	1049
Apprch %	32.5	67.5		98.7	1.3		0	100		
Total %	1.2	2.6	3.8	66.5	0.9	67.4	0	28.8	28.8	

	Via Castilla Street Southbound			Masters Drive Westbound			Masters Drive Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	2	**8**	**10**	141	0	141	0	29	29	180
07:15 AM	1	7	8	**189**	1	**190**	0	60	60	**258**
07:30 AM	**3**	2	5	112	**3**	115	0	84	84	204
07:45 AM	3	4	7	65	2	67	0	**87**	**87**	161
Total Volume	9	21	30	507	6	513	0	260	260	803
% App. Total	30	70		98.8	1.2		0	100		
PHF	.750	.656	.750	.671	.500	.675	.000	.747	.747	.778

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City of Corona
N/S: Via Castilla Street
E/W: Masters Drive
Weather: Clear

File Name : 132_COR_Castilla_Masters AM
Site Code : 05617610
Start Date : 10/3/2017
Page No : 2



Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			06:45 AM			07:00 AM		
+0 mins.	2	**8**	**10**	84	1	85	0	29	29
+15 mins.	1	7	8	141	0	141	0	60	60
+30 mins.	**3**	2	5	**189**	1	**190**	0	84	84
+45 mins.	3	4	7	112	**3**	115	0	**87**	**87**
Total Volume	9	21	30	526	5	531	0	260	260
% App. Total	30	70		99.1	0.9		0	100	
PHF	.750	.656	.750	.696	.417	.699	.000	.747	.747

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City of Corona
N/S: Via Castilla Street
E/W: Masters Drive
Weather: Clear

File Name : 132_COR_Castilla_Masters PM
Site Code : 05617610
Start Date : 10/3/2017
Page No : 1

Groups Printed- Total Volume

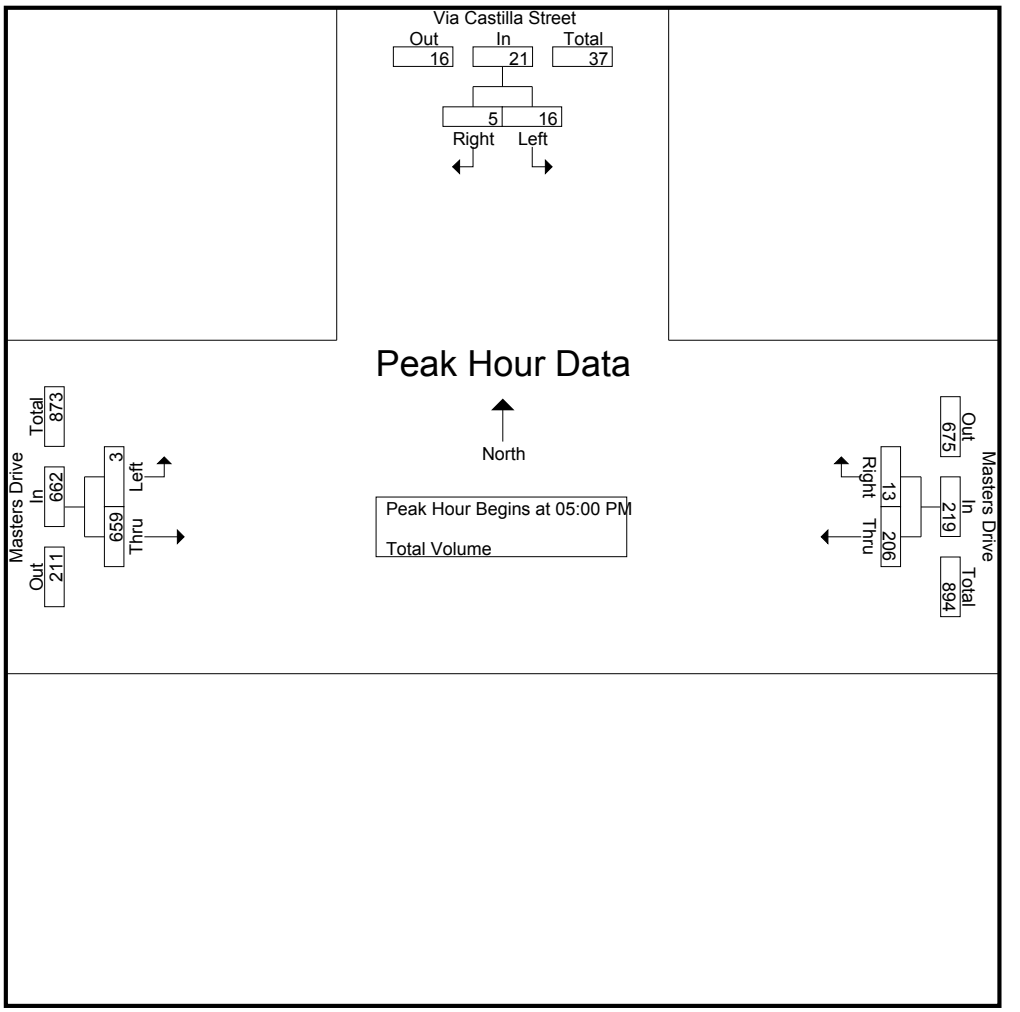
	Via Castilla Street Southbound			Masters Drive Westbound			Masters Drive Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	0	0	0	36	2	38	0	103	103	141
04:15 PM	3	0	3	39	7	46	2	132	134	183
04:30 PM	1	1	2	32	0	32	3	131	134	168
04:45 PM	0	1	1	42	2	44	2	137	139	184
Total	4	2	6	149	11	160	7	503	510	676
05:00 PM	5	1	6	53	2	55	2	163	165	226
05:15 PM	4	2	6	60	2	62	1	195	196	264
05:30 PM	4	0	4	43	5	48	0	165	165	217
05:45 PM	3	2	5	50	4	54	0	136	136	195
Total	16	5	21	206	13	219	3	659	662	902
Grand Total	20	7	27	355	24	379	10	1162	1172	1578
Apprch %	74.1	25.9		93.7	6.3		0.9	99.1		
Total %	1.3	0.4	1.7	22.5	1.5	24	0.6	73.6	74.3	

	Via Castilla Street Southbound			Masters Drive Westbound			Masters Drive Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	**5**	1	**6**	53	2	55	**2**	163	165	226
05:15 PM	4	**2**	6	**60**	2	**62**	1	**195**	**196**	**264**
05:30 PM	4	0	4	43	**5**	48	0	165	165	217
05:45 PM	3	2	5	50	4	54	0	136	136	195
Total Volume	16	5	21	206	13	219	3	659	662	902
% App. Total	76.2	23.8		94.1	5.9		0.5	99.5		
PHF	.800	.625	.875	.858	.650	.883	.375	.845	.844	.854

Counts Unlimited
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Corona, CA 92878
(951) 268-6268

City of Corona
N/S: Via Castilla Street
E/W: Masters Drive
Weather: Clear

File Name : 132_COR_Castilla_Masters PM
Site Code : 05617610
Start Date : 10/3/2017
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			04:45 PM		
+0 mins.	**5**	1	**6**	53	2	55	**2**	137	139
+15 mins.	4	**2**	6	**60**	2	**62**	2	163	165
+30 mins.	4	0	4	43	**5**	48	1	**195**	**196**
+45 mins.	3	2	5	50	4	54	0	165	165
Total Volume	16	5	21	206	13	219	5	660	665
% App. Total	76.2	23.8		94.1	5.9		0.8	99.2	
PHF	.800	.625	.875	.858	.650	.883	.625	.846	.848

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Corona
N/S: Morales Way
E/W: Masters Drive
Weather: Clear

File Name : 134_COR_Morales_Masters AM
Site Code : 05617610
Start Date : 10/4/2017
Page No : 1

Groups Printed- Total Volume

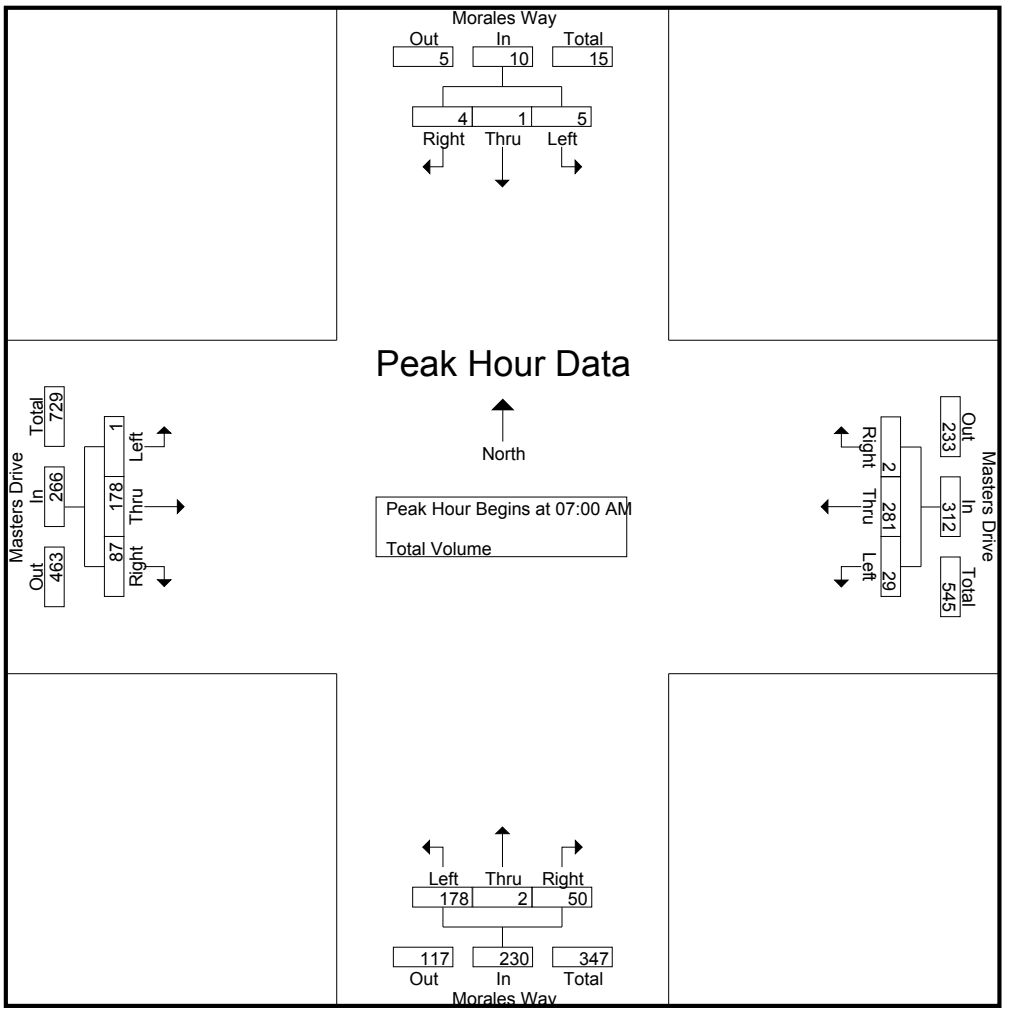
	Morales Way Southbound				Masters Drive Westbound				Morales Way Northbound				Masters Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:00 AM	0	0	0	0	3	18	0	21	8	0	4	12	0	7	2	9	42
06:15 AM	0	0	0	0	1	24	0	25	10	0	8	18	0	4	2	6	49
06:30 AM	0	0	0	0	2	24	0	26	20	0	6	26	0	13	2	15	67
06:45 AM	1	0	2	3	8	68	1	77	26	0	12	38	0	20	8	28	146
Total	1	0	2	3	14	134	1	149	64	0	30	94	0	44	14	58	304
07:00 AM	1	0	1	2	2	87	1	90	70	0	18	88	0	30	10	40	220
07:15 AM	1	0	2	3	7	90	0	97	67	0	15	82	0	46	15	61	243
07:30 AM	2	1	1	4	13	63	0	76	22	2	12	36	0	50	31	81	197
07:45 AM	1	0	0	1	7	41	1	49	19	0	5	24	1	52	31	84	158
Total	5	1	4	10	29	281	2	312	178	2	50	230	1	178	87	266	818
Grand Total	6	1	6	13	43	415	3	461	242	2	80	324	1	222	101	324	1122
Apprch %	46.2	7.7	46.2		9.3	90	0.7		74.7	0.6	24.7		0.3	68.5	31.2		
Total %	0.5	0.1	0.5	1.2	3.8	37	0.3	41.1	21.6	0.2	7.1	28.9	0.1	19.8	9	28.9	

	Morales Way Southbound				Masters Drive Westbound				Morales Way Northbound				Masters Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	1	0	1	2	2	87	**1**	90	**70**	0	**18**	**88**	0	30	10	40	220
07:15 AM	1	0	**2**	3	7	**90**	0	**97**	67	0	15	82	0	46	15	61	**243**
07:30 AM	**2**	**1**	1	**4**	**13**	63	0	76	22	**2**	12	36	0	50	**31**	81	197
07:45 AM	1	0	0	1	7	41	1	49	19	0	5	24	**1**	**52**	31	**84**	158
Total Volume	5	1	4	10	29	281	2	312	178	2	50	230	1	178	87	266	818
% App. Total	50	10	40		9.3	90.1	0.6		77.4	0.9	21.7		0.4	66.9	32.7		
PHF	.625	.250	.500	.625	.558	.781	.500	.804	.636	.250	.694	.653	.250	.856	.702	.792	.842

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City of Corona
N/S: Morales Way
E/W: Masters Drive
Weather: Clear

File Name : 134_COR_Morales_Masters AM
Site Code : 05617610
Start Date : 10/4/2017
Page No : 2



Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	06:45 AM				06:45 AM				06:45 AM				07:00 AM			
+0 mins.	1	0	**2**	3	8	68	**1**	77	26	0	12	38	0	30	10	40
+15 mins.	1	0	1	2	2	87	1	90	**70**	0	**18**	**88**	0	46	15	61
+30 mins.	1	0	2	3	7	**90**	0	**97**	67	0	15	82	0	50	**31**	81
+45 mins.	**2**	**1**	1	**4**	**13**	63	0	76	22	**2**	12	36	**1**	**52**	31	**84**
Total Volume	5	1	6	12	30	308	2	340	185	2	57	244	1	178	87	266
% App. Total	41.7	8.3	50		8.8	90.6	0.6		75.8	0.8	23.4		0.4	66.9	32.7	
PHF	.625	.250	.750	.750	.577	.856	.500	.876	.661	.250	.792	.693	.250	.856	.702	.792

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City of Corona
N/S: Morales Way
E/W: Masters Drive
Weather: Clear

File Name : 134_COR_Morales_Masters PM
Site Code : 05617610
Start Date : 10/4/2017
Page No : 1

Groups Printed- Total Volume

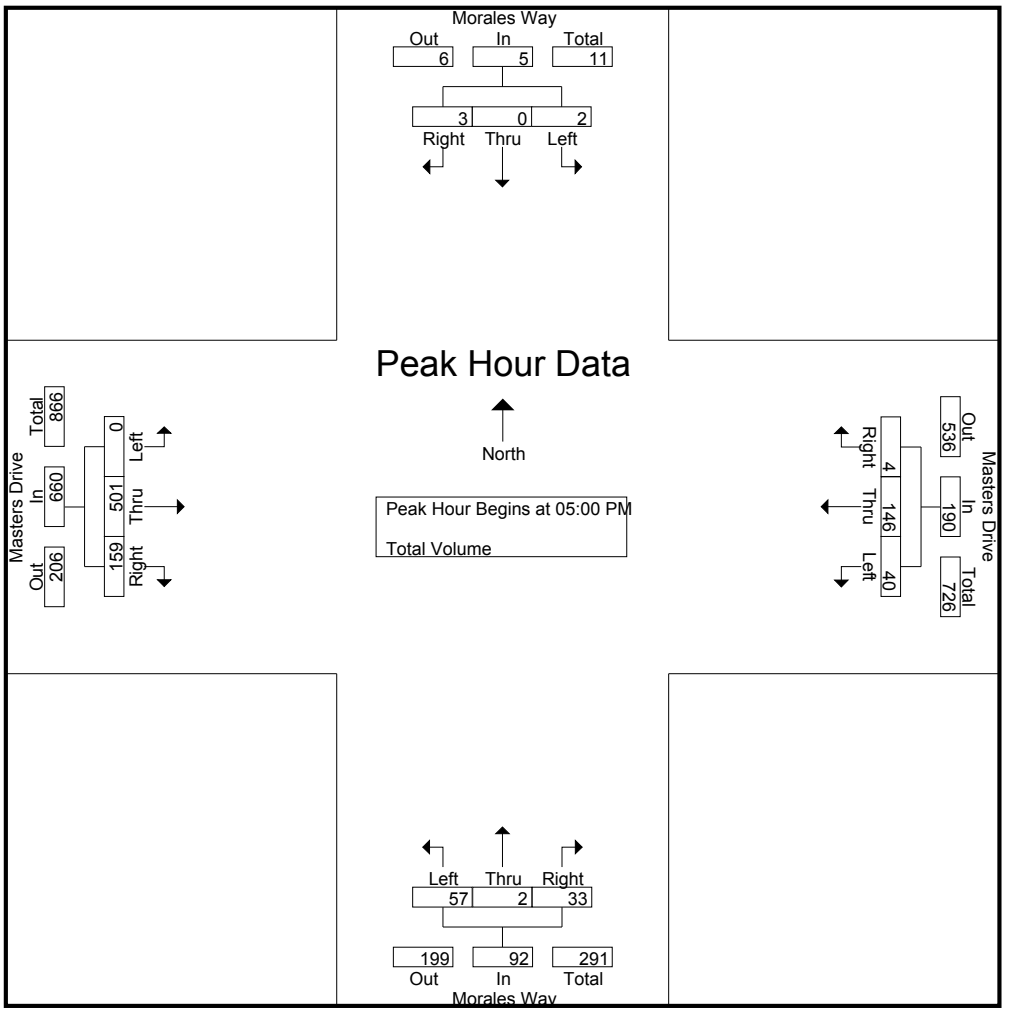
	Morales Way Southbound				Masters Drive Westbound				Morales Way Northbound				Masters Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	0	0	1	12	26	2	40	12	0	11	23	0	67	32	99	163
04:15 PM	0	1	0	1	12	27	0	39	7	0	15	22	0	96	39	135	197
04:30 PM	1	0	0	1	14	22	0	36	13	0	12	25	1	96	26	123	185
04:45 PM	0	0	1	1	11	22	1	34	20	0	10	30	1	108	30	139	204
Total	2	1	1	4	49	97	3	149	52	0	48	100	2	367	127	496	749
05:00 PM	0	0	1	1	9	41	0	50	13	0	12	25	0	125	35	160	236
05:15 PM	1	0	2	3	8	32	1	41	17	0	8	25	0	147	48	195	264
05:30 PM	1	0	0	1	14	36	1	51	12	1	4	17	0	126	36	162	231
05:45 PM	0	0	0	0	9	37	2	48	15	1	9	25	0	103	40	143	216
Total	2	0	3	5	40	146	4	190	57	2	33	92	0	501	159	660	947
Grand Total	4	1	4	9	89	243	7	339	109	2	81	192	2	868	286	1156	1696
Apprch %	44.4	11.1	44.4		26.3	71.7	2.1		56.8	1	42.2		0.2	75.1	24.7		
Total %	0.2	0.1	0.2	0.5	5.2	14.3	0.4	20	6.4	0.1	4.8	11.3	0.1	51.2	16.9	68.2	

	Morales Way Southbound				Masters Drive Westbound				Morales Way Northbound				Masters Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	1	1	9	**41**	0	50	13	0	**12**	**25**	0	125	35	160	236
05:15 PM	**1**	0	**2**	**3**	8	32	1	41	**17**	0	8	25	0	**147**	**48**	**195**	**264**
05:30 PM	1	0	0	1	**14**	36	1	**51**	12	**1**	4	17	0	126	36	162	231
05:45 PM	0	0	0	0	9	37	**2**	48	15	1	9	25	0	103	40	143	216
Total Volume	2	0	3	5	40	146	4	190	57	2	33	92	0	501	159	660	947
% App. Total	40	0	60		21.1	76.8	2.1		62	2.2	35.9		0	75.9	24.1		
PHF	.500	.000	.375	.417	.714	.890	.500	.931	.838	.500	.688	.920	.000	.852	.828	.846	.897

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City of Corona
N/S: Morales Way
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File Name : 134_COR_Morales_Masters PM
Site Code : 05617610
Start Date : 10/4/2017
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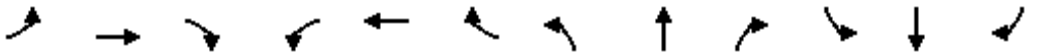
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				05:00 PM				04:30 PM				05:00 PM			
+0 mins.	**1**	0	0	1	9	**41**	0	50	13	0	**12**	25	0	125	35	160
+15 mins.	0	0	1	1	8	32	1	41	**20**	0	10	**30**	0	**147**	**48**	**195**
+30 mins.	0	0	1	1	**14**	36	1	**51**	13	0	12	25	0	126	36	162
+45 mins.	1	0	**2**	**3**	9	37	**2**	48	17	0	8	25	0	103	40	143
Total Volume	2	0	4	6	40	146	4	190	63	0	42	105	0	501	159	660
% App. Total	33.3	0	66.7		21.1	76.8	2.1		60	0	40		0	75.9	24.1	
PHF	.500	.000	.500	.500	.714	.890	.500	.931	.788	.000	.875	.875	.000	.852	.828	.846

APPENDIX 2.2:

EXISTING (2017 AND 2018) INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	189	57	102	68	135	63	176	228	158	97	4
Future Volume (vph)	8	189	57	102	68	135	63	176	228	158	97	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	135		0	130		200	100		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	100			90			60			65		
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		495			683			680			695	
Travel Time (s)		7.5			10.3			13.2			13.5	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

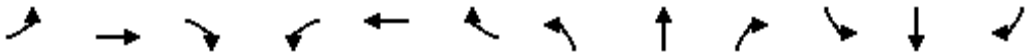
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	82.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	189	57	102	68	135	63	176	228	158	97	4
Future Vol, veh/h	8	189	57	102	68	135	63	176	228	158	97	4
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	252	76	136	91	180	84	235	304	211	129	5
Number of Lanes	1	1	0	1	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	3	2
HCM Control Delay	50.6	19.4	172	24.9
HCM LOS	F	C	F	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	44%	0%	77%	0%	100%	0%	0%	96%
Vol Right, %	0%	56%	0%	23%	0%	0%	100%	0%	4%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	63	404	8	246	102	68	135	158	101
LT Vol	63	0	8	0	102	0	0	158	0
Through Vol	0	176	0	189	0	68	0	0	97
RT Vol	0	228	0	57	0	0	135	0	4
Lane Flow Rate	84	539	11	328	136	91	180	211	135
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.231	1.345	0.03	0.857	0.382	0.242	0.445	0.594	0.36
Departure Headway (Hd)	9.918	8.992	11.064	10.365	11.065	10.539	9.802	11.037	10.484
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	365	409	326	351	328	343	371	329	345
Service Time	7.618	6.692	8.764	8.065	8.765	8.239	7.502	8.737	8.184
HCM Lane V/C Ratio	0.23	1.318	0.034	0.934	0.415	0.265	0.485	0.641	0.391
HCM Control Delay	15.6	196.4	14.1	51.8	20.4	16.6	20.1	28.7	19
HCM Lane LOS	C	F	B	F	C	C	C	D	C
HCM 95th-tile Q	0.9	25.3	0.1	7.9	1.7	0.9	2.2	3.6	1.6



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	21	32	5	12	37	9	213	8	51	171	24
Future Volume (vph)	30	21	32	5	12	37	9	213	8	51	171	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	110		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		655			663			936			638	
Travel Time (s)		12.8			12.9			18.2			12.4	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

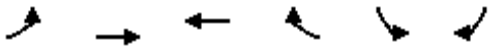
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

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	30	21	32	5	12	37	9	213	8	51	171	24
Future Vol, veh/h	30	21	32	5	12	37	9	213	8	51	171	24
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	24	36	6	13	42	10	239	9	57	192	27
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	9	8.5	10.7	9.9
HCM LOS	A	A	B	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	36%	9%	100%	0%
Vol Thru, %	0%	96%	25%	22%	0%	88%
Vol Right, %	0%	4%	39%	69%	0%	12%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	9	221	83	54	51	195
LT Vol	9	0	30	5	51	0
Through Vol	0	213	21	12	0	171
RT Vol	0	8	32	37	0	24
Lane Flow Rate	10	248	93	61	57	219
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.016	0.356	0.133	0.084	0.09	0.309
Departure Headway (Hd)	5.689	5.16	5.146	4.968	5.663	5.073
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	627	695	693	715	630	706
Service Time	3.444	2.915	3.209	3.037	3.419	2.828
HCM Lane V/C Ratio	0.016	0.357	0.134	0.085	0.09	0.31
HCM Control Delay	8.5	10.8	9	8.5	9	10.1
HCM Lane LOS	A	B	A	A	A	B
HCM 95th-tile Q	0	1.6	0.5	0.3	0.3	1.3



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	18	257	154	227	201	12
Future Volume (vph)	18	257	154	227	201	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	130	0
Storage Lanes	1			0	1	1
Taper Length (ft)	120				60	
Link Speed (mph)		45	45		35	
Link Distance (ft)		1281	546		936	
Travel Time (s)		19.4	8.3		18.2	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)						
Sign Control		Stop	Stop		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	12.4
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	257	154	227	201	12
Future Vol, veh/h	18	257	154	227	201	12
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	289	173	255	226	13
Number of Lanes	1	2	2	0	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	3	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	3
HCM Control Delay	10	12.8	14.9
HCM LOS	A	B	B

Lane	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	0%	0%	100%	0%
Vol Thru, %	0%	100%	100%	100%	18%	0%	0%
Vol Right, %	0%	0%	0%	0%	82%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	18	129	129	103	278	201	12
LT Vol	18	0	0	0	0	201	0
Through Vol	0	129	129	103	51	0	0
RT Vol	0	0	0	0	227	0	12
Lane Flow Rate	20	144	144	115	313	226	13
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.039	0.259	0.188	0.198	0.487	0.443	0.022
Departure Headway (Hd)	6.966	6.459	4.7	6.189	5.61	7.061	5.853
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	513	554	759	579	641	510	610
Service Time	4.721	4.214	2.454	3.939	3.36	4.813	3.606
HCM Lane V/C Ratio	0.039	0.26	0.19	0.199	0.488	0.443	0.021
HCM Control Delay	10	11.5	8.6	10.5	13.6	15.3	8.7
HCM Lane LOS	A	B	A	B	B	C	A
HCM 95th-tile Q	0.1	1	0.7	0.7	2.7	2.2	0.1

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1053	87	98	729	361	278
Future Volume (vph)	1053	87	98	729	361	278
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	120		0	125
Storage Lanes		0	1		1	1
Taper Length (ft)			90		100	
Right Turn on Red		Yes				Yes
Link Speed (mph)	40			45	40	
Link Distance (ft)	351			305	404	
Travel Time (s)	6.0			4.6	6.9	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Shared Lane Traffic (%)						
Turn Type	NA		Prot	NA	Prot	Perm
Protected Phases	2		1	6	8	
Permitted Phases						8
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	26.0		8.0	26.0	26.0	26.0
Total Split (s)	60.0		17.0	77.0	43.0	43.0
Total Split (%)	50.0%		14.2%	64.2%	35.8%	35.8%
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	C-Max		None	C-Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 25 (21%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

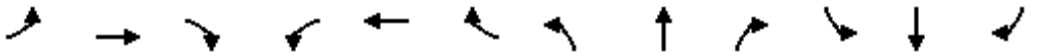
Splits and Phases: 4: Bedford Cyn. Rd. & El Cerrito Rd.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1053	87	98	729	361	278
Future Volume (veh/h)	1053	87	98	729	361	278
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1284	106	120	889	440	339
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1642	135	144	2162	579	515
Arrive On Green	0.49	0.49	0.16	1.00	0.32	0.32
Sat Flow, veh/h	3418	274	1781	3647	1781	1585
Grp Volume(v), veh/h	685	705	120	889	440	339
Grp Sat Flow(s),veh/h/ln	1777	1821	1781	1777	1781	1585
Q Serve(g_s), s	38.1	38.4	7.8	0.0	26.6	22.0
Cycle Q Clear(g_c), s	38.1	38.4	7.8	0.0	26.6	22.0
Prop In Lane		0.15	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	878	900	144	2162	579	515
V/C Ratio(X)	0.78	0.78	0.83	0.41	0.76	0.66
Avail Cap(c_a), veh/h	878	900	193	2162	579	515
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	1.00	1.00
Uniform Delay (d), s/veh	25.0	25.1	49.5	0.0	36.3	34.8
Incr Delay (d2), s/veh	6.8	6.8	19.2	0.6	9.1	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.7	17.3	3.9	0.2	12.7	9.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	31.8	31.9	68.7	0.6	45.4	41.2
LnGrp LOS	C	C	E	A	D	D
Approach Vol, veh/h	1390			1009	779	
Approach Delay, s/veh	31.8			8.7	43.6	
Approach LOS	C			A	D	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	13.7	63.3				77.0	43.0
Change Period (Y+Rc), s	4.0	4.0				4.0	4.0
Max Green Setting (Gmax), s	13.0	56.0				73.0	39.0
Max Q Clear Time (g_c+I1), s	9.8	40.4				2.0	28.6
Green Ext Time (p_c), s	0.1	8.1				6.9	2.1

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	88	3	32	2	1	1	17	206	5	4	60	29
Future Volume (vph)	88	3	32	2	1	1	17	206	5	4	60	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	80		0	0		100
Storage Lanes	0		1	0		0	1		0	0		1
Taper Length (ft)	100			100			80			100		
Link Speed (mph)		45			45			30			45	
Link Distance (ft)		786			169			443			297	
Travel Time (s)		11.9			2.6			10.1			4.5	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

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	88	3	32	2	1	1	17	206	5	4	60	29
Future Vol, veh/h	88	3	32	2	1	1	17	206	5	4	60	29
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	106	4	39	2	1	1	20	248	6	5	72	35
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay	9.5	8.8	10.4	8.3
HCM LOS	A	A	B	A

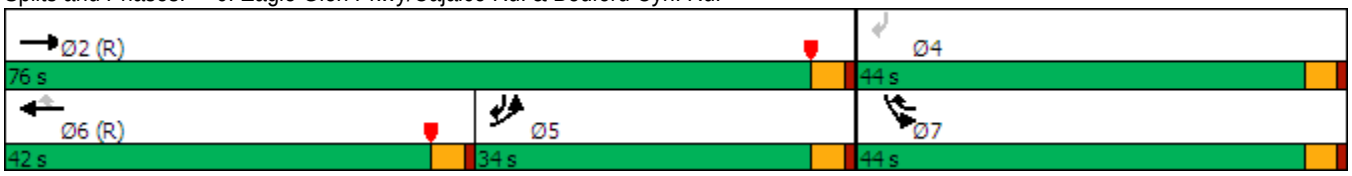
Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	97%	0%	50%	6%	0%
Vol Thru, %	0%	98%	3%	0%	25%	94%	0%
Vol Right, %	0%	2%	0%	100%	25%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	17	211	91	32	4	64	29
LT Vol	17	0	88	0	2	4	0
Through Vol	0	206	3	0	1	60	0
RT Vol	0	5	0	32	1	0	29
Lane Flow Rate	20	254	110	39	5	77	35
Geometry Grp	7	7	7	7	6	7	7
Degree of Util (X)	0.032	0.357	0.182	0.051	0.008	0.113	0.044
Departure Headway (Hd)	5.573	5.054	5.972	4.782	5.661	5.258	4.522
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	642	712	600	746	629	681	790
Service Time	3.307	2.788	3.717	2.527	3.722	2.999	2.263
HCM Lane V/C Ratio	0.031	0.357	0.183	0.052	0.008	0.113	0.044
HCM Control Delay	8.5	10.6	10.1	7.8	8.8	8.7	7.5
HCM Lane LOS	A	B	B	A	A	A	A
HCM 95th-tile Q	0.1	1.6	0.7	0.2	0	0.4	0.1

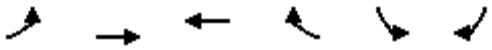
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4
Lane Configurations							
Traffic Volume (vph)	97	353	323	414	127	61	
Future Volume (vph)	97	353	323	414	127	61	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	180			200	450	0	
Storage Lanes	1			2	0	1	
Taper Length (ft)	100				180		
Right Turn on Red				Yes		Yes	
Link Speed (mph)		45	45		45		
Link Distance (ft)		755	792		716		
Travel Time (s)		11.4	12.0		10.8		
Confl. Peds. (#/hr)				5		5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	
Shared Lane Traffic (%)							
Turn Type	Prot	NA	NA	pm+ov	Prot	pm+ov	
Protected Phases	5	2	6	7	7	5	4
Permitted Phases				6		4	
Detector Phase	5	2	6	7	7	5	
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	26.0	30.7	30.7	8.5	8.5	26.0	36.7
Total Split (s)	34.0	76.0	42.0	44.0	44.0	34.0	44.0
Total Split (%)	28.3%	63.3%	35.0%	36.7%	36.7%	28.3%	37%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lag		Lead			Lag	
Lead-Lag Optimize?	Yes		Yes			Yes	
Recall Mode	None	C-Max	C-Max	Max	Max	None	Max

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection
Natural Cycle: 95
Control Type: Actuated-Coordinated

Splits and Phases: 6: Eagle Glen Pkwy/Cajalco Rd. & Bedford Cyn. Rd.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	97	353	323	414	127	61
Future Volume (veh/h)	97	353	323	414	127	61
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	108	392	359	460	141	68
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	445	1122	1125	1026	594	925
Arrive On Green	0.25	0.60	0.10	0.10	0.33	0.33
Sat Flow, veh/h	1781	1870	3647	1573	1781	1585
Grp Volume(v), veh/h	108	392	359	460	141	68
Grp Sat Flow(s),veh/h/ln	1781	1870	1777	1573	1781	1585
Q Serve(g_s), s	5.8	12.7	11.2	0.0	6.9	0.0
Cycle Q Clear(g_c), s	5.8	12.7	11.2	0.0	6.9	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	445	1122	1125	1026	594	925
V/C Ratio(X)	0.24	0.35	0.32	0.45	0.24	0.07
Avail Cap(c_a), veh/h	445	1122	1125	1026	594	925
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.69	0.69	1.00	1.00
Uniform Delay (d), s/veh	35.9	12.1	41.7	10.2	29.0	10.9
Incr Delay (d2), s/veh	0.3	0.9	0.5	1.0	0.9	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	2.5	5.1	5.3	15.6	3.0	2.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	36.2	13.0	42.3	11.2	29.9	11.0
LnGrp LOS	D	B	D	B	C	B
Approach Vol, veh/h		500	819		209	
Approach Delay, s/veh		18.0	24.8		23.8	
Approach LOS		B	C		C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		76.0		44.0	34.0	42.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		72.0		40.0	30.0	38.0
Max Q Clear Time (g_c+I1), s		14.7		8.9	7.8	13.2
Green Ext Time (p_c), s		1.5		0.8	0.3	3.8

Intersection Summary	
HCM 6th Ctrl Delay	22.4
HCM 6th LOS	C

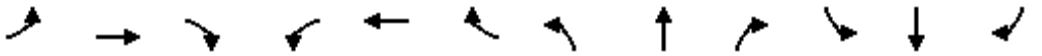
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	966	287	121	566	0	0	0	0	230	3	214
Future Volume (vph)	0	966	287	121	566	0	0	0	0	230	3	214
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	90		0	0		0	0		525
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	100			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		305			387			1098			1308	
Travel Time (s)		4.6			5.9			16.6			19.8	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)												
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Detector Phase		2		1	6					4	4	4
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0					4.0	4.0	4.0
Minimum Split (s)		26.0		8.0	26.0					26.0	26.0	26.0
Total Split (s)		67.0		21.0	88.0					32.0	32.0	32.0
Total Split (%)		55.8%		17.5%	73.3%					26.7%	26.7%	26.7%
Yellow Time (s)		3.0		3.0	3.0					3.0	3.0	3.0
All-Red Time (s)		1.0		1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0						0.0	0.0
Total Lost Time (s)		4.0		4.0	4.0						4.0	4.0
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?		Yes		Yes								
Recall Mode		C-Max		None	C-Max					Max	Max	Max

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 28 (23%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 7: I-15 SB Ramps & El Cerrito Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	966	287	121	566	0	0	0	0	230	3	214
Future Volume (veh/h)	0	966	287	121	566	0	0	0	0	230	3	214
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	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1150	342	144	674	0				274	4	255
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84				0.84	0.84	0.84
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1546	453	171	2488	0				410	6	370
Arrive On Green	0.00	1.00	1.00	0.13	0.93	0.00				0.23	0.23	0.23
Sat Flow, veh/h	0	2803	794	1781	3647	0				1757	26	1585
Grp Volume(v), veh/h	0	748	744	144	674	0				278	0	255
Grp Sat Flow(s),veh/h/ln	0	1777	1727	1781	1777	0				1783	0	1585
Q Serve(g_s), s	0.0	0.0	0.0	9.5	2.1	0.0				17.0	0.0	17.6
Cycle Q Clear(g_c), s	0.0	0.0	0.0	9.5	2.1	0.0				17.0	0.0	17.6
Prop In Lane	0.00		0.46	1.00		0.00				0.99		1.00
Lane Grp Cap(c), veh/h	0	1014	986	171	2488	0				416	0	370
V/C Ratio(X)	0.00	0.74	0.75	0.84	0.27	0.00				0.67	0.00	0.69
Avail Cap(c_a), veh/h	0	1014	986	252	2488	0				416	0	370
HCM Platoon Ratio	1.00	2.00	2.00	1.33	1.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.55	0.55	0.53	0.53	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	51.4	1.3	0.0				41.8	0.0	42.0
Incr Delay (d2), s/veh	0.0	2.7	3.0	8.6	0.1	0.0				8.3	0.0	10.1
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	0.8	0.8	4.4	0.6	0.0				8.2	0.0	7.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	2.7	3.0	60.0	1.5	0.0				50.0	0.0	52.1
LnGrp LOS	A	A	A	E	A	A				D	A	D
Approach Vol, veh/h		1492			818						533	
Approach Delay, s/veh		2.8			11.8						51.0	
Approach LOS		A			B						D	

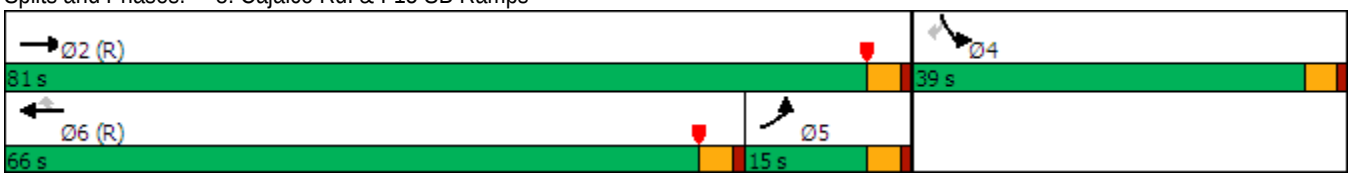
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	15.5	72.5		32.0		88.0						
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0						
Max Green Setting (Gmax), s	17.0	63.0		28.0		84.0						
Max Q Clear Time (g_c+I1), s	11.5	2.0		19.6		4.1						
Green Ext Time (p_c), s	0.1	14.8		1.6		4.8						

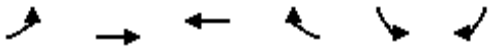
Intersection Summary												
HCM 6th Ctrl Delay			14.4									
HCM 6th LOS			B									

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	97	363	690	85	341	169
Future Volume (vph)	97	363	690	85	341	169
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290			200	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	90				25	
Right Turn on Red				Yes		Yes
Link Speed (mph)		45	45		45	
Link Distance (ft)		792	1297		282	
Travel Time (s)		12.0	19.7		4.3	
Confl. Peds. (#/hr)						5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	23.7	30.7	30.7	8.5	8.5
Total Split (s)	15.0	81.0	66.0	66.0	39.0	39.0
Total Split (%)	12.5%	67.5%	55.0%	55.0%	32.5%	32.5%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag		Lead	Lead		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 97 (81%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 8: Cajalco Rd. & I-15 SB Ramps





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	97	363	690	85	341	169
Future Volume (veh/h)	97	363	690	85	341	169
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	102	382	726	89	359	178
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	163	1200	966	819	520	462
Arrive On Green	0.09	0.64	0.35	0.35	0.29	0.29
Sat Flow, veh/h	1781	1870	1870	1585	1781	1585
Grp Volume(v), veh/h	102	382	726	89	359	178
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1585	1781	1585
Q Serve(g_s), s	6.6	11.0	41.2	4.6	21.5	10.8
Cycle Q Clear(g_c), s	6.6	11.0	41.2	4.6	21.5	10.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	163	1200	966	819	520	462
V/C Ratio(X)	0.62	0.32	0.75	0.11	0.69	0.39
Avail Cap(c_a), veh/h	163	1200	966	819	520	462
HCM Platoon Ratio	1.00	1.00	0.67	0.67	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.74	0.74	1.00	1.00
Uniform Delay (d), s/veh	52.5	9.7	32.4	20.5	37.7	33.9
Incr Delay (d2), s/veh	7.0	0.7	4.0	0.2	7.4	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	4.2	20.1	1.7	10.1	10.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	59.5	10.4	36.4	20.7	45.1	36.3
LnGrp LOS	E	B	D	C	D	D
Approach Vol, veh/h		484	815		537	
Approach Delay, s/veh		20.7	34.7		42.2	
Approach LOS		C	C		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		81.0		39.0	15.0	66.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		77.0		35.0	11.0	62.0
Max Q Clear Time (g_c+I1), s		13.0		23.5	8.6	43.2
Green Ext Time (p_c), s		1.5		1.7	0.1	3.4

Intersection Summary	
HCM 6th Ctrl Delay	33.2
HCM 6th LOS	C

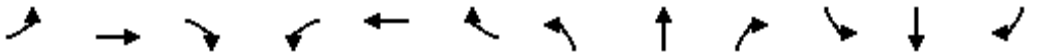
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	630	564	0	0	496	357	209	2	133	0	0	0
Future Volume (vph)	630	564	0	0	496	357	209	2	133	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	60			100			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		387			489			1198			782	
Travel Time (s)		5.9			7.4			18.2			11.8	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)												
Turn Type	Prot	NA			NA		Perm	NA				
Protected Phases	5	2			6			8				
Permitted Phases							8					
Detector Phase	5	2			6		8	8				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		4.0	4.0				
Minimum Split (s)	8.0	26.0			26.0		26.0	26.0				
Total Split (s)	36.0	81.0			45.0		39.0	39.0				
Total Split (%)	30.0%	67.5%			37.5%		32.5%	32.5%				
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0				
All-Red Time (s)	1.0	1.0			1.0		1.0	1.0				
Lost Time Adjust (s)	0.0	0.0			0.0			0.0				
Total Lost Time (s)	4.0	4.0			4.0			4.0				
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?	Yes				Yes							
Recall Mode	None	C-Max			C-Max		Max	Max				

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 17 (14%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 9: I-15 NB Ramps & El Cerrito Rd.





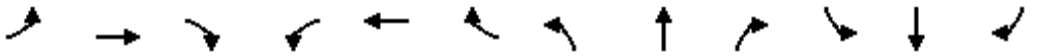
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	630	564	0	0	496	357	209	2	133	0	0	0
Future Volume (veh/h)	630	564	0	0	496	357	209	2	133	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
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	1870	1870	0	0	1870	1870	1900	1870	1900			
Adj Flow Rate, veh/h	750	671	0	0	590	425	249	2	158			
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	813	1200	0	0	736	530	302	2	192			
Arrive On Green	0.39	1.00	0.00	0.00	0.37	0.37	0.29	0.29	0.29			
Sat Flow, veh/h	3456	1870	0	0	2065	1420	1035	8	657			
Grp Volume(v), veh/h	750	671	0	0	532	483	409	0	0			
Grp Sat Flow(s),veh/h/ln	1728	1870	0	0	1777	1615	1700	0	0			
Q Serve(g_s), s	24.8	0.0	0.0	0.0	32.1	32.1	26.9	0.0	0.0			
Cycle Q Clear(g_c), s	24.8	0.0	0.0	0.0	32.1	32.1	26.9	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.88	0.61		0.39			
Lane Grp Cap(c), veh/h	813	1200	0	0	663	602	496	0	0			
V/C Ratio(X)	0.92	0.56	0.00	0.00	0.80	0.80	0.82	0.00	0.00			
Avail Cap(c_a), veh/h	922	1200	0	0	663	602	496	0	0			
HCM Platoon Ratio	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.52	0.52	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	35.4	0.0	0.0	0.0	33.7	33.7	39.6	0.0	0.0			
Incr Delay (d2), s/veh	7.9	1.0	0.0	0.0	9.9	10.8	14.4	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	9.3	0.3	0.0	0.0	15.0	13.8	12.8	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.3	1.0	0.0	0.0	43.6	44.5	54.1	0.0	0.0			
LnGrp LOS	D	A	A	A	D	D	D	A	A			
Approach Vol, veh/h		1421			1015			409				
Approach Delay, s/veh		23.3			44.0			54.1				
Approach LOS		C			D			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		81.0			32.2	48.8		39.0				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		77.0			32.0	41.0		35.0				
Max Q Clear Time (g_c+I1), s		2.0			26.8	34.1		28.9				
Green Ext Time (p_c), s		4.8			1.4	3.4		1.2				
Intersection Summary												
HCM 6th Ctrl Delay			35.1									
HCM 6th LOS			D									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	246	450	0	0	667	836	118	0	47	0	0	0
Future Volume (vph)	246	450	0	0	667	836	118	0	47	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	575		300	0		0	300		175	0		0
Storage Lanes	1		0	0		1	0		1	0		0
Taper Length (ft)	50			25			180			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1297			527			714			1440	
Travel Time (s)		19.7			8.0			10.8			21.8	
Confl. Peds. (#/hr)									5			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	0%	2%	2%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Detector Phase	5	2			6	6	8	8	8			
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Minimum Split (s)	8.0	23.7			30.7	30.7	8.5	8.5	8.5			
Total Split (s)	28.0	103.0			75.0	75.0	17.0	17.0	17.0			
Total Split (%)	23.3%	85.8%			62.5%	62.5%	14.2%	14.2%	14.2%			
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
All-Red Time (s)	1.0	1.0			1.0	1.0	1.0	1.0	1.0			
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0			
Total Lost Time (s)	4.0	4.0			4.0	4.0		4.0	4.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Recall Mode	None	C-Max			C-Max	C-Max	Max	Max	Max			

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 54 (45%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 10: I-15 NB Ramps & Cajalco Rd.





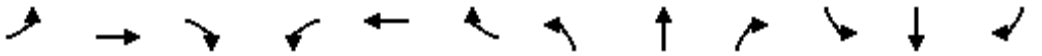
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	246	450	0	0	667	836	118	0	47	0	0	0
Future Volume (veh/h)	246	450	0	0	667	836	118	0	47	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99			
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	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	265	484	0	0	717	899	127	0	51			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	293	1543	0	0	1174	995	193	0	169			
Arrive On Green	0.22	1.00	0.00	0.00	0.63	0.63	0.11	0.00	0.11			
Sat Flow, veh/h	1781	1870	0	0	1870	1585	1781	0	1563			
Grp Volume(v), veh/h	265	484	0	0	717	899	127	0	51			
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1870	1585	1781	0	1563			
Q Serve(g_s), s	17.4	0.0	0.0	0.0	27.8	58.6	8.2	0.0	3.6			
Cycle Q Clear(g_c), s	17.4	0.0	0.0	0.0	27.8	58.6	8.2	0.0	3.6			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	293	1543	0	0	1174	995	193	0	169			
V/C Ratio(X)	0.91	0.31	0.00	0.00	0.61	0.90	0.66	0.00	0.30			
Avail Cap(c_a), veh/h	356	1543	0	0	1174	995	193	0	169			
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.86	0.86	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	46.0	0.0	0.0	0.0	13.5	19.2	51.4	0.0	49.3			
Incr Delay (d2), s/veh	20.5	0.5	0.0	0.0	2.4	13.1	16.2	0.0	4.5			
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	8.7	0.2	0.0	0.0	11.1	22.1	4.4	0.0	1.6			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.5	0.5	0.0	0.0	15.9	32.3	67.6	0.0	53.8			
LnGrp LOS	E	A	A	A	B	C	E	A	D			
Approach Vol, veh/h		749			1616			178				
Approach Delay, s/veh		23.8			25.0			63.7				
Approach LOS		C			C			E				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		103.0			23.7	79.3		17.0				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		99.0			24.0	71.0		13.0				
Max Q Clear Time (g_c+I1), s		2.0			19.4	60.6		10.2				
Green Ext Time (p_c), s		2.0			0.3	5.4		0.2				
Intersection Summary												
HCM 6th Ctrl Delay			27.4									
HCM 6th LOS			C									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	373	0	0	1375	62	0	0	0	27	0	102
Future Volume (vph)	135	373	0	0	1375	62	0	0	0	27	0	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	130		130	0		0	200		0
Storage Lanes	2		0	1		1	0		0	1		2
Taper Length (ft)	180			110			100			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		627			570			544			904	
Travel Time (s)		9.5			8.6			8.2			13.7	
Confl. Peds. (#/hr)						5				5		
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm				Split	NA	pm+ov
Protected Phases	5	2		1	6		8	8		4	4	5
Permitted Phases						6						4
Detector Phase	5	2		1	6	6	8	8		4	4	5
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	23.2		8.0	30.7	30.7	26.0	26.0		8.0	8.0	8.5
Total Split (s)	14.0	76.0		8.0	70.0	70.0	26.0	26.0		10.0	10.0	14.0
Total Split (%)	11.7%	63.3%		6.7%	58.3%	58.3%	21.7%	21.7%		8.3%	8.3%	11.7%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		Max	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 43 (36%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 11: Cajalco Rd. & Grand Oaks





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	373	0	0	1375	62	0	0	0	27	0	102
Future Volume (veh/h)	135	373	0	0	1375	62	0	0	0	27	0	102
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		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	147	405	0	0	1495	67	0	0	0	29	0	111
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	204	3139	0	1	2810	1251	0	2	0	89	0	297
Arrive On Green	0.06	0.88	0.00	0.00	0.79	0.79	0.00	0.00	0.00	0.05	0.00	0.05
Sat Flow, veh/h	3456	3647	0	1781	3554	1582	0	1870	0	1781	0	2650
Grp Volume(v), veh/h	147	405	0	0	1495	67	0	0	0	29	0	111
Grp Sat Flow(s),veh/h/ln	1728	1777	0	1781	1777	1582	0	1870	0	1781	0	1325
Q Serve(g_s), s	5.0	1.8	0.0	0.0	18.2	1.1	0.0	0.0	0.0	1.9	0.0	4.7
Cycle Q Clear(g_c), s	5.0	1.8	0.0	0.0	18.2	1.1	0.0	0.0	0.0	1.9	0.0	4.7
Prop In Lane	1.00		0.00	1.00		1.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	204	3139	0	1	2810	1251	0	2	0	89	0	297
V/C Ratio(X)	0.72	0.13	0.00	0.00	0.53	0.05	0.00	0.00	0.00	0.33	0.00	0.37
Avail Cap(c_a), veh/h	288	3139	0	59	2810	1251	0	343	0	89	0	297
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	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	55.5	0.9	0.0	0.0	4.5	2.7	0.0	0.0	0.0	55.0	0.0	49.7
Incr Delay (d2), s/veh	5.0	0.1	0.0	0.0	0.7	0.1	0.0	0.0	0.0	9.5	0.0	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	2.3	0.1	0.0	0.0	4.7	0.3	0.0	0.0	0.0	1.1	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.5	1.0	0.0	0.0	5.3	2.8	0.0	0.0	0.0	64.5	0.0	53.3
LnGrp LOS	E	A	A	A	A	A	A	A	A	E	A	D
Approach Vol, veh/h		552			1562			0			140	
Approach Delay, s/veh		16.9			5.2			0.0			55.6	
Approach LOS		B			A						E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	110.0		10.0	11.1	98.9		0.0				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	4.0	72.0		6.0	10.0	66.0		22.0				
Max Q Clear Time (g_c+I1), s	0.0	3.8		6.7	7.0	20.2		0.0				
Green Ext Time (p_c), s	0.0	1.8		0.0	0.1	10.4		0.0				

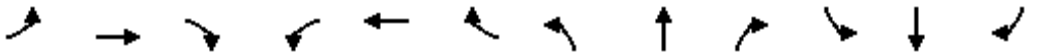
Intersection Summary			
HCM 6th Ctrl Delay		11.1	
HCM 6th LOS		B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	169	181	102	479	205	951	762	372	40	47	28
Future Volume (vph)	15	169	181	102	479	205	951	762	372	40	47	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	16	12	12	16	12	12	12
Storage Length (ft)	300		200	100		200	160		160	185		200
Storage Lanes	1		0	1		0	2		1	1		0
Taper Length (ft)	180			115			90			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		464			939			1196			475	
Travel Time (s)		7.0			14.2			18.1			7.2	
Confl. Peds. (#/hr)			5			5						5
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.5	26.0	26.0	8.5	30.7		8.5	26.0	26.0	35.5	26.0	
Total Split (s)	9.3	26.4	26.4	18.6	35.7		49.0	39.5	39.5	35.5	26.0	
Total Split (%)	7.8%	22.0%	22.0%	15.5%	29.8%		40.8%	32.9%	32.9%	29.6%	21.7%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	Max	Max	None	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 10 (8%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Temescal Cyn Rd. & Cajalco Rd.

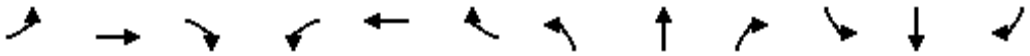




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	169	181	102	479	205	951	762	372	40	47	28
Future Volume (veh/h)	15	169	181	102	479	205	951	762	372	40	47	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1945	1870	1870	1945	1870	1870	1870
Adj Flow Rate, veh/h	15	174	187	105	494	211	980	786	384	41	48	29
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	23	548	462	131	1252	515	1096	1672	776	53	403	223
Arrive On Green	0.01	0.29	0.29	0.07	0.35	0.35	0.32	0.47	0.47	0.03	0.18	0.18
Sat Flow, veh/h	1781	1870	1577	1781	3546	1459	3456	3554	1648	1781	2200	1217
Grp Volume(v), veh/h	15	174	187	105	473	232	980	786	384	41	38	39
Grp Sat Flow(s),veh/h/ln	1781	1870	1577	1781	1702	1600	1728	1777	1648	1781	1777	1640
Q Serve(g_s), s	1.0	8.7	11.4	7.0	12.5	13.1	32.4	18.0	19.3	2.7	2.1	2.4
Cycle Q Clear(g_c), s	1.0	8.7	11.4	7.0	12.5	13.1	32.4	18.0	19.3	2.7	2.1	2.4
Prop In Lane	1.00		1.00	1.00		0.91	1.00		1.00	1.00		0.74
Lane Grp Cap(c), veh/h	23	548	462	131	1202	565	1096	1672	776	53	326	301
V/C Ratio(X)	0.64	0.32	0.41	0.80	0.39	0.41	0.89	0.47	0.50	0.77	0.12	0.13
Avail Cap(c_a), veh/h	79	548	462	217	1202	565	1296	1672	776	468	326	301
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	58.9	33.1	34.0	54.7	29.2	29.4	39.1	21.6	21.9	57.8	40.9	41.0
Incr Delay (d2), s/veh	25.7	1.5	2.6	10.8	1.0	2.2	7.4	1.0	2.3	20.1	0.7	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	4.1	4.6	3.4	5.1	5.2	14.3	7.3	7.5	1.5	1.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	84.7	34.6	36.7	65.5	30.1	31.6	46.5	22.6	24.2	77.9	41.6	41.9
LnGrp LOS	F	C	D	E	C	C	D	C	C	E	D	D
Approach Vol, veh/h		376			810			2150			118	
Approach Delay, s/veh		37.6			35.1			33.7			54.3	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	39.1	42.1	26.0	5.6	46.4	7.6	60.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.6	22.4	45.0	22.0	5.3	31.7	31.5	35.5
Max Q Clear Time (g_c+I1), s	9.0	13.4	34.4	4.4	3.0	15.1	4.7	21.3
Green Ext Time (p_c), s	0.1	0.9	3.6	0.2	0.0	2.8	0.1	4.7

Intersection Summary	
HCM 6th Ctrl Delay	35.2
HCM 6th LOS	D



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	11	23	9	5	13	87	424	82	7	242	4
Future Volume (vph)	17	11	23	9	5	13	87	424	82	7	242	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		237			740			929			680	
Travel Time (s)		5.4			16.8			18.1			13.2	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

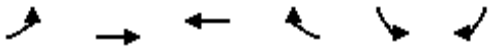
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	29.6
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	11	23	9	5	13	87	424	82	7	242	4
Future Vol, veh/h	17	11	23	9	5	13	87	424	82	7	242	4
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	15	31	12	7	17	116	565	109	9	323	5
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	10.2	9.9	38.8	14.2
HCM LOS	B	A	E	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	33%	33%	100%	0%
Vol Thru, %	0%	84%	22%	19%	0%	98%
Vol Right, %	0%	16%	45%	48%	0%	2%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	87	506	51	27	7	246
LT Vol	87	0	17	9	7	0
Through Vol	0	424	11	5	0	242
RT Vol	0	82	23	13	0	4
Lane Flow Rate	116	675	68	36	9	328
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.182	0.945	0.12	0.065	0.016	0.518
Departure Headway (Hd)	5.661	5.044	6.363	6.453	6.201	5.684
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	628	708	565	557	580	636
Service Time	3.457	2.839	4.379	4.47	3.911	3.394
HCM Lane V/C Ratio	0.185	0.953	0.12	0.065	0.016	0.516
HCM Control Delay	9.7	43.8	10.2	9.9	9	14.3
HCM Lane LOS	A	E	B	A	A	B
HCM 95th-tile Q	0.7	13.5	0.4	0.2	0	3



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	260	507	6	9	21
Future Volume (vph)	0	260	507	6	9	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	60				100	
Link Speed (mph)		35	35		30	
Link Distance (ft)		1222	796		251	
Travel Time (s)		23.8	15.5		5.7	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Shared Lane Traffic (%)						
Sign Control		Stop	Stop		Stop	

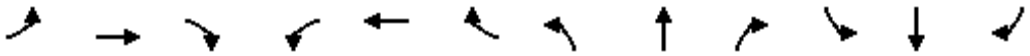
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	20.5
Intersection LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	260	507	6	9	21
Future Vol, veh/h	0	260	507	6	9	21
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	333	650	8	12	27
Number of Lanes	1	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	12.3	25.3	9.2
HCM LOS	B	D	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	0%	30%
Vol Thru, %	100%	100%	99%	0%
Vol Right, %	0%	0%	1%	70%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	260	513	30
LT Vol	0	0	0	9
Through Vol	0	260	507	0
RT Vol	0	0	6	21
Lane Flow Rate	0	333	658	38
Geometry Grp	7	7	5	2
Degree of Util (X)	0	0.472	0.827	0.062
Departure Headway (Hd)	5.102	5.102	4.527	5.763
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	0	707	802	617
Service Time	2.839	2.839	2.555	3.838
HCM Lane V/C Ratio	0	0.471	0.82	0.062
HCM Control Delay	7.8	12.3	25.3	9.2
HCM Lane LOS	N	B	D	A
HCM 95th-tile Q	0	2.5	9.3	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	178	87	29	281	2	178	2	50	5	1	4
Future Volume (vph)	1	178	87	29	281	2	178	2	50	5	1	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	60			60			100			100		
Link Speed (mph)		35			35			30			45	
Link Distance (ft)		1243			910			626			548	
Travel Time (s)		24.2			17.7			14.2			8.3	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

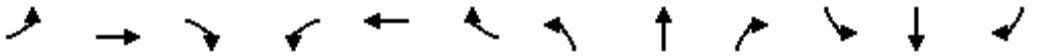
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	14.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	178	87	29	281	2	178	2	50	5	1	4
Future Vol, veh/h	1	178	87	29	281	2	178	2	50	5	1	4
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	212	104	35	335	2	212	2	60	6	1	5
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	14	14.9	13.5	9.5
HCM LOS	B	B	B	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	77%	100%	0%	100%	0%	50%
Vol Thru, %	1%	0%	67%	0%	99%	10%
Vol Right, %	22%	0%	33%	0%	1%	40%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	230	1	265	29	283	10
LT Vol	178	1	0	29	0	5
Through Vol	2	0	178	0	281	1
RT Vol	50	0	87	0	2	4
Lane Flow Rate	274	1	315	35	337	12
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.443	0.002	0.5	0.061	0.547	0.021
Departure Headway (Hd)	5.826	6.443	5.703	6.356	5.844	6.308
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	616	555	631	563	617	564
Service Time	3.872	4.186	3.444	4.096	3.584	4.382
HCM Lane V/C Ratio	0.445	0.002	0.499	0.062	0.546	0.021
HCM Control Delay	13.5	9.2	14	9.5	15.5	9.5
HCM Lane LOS	B	A	B	A	C	A
HCM 95th-tile Q	2.3	0	2.8	0.2	3.3	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	106	225	197	59	22	45	93	91	37	217	0
Future Volume (vph)	2	106	225	197	59	22	45	93	91	37	217	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	135		0	130		200	100		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	100			90			60			65		
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		495			683			680			695	
Travel Time (s)		7.5			10.3			13.2			13.5	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

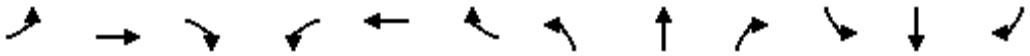
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	19.9
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	106	225	197	59	22	45	93	91	37	217	0
Future Vol, veh/h	2	106	225	197	59	22	45	93	91	37	217	0
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	115	245	214	64	24	49	101	99	40	236	0
Number of Lanes	1	1	0	1	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	3	2
HCM Control Delay	26.6	17	15.5	18.1
HCM LOS	D	C	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	51%	0%	32%	0%	100%	0%	0%	100%
Vol Right, %	0%	49%	0%	68%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	45	184	2	331	197	59	22	37	217
LT Vol	45	0	2	0	197	0	0	37	0
Through Vol	0	93	0	106	0	59	0	0	217
RT Vol	0	91	0	225	0	0	22	0	0
Lane Flow Rate	49	200	2	360	214	64	24	40	236
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.117	0.428	0.005	0.721	0.498	0.14	0.047	0.094	0.52
Departure Headway (Hd)	8.576	7.71	8.22	7.218	8.371	7.857	7.139	8.452	7.941
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	416	464	434	500	428	454	498	422	451
Service Time	6.372	5.505	6.005	5.002	6.164	5.65	4.931	6.245	5.734
HCM Lane V/C Ratio	0.118	0.431	0.005	0.72	0.5	0.141	0.048	0.095	0.523
HCM Control Delay	12.5	16.2	11	26.7	19.3	11.9	10.3	12.1	19.1
HCM Lane LOS	B	C	B	D	C	B	B	B	C
HCM 95th-tile Q	0.4	2.1	0	5.8	2.7	0.5	0.1	0.3	2.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	6	20	2	22	17	23	132	7	22	398	90
Future Volume (vph)	31	6	20	2	22	17	23	132	7	22	398	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	110		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		655			663			936			638	
Travel Time (s)		12.8			12.9			18.2			12.4	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

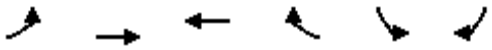
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	15.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	6	20	2	22	17	23	132	7	22	398	90
Future Vol, veh/h	31	6	20	2	22	17	23	132	7	22	398	90
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	6	22	2	24	18	25	142	8	24	428	97
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	9.3	9	9.4	18.1
HCM LOS	A	A	A	C

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	54%	5%	100%	0%
Vol Thru, %	0%	95%	11%	54%	0%	82%
Vol Right, %	0%	5%	35%	41%	0%	18%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	23	139	57	41	22	488
LT Vol	23	0	31	2	22	0
Through Vol	0	132	6	22	0	398
RT Vol	0	7	20	17	0	90
Lane Flow Rate	25	149	61	44	24	525
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.04	0.218	0.095	0.067	0.036	0.707
Departure Headway (Hd)	5.789	5.25	5.594	5.492	5.481	4.849
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	616	680	636	647	652	745
Service Time	3.546	3.006	3.667	3.568	3.224	2.592
HCM Lane V/C Ratio	0.041	0.219	0.096	0.068	0.037	0.705
HCM Control Delay	8.8	9.5	9.3	9	8.4	18.5
HCM Lane LOS	A	A	A	A	A	C
HCM 95th-tile Q	0.1	0.8	0.3	0.2	0.1	5.9



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	14	198	274	198	427	24
Future Volume (vph)	14	198	274	198	427	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	130	0
Storage Lanes	1			0	1	1
Taper Length (ft)	120				60	
Link Speed (mph)		45	45		35	
Link Distance (ft)		1281	546		936	
Travel Time (s)		19.4	8.3		18.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control		Stop	Stop		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	28.4
Intersection LOS	D

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	198	274	198	427	24
Future Vol, veh/h	14	198	274	198	427	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	208	288	208	449	25
Number of Lanes	1	2	2	0	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	3	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	3
HCM Control Delay	11.5	16.6	48.6
HCM LOS	B	C	E

Lane	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	0%	0%	100%	0%
Vol Thru, %	0%	100%	100%	100%	32%	0%	0%
Vol Right, %	0%	0%	0%	0%	68%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	14	99	99	183	289	427	24
LT Vol	14	0	0	0	0	427	0
Through Vol	0	99	99	183	91	0	0
RT Vol	0	0	0	0	198	0	24
Lane Flow Rate	15	104	104	192	305	449	25
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.034	0.227	0.175	0.385	0.568	0.923	0.043
Departure Headway (Hd)	8.341	7.826	6.041	7.205	6.713	7.396	6.187
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	429	459	592	500	536	494	582
Service Time	6.095	5.58	3.794	4.951	4.458	5.096	3.887
HCM Lane V/C Ratio	0.035	0.227	0.176	0.384	0.569	0.909	0.043
HCM Control Delay	11.4	12.9	10.1	14.4	18	50.8	9.2
HCM Lane LOS	B	B	B	B	C	F	A
HCM 95th-tile Q	0.1	0.9	0.6	1.8	3.5	10.8	0.1

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1325	317	150	397	90	93
Future Volume (vph)	1325	317	150	397	90	93
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	120		0	125
Storage Lanes		0	1		1	1
Taper Length (ft)			90		100	
Right Turn on Red		Yes				Yes
Link Speed (mph)	40			45	40	
Link Distance (ft)	351			305	404	
Travel Time (s)	6.0			4.6	6.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)						
Turn Type	NA		Prot	NA	Prot	Perm
Protected Phases	2		1	6	8	
Permitted Phases						8
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	26.0		8.0	26.0	26.0	26.0
Total Split (s)	74.0		20.0	94.0	26.0	26.0
Total Split (%)	61.7%		16.7%	78.3%	21.7%	21.7%
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	C-Max		None	C-Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 25 (21%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Bedford Cyn. Rd. & El Cerrito Rd.

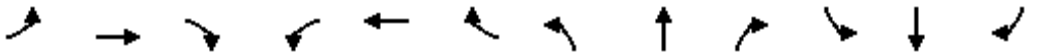




Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1325	317	150	397	90	93
Future Volume (veh/h)	1325	317	150	397	90	93
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1352	323	153	405	92	95
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1762	412	178	2665	327	291
Arrive On Green	0.62	0.62	0.20	1.00	0.18	0.18
Sat Flow, veh/h	2952	669	1781	3647	1781	1585
Grp Volume(v), veh/h	830	845	153	405	92	95
Grp Sat Flow(s),veh/h/ln	1777	1750	1781	1777	1781	1585
Q Serve(g_s), s	40.3	43.0	10.0	0.0	5.3	6.2
Cycle Q Clear(g_c), s	40.3	43.0	10.0	0.0	5.3	6.2
Prop In Lane		0.38	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1096	1079	178	2665	327	291
V/C Ratio(X)	0.76	0.78	0.86	0.15	0.28	0.33
Avail Cap(c_a), veh/h	1096	1079	238	2665	327	291
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.98	0.98	1.00	1.00
Uniform Delay (d), s/veh	16.5	17.1	47.2	0.0	42.2	42.6
Incr Delay (d2), s/veh	4.9	5.7	20.1	0.1	2.1	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	16.2	17.2	4.9	0.0	2.5	2.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.4	22.8	67.3	0.1	44.3	45.5
LnGrp LOS	C	C	E	A	D	D
Approach Vol, veh/h	1675			558	187	
Approach Delay, s/veh	22.1			18.5	45.0	
Approach LOS	C			B	D	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	16.0	78.0				94.0	26.0
Change Period (Y+Rc), s	4.0	4.0				4.0	4.0
Max Green Setting (Gmax), s	16.0	70.0				90.0	22.0
Max Q Clear Time (g_c+I1), s	12.0	45.0				2.0	8.2
Green Ext Time (p_c), s	0.1	13.8				2.6	0.4

Intersection Summary			
HCM 6th Ctrl Delay		23.1	
HCM 6th LOS		C	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	1	24	1	1	2	34	145	8	8	305	98
Future Volume (vph)	45	1	24	1	1	2	34	145	8	8	305	98
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	80		0	0		100
Storage Lanes	0		1	0		0	1		0	0		1
Taper Length (ft)	100			100			80			100		
Link Speed (mph)		45			45			30			45	
Link Distance (ft)		786			169			443			297	
Travel Time (s)		11.9			2.6			10.1			4.5	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	10.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	1	24	1	1	2	34	145	8	8	305	98
Future Vol, veh/h	45	1	24	1	1	2	34	145	8	8	305	98
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	1	26	1	1	2	37	156	9	9	328	105
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay	9.3	9	9.3	10.9
HCM LOS	A	A	A	B

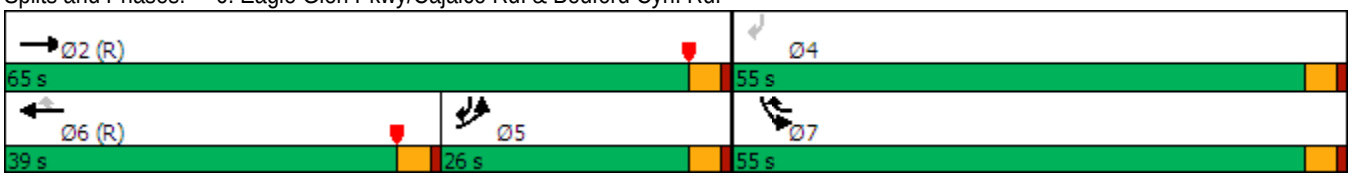
Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	98%	0%	25%	3%	0%
Vol Thru, %	0%	95%	2%	0%	25%	97%	0%
Vol Right, %	0%	5%	0%	100%	50%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	34	153	46	24	4	313	98
LT Vol	34	0	45	0	1	8	0
Through Vol	0	145	1	0	1	305	0
RT Vol	0	8	0	24	2	0	98
Lane Flow Rate	37	165	49	26	4	337	105
Geometry Grp	7	7	7	7	6	7	7
Degree of Util (X)	0.057	0.233	0.089	0.038	0.007	0.464	0.124
Departure Headway (Hd)	5.649	5.109	6.484	5.285	5.851	4.962	4.247
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	634	702	552	675	609	727	844
Service Time	3.386	2.846	4.235	3.036	3.912	2.691	1.975
HCM Lane V/C Ratio	0.058	0.235	0.089	0.039	0.007	0.464	0.124
HCM Control Delay	8.7	9.4	9.9	8.2	9	11.9	7.6
HCM Lane LOS	A	A	A	A	A	B	A
HCM 95th-tile Q	0.2	0.9	0.3	0.1	0	2.5	0.4

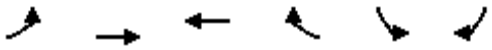
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4
Lane Configurations							
Traffic Volume (vph)	78	543	371	69	422	105	
Future Volume (vph)	78	543	371	69	422	105	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	180			200	450	0	
Storage Lanes	1			2	0	1	
Taper Length (ft)	100				180		
Right Turn on Red				Yes		Yes	
Link Speed (mph)		45	45		45		
Link Distance (ft)		755	792		716		
Travel Time (s)		11.4	12.0		10.8		
Confl. Peds. (#/hr)				5		5	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	
Shared Lane Traffic (%)							
Turn Type	Prot	NA	NA	pm+ov	Prot	pm+ov	
Protected Phases	5	2	6	7	7	5	4
Permitted Phases				6		4	
Detector Phase	5	2	6	7	7	5	
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	26.0	30.7	30.7	8.5	8.5	26.0	36.7
Total Split (s)	26.0	65.0	39.0	55.0	55.0	26.0	55.0
Total Split (%)	21.7%	54.2%	32.5%	45.8%	45.8%	21.7%	46%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lag		Lead			Lag	
Lead-Lag Optimize?	Yes		Yes			Yes	
Recall Mode	None	C-Max	C-Max	Max	Max	None	Max

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection
Natural Cycle: 95
Control Type: Actuated-Coordinated

Splits and Phases: 6: Eagle Glen Pkwy/Cajalco Rd. & Bedford Cyn. Rd.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	78	543	371	69	422	105
Future Volume (veh/h)	78	543	371	69	422	105
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	584	399	74	454	113
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	327	951	1036	1132	757	964
Arrive On Green	0.18	0.51	0.10	0.10	0.43	0.43
Sat Flow, veh/h	1781	1870	3647	1571	1781	1585
Grp Volume(v), veh/h	84	584	399	74	454	113
Grp Sat Flow(s),veh/h/ln	1781	1870	1777	1571	1781	1585
Q Serve(g_s), s	4.9	26.8	12.6	0.0	23.6	0.0
Cycle Q Clear(g_c), s	4.9	26.8	12.6	0.0	23.6	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	327	951	1036	1132	757	964
V/C Ratio(X)	0.26	0.61	0.38	0.07	0.60	0.12
Avail Cap(c_a), veh/h	327	951	1036	1132	757	964
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.74	0.74	1.00	1.00
Uniform Delay (d), s/veh	42.0	21.1	44.1	3.8	26.6	9.9
Incr Delay (d2), s/veh	0.4	3.0	0.8	0.1	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	2.1	11.7	6.1	2.5	10.2	3.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	42.4	24.1	44.9	3.9	30.1	10.2
LnGrp LOS	D	C	D	A	C	B
Approach Vol, veh/h		668	473		567	
Approach Delay, s/veh		26.4	38.5		26.1	
Approach LOS		C	D		C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		65.0		55.0	26.0	39.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		61.0		51.0	22.0	35.0
Max Q Clear Time (g_c+I1), s		28.8		25.6	6.9	14.6
Green Ext Time (p_c), s		2.5		2.3	0.2	1.9

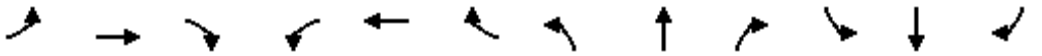
Intersection Summary	
HCM 6th Ctrl Delay	29.7
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	476	871	33	408	0	0	0	0	130	33	175
Future Volume (vph)	0	476	871	33	408	0	0	0	0	130	33	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	90		0	0		0	0		525
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	100			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		305			387			1098			1308	
Travel Time (s)		4.6			5.9			16.6			19.8	
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
Shared Lane Traffic (%)												
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Detector Phase		2		1	6					4	4	4
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0					4.0	4.0	4.0
Minimum Split (s)		26.0		8.0	26.0					26.0	26.0	26.0
Total Split (s)		78.0		12.0	90.0					30.0	30.0	30.0
Total Split (%)		65.0%		10.0%	75.0%					25.0%	25.0%	25.0%
Yellow Time (s)		3.0		3.0	3.0					3.0	3.0	3.0
All-Red Time (s)		1.0		1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0						0.0	0.0
Total Lost Time (s)		4.0		4.0	4.0						4.0	4.0
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?		Yes		Yes								
Recall Mode		C-Max		None	C-Max					Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 28 (23%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: I-15 SB Ramps & El Cerrito Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	476	871	33	408	0	0	0	0	130	33	175
Future Volume (veh/h)	0	476	871	33	408	0	0	0	0	130	33	175
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	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	491	898	34	421	0				134	34	180
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	2	2	2	2	0				2	2	2
Cap, veh/h	0	1171	1045	43	2547	0				311	79	343
Arrive On Green	0.00	0.66	0.66	0.05	1.00	0.00				0.22	0.22	0.22
Sat Flow, veh/h	0	1870	1585	1781	3647	0				1435	364	1585
Grp Volume(v), veh/h	0	491	898	34	421	0				168	0	180
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1777	0				1799	0	1585
Q Serve(g_s), s	0.0	15.6	53.5	2.3	0.0	0.0				9.7	0.0	12.0
Cycle Q Clear(g_c), s	0.0	15.6	53.5	2.3	0.0	0.0				9.7	0.0	12.0
Prop In Lane	0.00		1.00	1.00		0.00				0.80		1.00
Lane Grp Cap(c), veh/h	0	1171	1045	43	2547	0				390	0	343
V/C Ratio(X)	0.00	0.42	0.86	0.79	0.17	0.00				0.43	0.00	0.52
Avail Cap(c_a), veh/h	0	1171	1045	119	2547	0				390	0	343
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	0.54	0.54	0.98	0.98	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	9.6	16.1	56.8	0.0	0.0				40.6	0.0	41.5
Incr Delay (d2), s/veh	0.0	0.6	5.3	26.1	0.1	0.0				3.5	0.0	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.5	17.7	1.3	0.0	0.0				4.6	0.0	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.2	21.3	82.9	0.1	0.0				44.1	0.0	47.2
LnGrp LOS	A	B	C	F	A	A				D	A	D
Approach Vol, veh/h		1389			455						348	
Approach Delay, s/veh		17.4			6.3						45.7	
Approach LOS		B			A						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.9	83.1		30.0		90.0
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s	8.0	74.0		26.0		86.0
Max Q Clear Time (g_c+I1), s	4.3	55.5		14.0		2.0
Green Ext Time (p_c), s	0.0	9.6		1.1		2.8

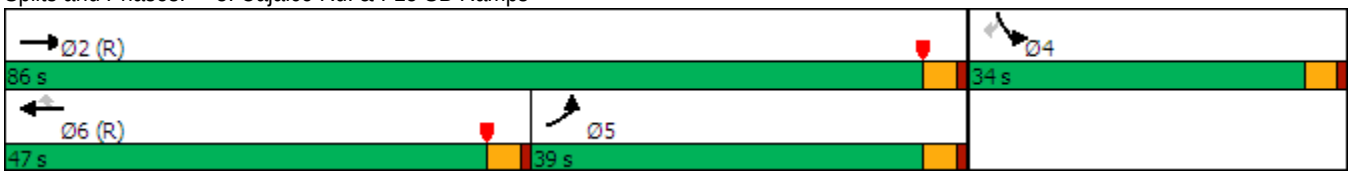
Intersection Summary	
HCM 6th Ctrl Delay	19.6
HCM 6th LOS	B

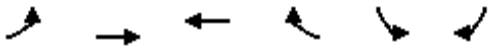
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	381	569	467	341	308	123
Future Volume (vph)	381	569	467	341	308	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290			200	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	90				25	
Right Turn on Red				Yes		Yes
Link Speed (mph)		45	45		45	
Link Distance (ft)		792	1297		282	
Travel Time (s)		12.0	19.7		4.3	
Confl. Peds. (#/hr)						5
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	23.7	30.7	30.7	8.5	8.5
Total Split (s)	39.0	86.0	47.0	47.0	34.0	34.0
Total Split (%)	32.5%	71.7%	39.2%	39.2%	28.3%	28.3%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag		Lead	Lead		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 97 (81%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 8: Cajalco Rd. & I-15 SB Ramps





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	381	569	467	341	308	123
Future Volume (veh/h)	381	569	467	341	308	123
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	393	587	481	352	318	127
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	520	1278	670	568	445	396
Arrive On Green	0.29	0.68	0.12	0.12	0.25	0.25
Sat Flow, veh/h	1781	1870	1870	1585	1781	1585
Grp Volume(v), veh/h	393	587	481	352	318	127
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1585	1781	1585
Q Serve(g_s), s	24.1	17.4	29.7	25.4	19.6	7.8
Cycle Q Clear(g_c), s	24.1	17.4	29.7	25.4	19.6	7.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	520	1278	670	568	445	396
V/C Ratio(X)	0.76	0.46	0.72	0.62	0.71	0.32
Avail Cap(c_a), veh/h	520	1278	670	568	445	396
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00
Upstream Filter(I)	0.76	0.76	0.75	0.75	1.00	1.00
Uniform Delay (d), s/veh	38.6	8.8	47.1	45.1	41.1	36.7
Incr Delay (d2), s/veh	4.8	0.9	4.9	3.8	9.4	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	6.3	15.7	11.3	9.4	7.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	43.5	9.7	52.0	48.9	50.5	38.8
LnGrp LOS	D	A	D	D	D	D
Approach Vol, veh/h		980	833		445	
Approach Delay, s/veh		23.2	50.7		47.2	
Approach LOS		C	D		D	

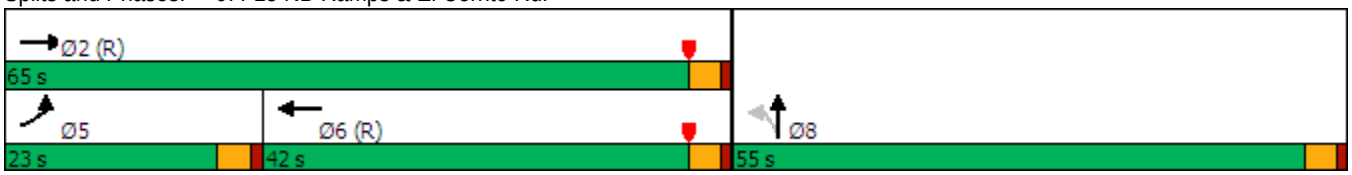
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		86.0		34.0	39.0	47.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		82.0		30.0	35.0	43.0
Max Q Clear Time (g_c+I1), s		19.4		21.6	26.1	31.7
Green Ext Time (p_c), s		2.5		1.2	1.0	2.8

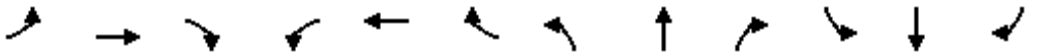
Intersection Summary		
HCM 6th Ctrl Delay		38.1
HCM 6th LOS		D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	211	427	0	0	187	70	281	6	59	0	0	0
Future Volume (vph)	211	427	0	0	187	70	281	6	59	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	60			100			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		387			489			1198			782	
Travel Time (s)		5.9			7.4			18.2			11.8	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA			NA		Perm	NA				
Protected Phases	5	2			6			8				
Permitted Phases							8					
Detector Phase	5	2			6		8	8				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		4.0	4.0				
Minimum Split (s)	8.0	26.0			26.0		26.0	26.0				
Total Split (s)	23.0	65.0			42.0		55.0	55.0				
Total Split (%)	19.2%	54.2%			35.0%		45.8%	45.8%				
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0				
All-Red Time (s)	1.0	1.0			1.0		1.0	1.0				
Lost Time Adjust (s)	0.0	0.0			0.0			0.0				
Total Lost Time (s)	4.0	4.0			4.0			4.0				
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?	Yes				Yes							
Recall Mode	None	C-Max			C-Max		Max	Max				

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 17 (14%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 9: I-15 NB Ramps & El Cerrito Rd.





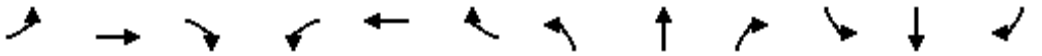
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	211	427	0	0	187	70	281	6	59	0	0	0
Future Volume (veh/h)	211	427	0	0	187	70	281	6	59	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking 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	1870	1870	0	0	1870	1870	1900	1870	1900			
Adj Flow Rate, veh/h	232	469	0	0	205	77	309	7	65			
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	294	951	0	0	995	362	602	14	127			
Arrive On Green	0.17	1.00	0.00	0.00	0.39	0.39	0.43	0.43	0.43			
Sat Flow, veh/h	3456	1870	0	0	2645	928	1416	32	298			
Grp Volume(v), veh/h	232	469	0	0	141	141	381	0	0			
Grp Sat Flow(s),veh/h/ln	1728	1870	0	0	1777	1703	1746	0	0			
Q Serve(g_s), s	7.7	0.0	0.0	0.0	6.3	6.6	19.3	0.0	0.0			
Cycle Q Clear(g_c), s	7.7	0.0	0.0	0.0	6.3	6.6	19.3	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.55	0.81		0.17			
Lane Grp Cap(c), veh/h	294	951	0	0	693	664	742	0	0			
V/C Ratio(X)	0.79	0.49	0.00	0.00	0.20	0.21	0.51	0.00	0.00			
Avail Cap(c_a), veh/h	547	951	0	0	693	664	742	0	0			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.78	0.78	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	48.8	0.0	0.0	0.0	24.3	24.4	25.4	0.0	0.0			
Incr Delay (d2), s/veh	3.7	1.4	0.0	0.0	0.7	0.7	2.5	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	3.2	0.4	0.0	0.0	2.7	2.7	8.1	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.5	1.4	0.0	0.0	24.9	25.1	27.9	0.0	0.0			
LnGrp LOS	D	A	A	A	C	C	C	A	A			
Approach Vol, veh/h		701			282			381				
Approach Delay, s/veh		18.3			25.0			27.9				
Approach LOS		B			C			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		65.0			14.2	50.8		55.0				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		61.0			19.0	38.0		51.0				
Max Q Clear Time (g_c+I1), s		2.0			9.7	8.6		21.3				
Green Ext Time (p_c), s		2.9			0.5	1.5		2.3				
Intersection Summary												
HCM 6th Ctrl Delay			22.4									
HCM 6th LOS			C									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	154	740	0	0	668	521	136	7	217	0	0	0
Future Volume (vph)	154	740	0	0	668	521	136	7	217	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	575		300	0		0	300		175	0		0
Storage Lanes	1		0	0		1	0		1	0		0
Taper Length (ft)	50			25			180			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1297			527			714			1440	
Travel Time (s)		19.7			8.0			10.8			21.8	
Confl. Peds. (#/hr)									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
Heavy Vehicles (%)	2%	2%	2%	0%	2%	2%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Detector Phase	5	2			6	6	8	8	8			
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Minimum Split (s)	8.0	23.7			30.7	30.7	8.5	8.5	8.5			
Total Split (s)	24.0	96.0			72.0	72.0	24.0	24.0	24.0			
Total Split (%)	20.0%	80.0%			60.0%	60.0%	20.0%	20.0%	20.0%			
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
All-Red Time (s)	1.0	1.0			1.0	1.0	1.0	1.0	1.0			
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0			
Total Lost Time (s)	4.0	4.0			4.0	4.0		4.0	4.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Recall Mode	None	C-Max			C-Max	C-Max	Max	Max	Max			

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 54 (45%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 10: I-15 NB Ramps & Cajalco Rd.





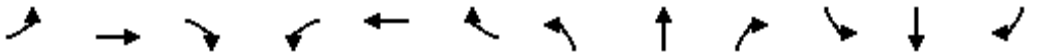
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	740	0	0	668	521	136	7	217	0	0	0
Future Volume (veh/h)	154	740	0	0	668	521	136	7	217	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99			
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	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	160	771	0	0	696	543	142	7	226			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	186	1434	0	0	1176	997	284	14	262			
Arrive On Green	0.21	1.00	0.00	0.00	0.63	0.63	0.17	0.17	0.17			
Sat Flow, veh/h	1781	1870	0	0	1870	1585	1701	84	1571			
Grp Volume(v), veh/h	160	771	0	0	696	543	149	0	226			
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1870	1585	1785	0	1571			
Q Serve(g_s), s	10.4	0.0	0.0	0.0	26.4	23.2	9.1	0.0	16.8			
Cycle Q Clear(g_c), s	10.4	0.0	0.0	0.0	26.4	23.2	9.1	0.0	16.8			
Prop In Lane	1.00		0.00	0.00		1.00	0.95		1.00			
Lane Grp Cap(c), veh/h	186	1434	0	0	1176	997	298	0	262			
V/C Ratio(X)	0.86	0.54	0.00	0.00	0.59	0.54	0.50	0.00	0.86			
Avail Cap(c_a), veh/h	297	1434	0	0	1176	997	298	0	262			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.81	0.81	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	46.6	0.0	0.0	0.0	13.2	12.6	45.5	0.0	48.7			
Incr Delay (d2), s/veh	11.2	1.2	0.0	0.0	2.2	2.1	5.9	0.0	29.4			
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	4.6	0.5	0.0	0.0	10.5	7.9	4.4	0.0	8.5			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.8	1.2	0.0	0.0	15.4	14.7	51.4	0.0	78.0			
LnGrp LOS	E	A	A	A	B	B	D	A	E			
Approach Vol, veh/h		931			1239			375				
Approach Delay, s/veh		10.9			15.1			67.4				
Approach LOS		B			B			E				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		96.0			16.6	79.4		24.0				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		92.0			20.0	68.0		20.0				
Max Q Clear Time (g_c+I1), s		2.0			12.4	28.4		18.8				
Green Ext Time (p_c), s		3.7			0.2	5.8		0.2				
Intersection Summary												
HCM 6th Ctrl Delay			21.3									
HCM 6th LOS			C									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	483	509	0	0	670	174	0	0	0	149	0	464
Future Volume (vph)	483	509	0	0	670	174	0	0	0	149	0	464
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	130		130	0		0	200		0
Storage Lanes	2		0	1		1	0		0	1		2
Taper Length (ft)	180			110			100			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		627			570			544			904	
Travel Time (s)		9.5			8.6			8.2			13.7	
Confl. Peds. (#/hr)						5				5		
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm				Split	NA	pm+ov
Protected Phases	5	2		1	6		8	8		4	4	5
Permitted Phases						6						4
Detector Phase	5	2		1	6	6	8	8		4	4	5
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	23.2		8.0	30.7	30.7	26.0	26.0		8.0	8.0	8.5
Total Split (s)	31.0	63.0		8.0	40.0	40.0	26.0	26.0		23.0	23.0	31.0
Total Split (%)	25.8%	52.5%		6.7%	33.3%	33.3%	21.7%	21.7%		19.2%	19.2%	25.8%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		Max	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 43 (36%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 11: Cajalco Rd. & Grand Oaks





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	483	509	0	0	670	174	0	0	0	149	0	464
Future Volume (veh/h)	483	509	0	0	670	174	0	0	0	149	0	464
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		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	493	519	0	0	684	178	0	0	0	152	0	473
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	578	2754	0	1	2041	908	0	2	0	282	0	902
Arrive On Green	0.17	0.77	0.00	0.00	0.57	0.57	0.00	0.00	0.00	0.16	0.00	0.16
Sat Flow, veh/h	3456	3647	0	1781	3554	1581	0	1870	0	1781	0	2746
Grp Volume(v), veh/h	493	519	0	0	684	178	0	0	0	152	0	473
Grp Sat Flow(s),veh/h/ln	1728	1777	0	1781	1777	1581	0	1870	0	1781	0	1373
Q Serve(g_s), s	16.6	4.6	0.0	0.0	12.2	6.5	0.0	0.0	0.0	9.4	0.0	16.8
Cycle Q Clear(g_c), s	16.6	4.6	0.0	0.0	12.2	6.5	0.0	0.0	0.0	9.4	0.0	16.8
Prop In Lane	1.00		0.00	1.00		1.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	578	2754	0	1	2041	908	0	2	0	282	0	902
V/C Ratio(X)	0.85	0.19	0.00	0.00	0.34	0.20	0.00	0.00	0.00	0.54	0.00	0.52
Avail Cap(c_a), veh/h	778	2754	0	59	2041	908	0	343	0	282	0	902
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	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.5	3.6	0.0	0.0	13.5	12.3	0.0	0.0	0.0	46.5	0.0	33.0
Incr Delay (d2), s/veh	6.9	0.2	0.0	0.0	0.4	0.5	0.0	0.0	0.0	7.2	0.0	2.2
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	7.5	1.2	0.0	0.0	4.6	2.3	0.0	0.0	0.0	4.6	0.0	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.5	3.7	0.0	0.0	13.9	12.7	0.0	0.0	0.0	53.7	0.0	35.1
LnGrp LOS	E	A	A	A	B	B	A	A	A	D	A	D
Approach Vol, veh/h		1012			862			0			625	
Approach Delay, s/veh		28.9			13.7			0.0			39.7	
Approach LOS		C			B						D	

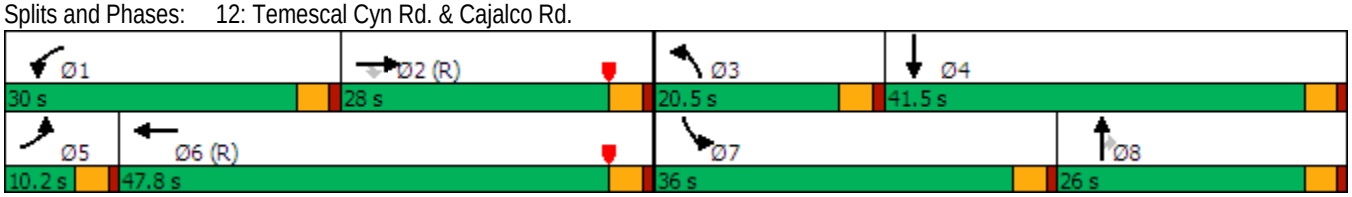
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	97.0		23.0	24.1	72.9		0.0				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	4.0	59.0		19.0	27.0	36.0		22.0				
Max Q Clear Time (g_c+I1), s	0.0	6.6		18.8	18.6	14.2		0.0				
Green Ext Time (p_c), s	0.0	2.3		0.1	1.5	3.8		0.0				

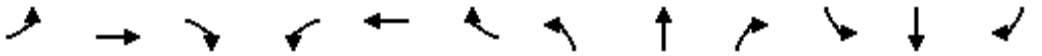
Intersection Summary		
HCM 6th Ctrl Delay		26.3
HCM 6th LOS		C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	269	312	281	527	140	284	203	146	310	581	65
Future Volume (vph)	27	269	312	281	527	140	284	203	146	310	581	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	16	12	12	16	12	12	12
Storage Length (ft)	300		200	100		200	160		160	185		200
Storage Lanes	1		0	1		0	2		1	1		0
Taper Length (ft)	180			115			90			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		464			939			1196			475	
Travel Time (s)		7.0			14.2			18.1			7.2	
Confl. Peds. (#/hr)			5			5						5
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.5	26.0	26.0	8.5	30.7		8.5	26.0	26.0	35.5	26.0	
Total Split (s)	10.2	28.0	28.0	30.0	47.8		20.5	26.0	26.0	36.0	41.5	
Total Split (%)	8.5%	23.3%	23.3%	25.0%	39.8%		17.1%	21.7%	21.7%	30.0%	34.6%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	Max	Max	None	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 10 (8%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Temescal Cyn Rd. & Cajalco Rd.

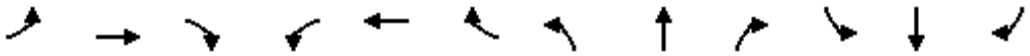




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	269	312	281	527	140	284	203	146	310	581	65
Future Volume (veh/h)	27	269	312	281	527	140	284	203	146	310	581	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		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	1945	1870	1870	1945	1870	1870	1870
Adj Flow Rate, veh/h	28	274	318	287	538	143	290	207	149	316	593	66
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	36	510	430	318	1739	451	356	778	361	350	1007	112
Arrive On Green	0.02	0.27	0.27	0.18	0.43	0.43	0.10	0.22	0.22	0.20	0.31	0.31
Sat Flow, veh/h	1781	1870	1576	1781	4036	1046	3456	3554	1648	1781	3223	358
Grp Volume(v), veh/h	28	274	318	287	452	229	290	207	149	316	326	333
Grp Sat Flow(s),veh/h/ln	1781	1870	1576	1781	1702	1678	1728	1777	1648	1781	1777	1804
Q Serve(g_s), s	1.9	15.0	22.1	18.9	10.4	10.8	9.9	5.8	9.3	20.8	18.6	18.6
Cycle Q Clear(g_c), s	1.9	15.0	22.1	18.9	10.4	10.8	9.9	5.8	9.3	20.8	18.6	18.6
Prop In Lane	1.00		1.00	1.00		0.62	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	36	510	430	318	1467	723	356	778	361	350	555	564
V/C Ratio(X)	0.78	0.54	0.74	0.90	0.31	0.32	0.81	0.27	0.41	0.90	0.59	0.59
Avail Cap(c_a), veh/h	92	510	430	386	1467	723	475	778	361	475	555	564
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	58.5	37.2	39.8	48.3	22.4	22.5	52.7	38.9	40.2	47.1	34.7	34.8
Incr Delay (d2), s/veh	29.2	4.0	10.9	21.2	0.5	1.2	7.9	0.8	3.5	16.4	4.5	4.5
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	1.1	7.2	9.5	10.0	4.1	4.3	4.6	2.6	4.0	10.5	8.4	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	87.7	41.2	50.6	69.5	22.9	23.7	60.6	39.7	43.7	63.5	39.3	39.3
LnGrp LOS	F	D	D	E	C	C	E	D	D	E	D	D
Approach Vol, veh/h		620			968			646			975	
Approach Delay, s/veh		48.1			36.9			50.0			47.1	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.4	36.7	16.4	41.5	6.4	55.7	27.6	30.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	26.0	24.0	16.5	37.5	6.2	43.8	32.0	22.0
Max Q Clear Time (g_c+I1), s	20.9	24.1	11.9	20.6	3.9	12.8	22.8	11.3
Green Ext Time (p_c), s	0.5	0.0	0.5	2.3	0.0	3.0	0.8	1.1

Intersection Summary	
HCM 6th Ctrl Delay	44.8
HCM 6th LOS	D



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	2	105	24	1	4	9	218	10	10	623	9
Future Volume (vph)	5	2	105	24	1	4	9	218	10	10	623	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		237			740			929			680	
Travel Time (s)		5.4			16.8			18.1			13.2	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

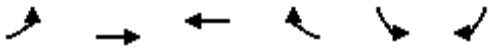
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	40
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	2	105	24	1	4	9	218	10	10	623	9
Future Vol, veh/h	5	2	105	24	1	4	9	218	10	10	623	9
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	2	113	26	1	4	10	234	11	11	670	10
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	10.4	10.2	11.9	56.9
HCM LOS	B	B	B	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	4%	83%	100%	0%
Vol Thru, %	0%	96%	2%	3%	0%	99%
Vol Right, %	0%	4%	94%	14%	0%	1%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	9	228	112	29	10	632
LT Vol	9	0	5	24	10	0
Through Vol	0	218	2	1	0	623
RT Vol	0	10	105	4	0	9
Lane Flow Rate	10	245	120	31	11	680
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.017	0.388	0.196	0.059	0.017	1.003
Departure Headway (Hd)	6.241	5.703	5.862	6.755	5.829	5.315
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	574	630	611	529	618	686
Service Time	3.976	3.438	3.914	4.818	3.529	3.015
HCM Lane V/C Ratio	0.017	0.389	0.196	0.059	0.018	0.991
HCM Control Delay	9.1	12	10.4	10.2	8.6	57.7
HCM Lane LOS	A	B	B	B	A	F
HCM 95th-tile Q	0.1	1.8	0.7	0.2	0.1	16.1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	3	659	206	13	16	5
Future Volume (vph)	3	659	206	13	16	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	60				100	
Link Speed (mph)		35	35		30	
Link Distance (ft)		1222	796		251	
Travel Time (s)		23.8	15.5		5.7	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Sign Control		Stop	Stop		Stop	

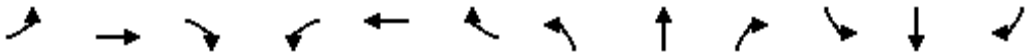
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	49.8
Intersection LOS	E

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	659	206	13	16	5
Future Vol, veh/h	3	659	206	13	16	5
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	775	242	15	19	6
Number of Lanes	1	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	64	10.6	9.7
HCM LOS	F	B	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	76%
Vol Thru, %	0%	100%	94%	0%
Vol Right, %	0%	0%	6%	24%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	3	659	219	21
LT Vol	3	0	0	16
Through Vol	0	659	206	0
RT Vol	0	0	13	5
Lane Flow Rate	4	775	258	25
Geometry Grp	7	7	5	2
Degree of Util (X)	0.005	1.038	0.349	0.043
Departure Headway (Hd)	5.32	4.818	4.876	6.39
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	677	760	732	564
Service Time	3.02	2.518	2.954	4.39
HCM Lane V/C Ratio	0.006	1.02	0.352	0.044
HCM Control Delay	8	64.3	10.6	9.7
HCM Lane LOS	A	F	B	A
HCM 95th-tile Q	0	18.9	1.6	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	501	159	40	146	4	57	2	33	2	0	3
Future Volume (vph)	0	501	159	40	146	4	57	2	33	2	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	60			60			100			100		
Link Speed (mph)		35			35			30			45	
Link Distance (ft)		1243			910			626			548	
Travel Time (s)		24.2			17.7			14.2			8.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	40.5
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	501	159	40	146	4	57	2	33	2	0	3
Future Vol, veh/h	0	501	159	40	146	4	57	2	33	2	0	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	557	177	44	162	4	63	2	37	2	0	3
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	53.7	9.9	10.5	9.3
HCM LOS	F	A	B	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	62%	0%	0%	100%	0%	40%
Vol Thru, %	2%	100%	76%	0%	97%	0%
Vol Right, %	36%	0%	24%	0%	3%	60%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	92	0	660	40	150	5
LT Vol	57	0	0	40	0	2
Through Vol	2	0	501	0	146	0
RT Vol	33	0	159	0	4	3
Lane Flow Rate	102	0	733	44	167	6
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.176	0	0.995	0.074	0.253	0.01
Departure Headway (Hd)	6.182	5.056	4.887	5.982	5.457	6.27
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	584	0	741	593	650	574
Service Time	4.183	2.826	2.656	3.779	3.253	4.275
HCM Lane V/C Ratio	0.175	0	0.989	0.074	0.257	0.01
HCM Control Delay	10.5	7.8	53.7	9.3	10.1	9.3
HCM Lane LOS	B	N	F	A	B	A
HCM 95th-tile Q	0.6	0	16.2	0.2	1	0

APPENDIX 2.3:

EXISTING (2017 AND 2018) TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

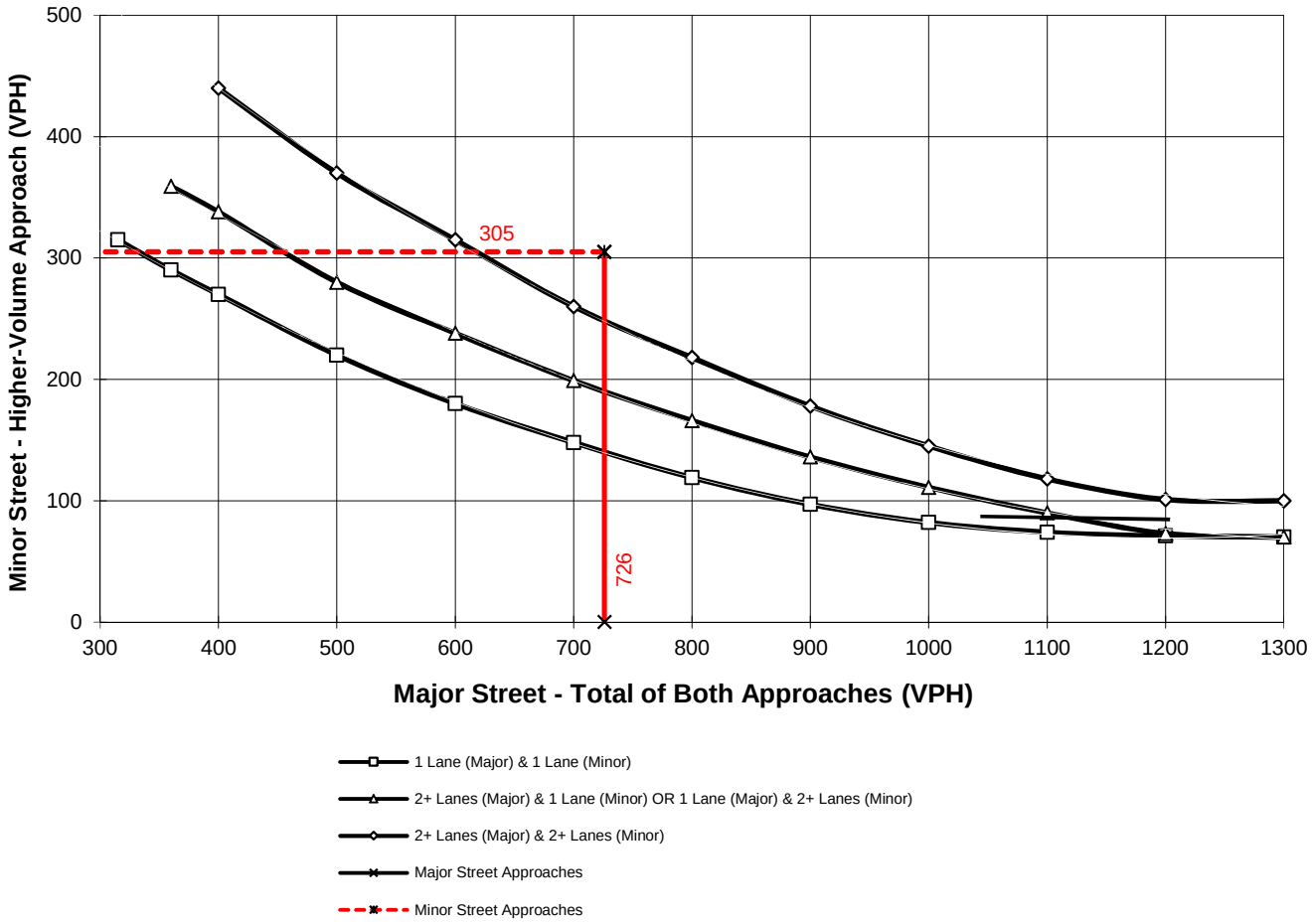
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2017/2018) AM Peak Hour Warrants**

Major Street Name = **Masters Dr.**
Total of Both Approaches (VPH) = **726**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **California Dr.**
High Volume Approach (VPH) = **305**
Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #1

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

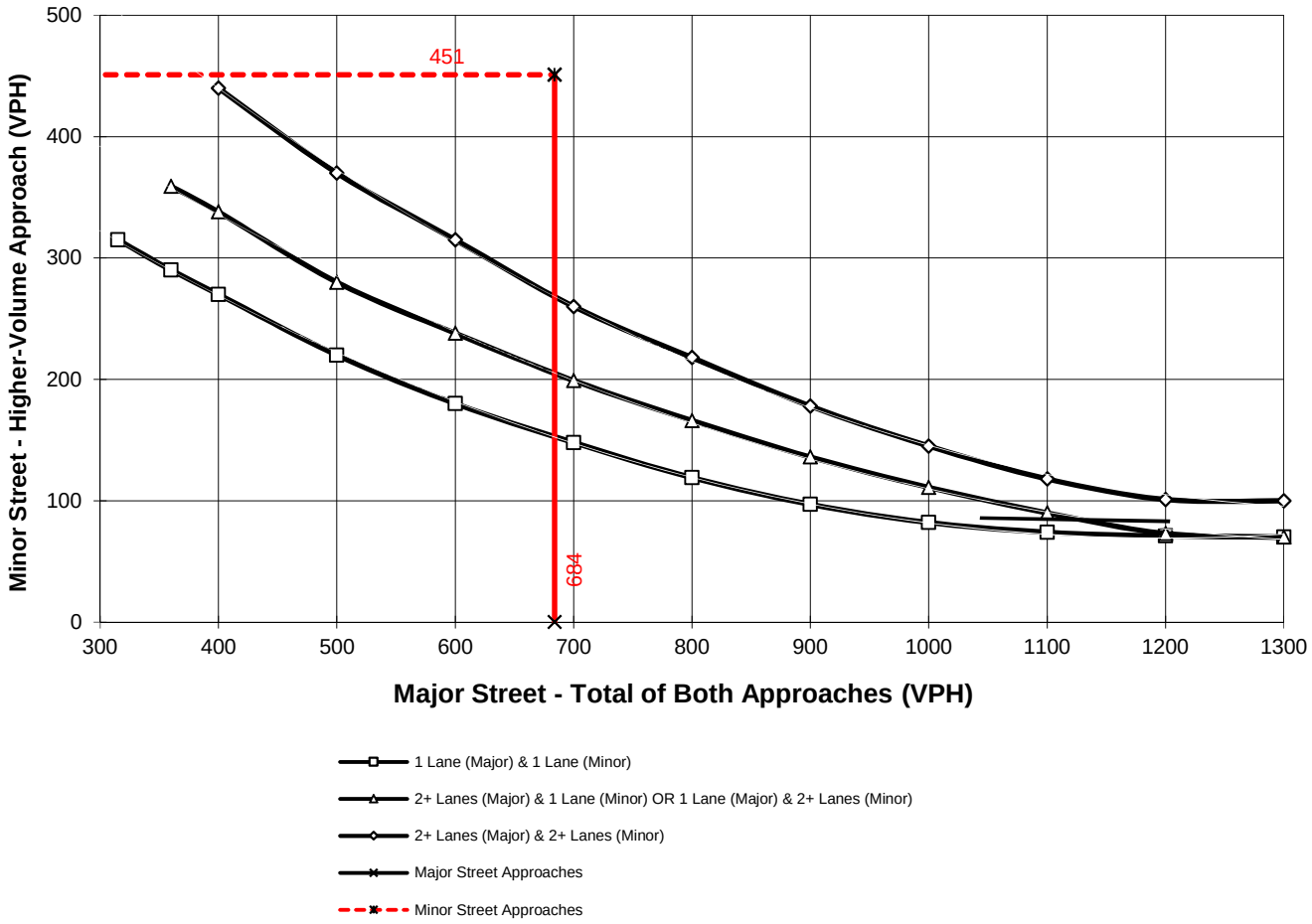
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2017/2018) PM Peak Hour Warrants**

Major Street Name = **Eagle Glen Pkwy.** Total of Both Approaches (VPH) = **684**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Masters Dr.** High Volume Approach (VPH) = **451**
Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #3

URBAN CROSSROADS

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

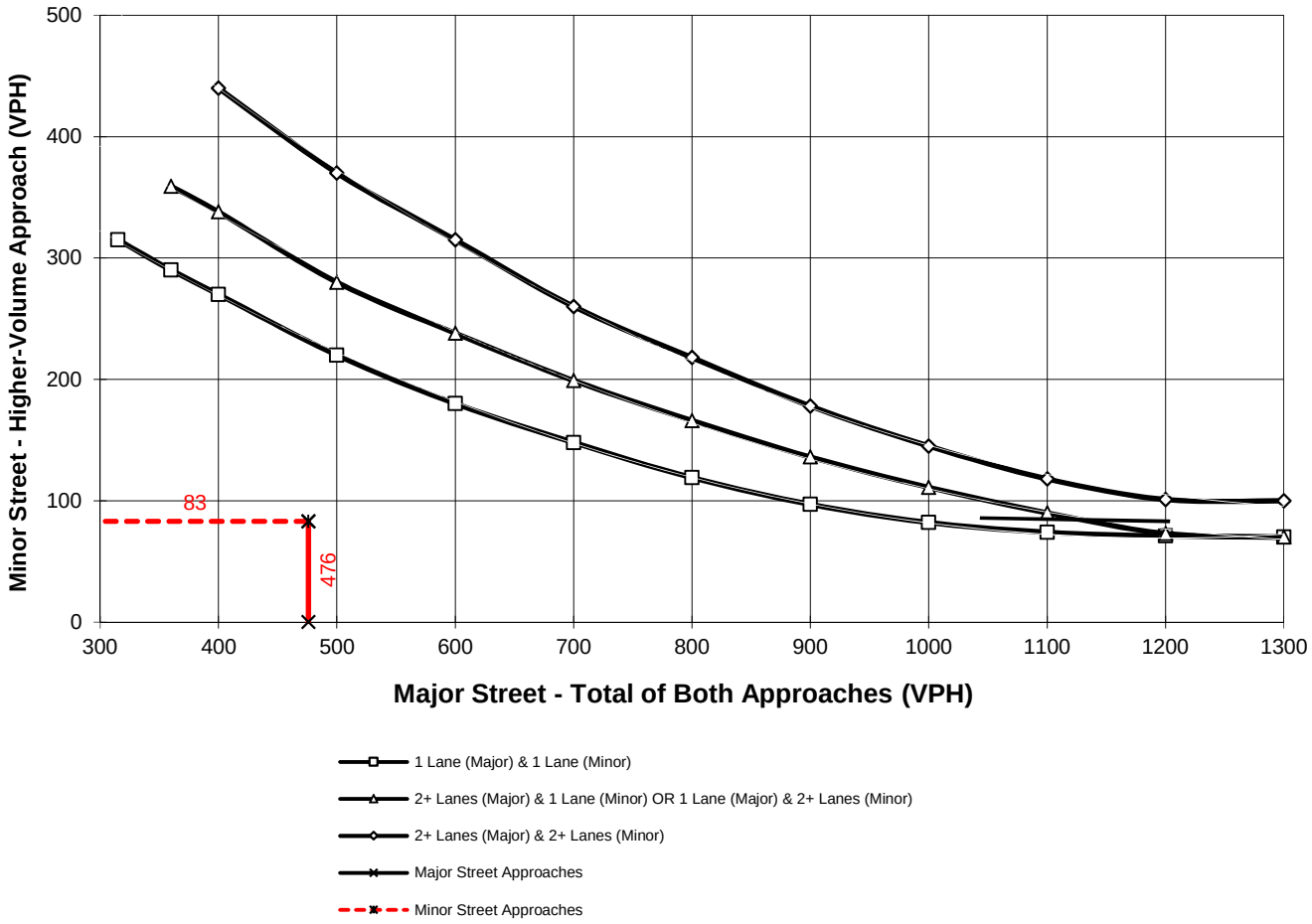
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2017/2018) AM Peak Hour Warrants**

Major Street Name = **Masters Dr.**
Total of Both Approaches (VPH) = **476**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Bennett Av.**
High Volume Approach (VPH) = **83**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #2

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

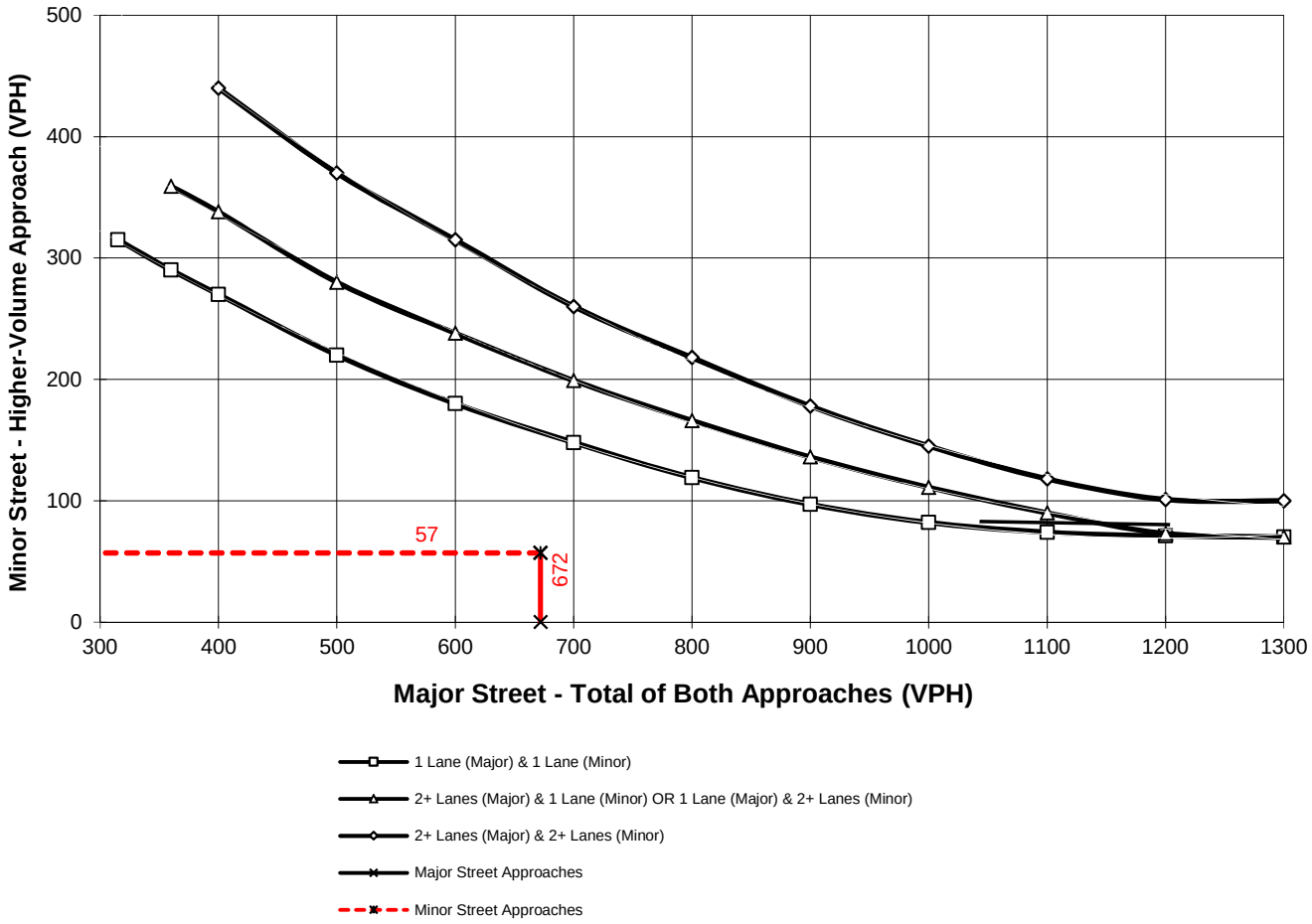
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2017/2018) PM Peak Hour Warrants**

Major Street Name = **Masters Dr.** Total of Both Approaches (VPH) = **672**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Bennett Av.** High Volume Approach (VPH) = **57**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #2

URBAN CROSSROADS

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

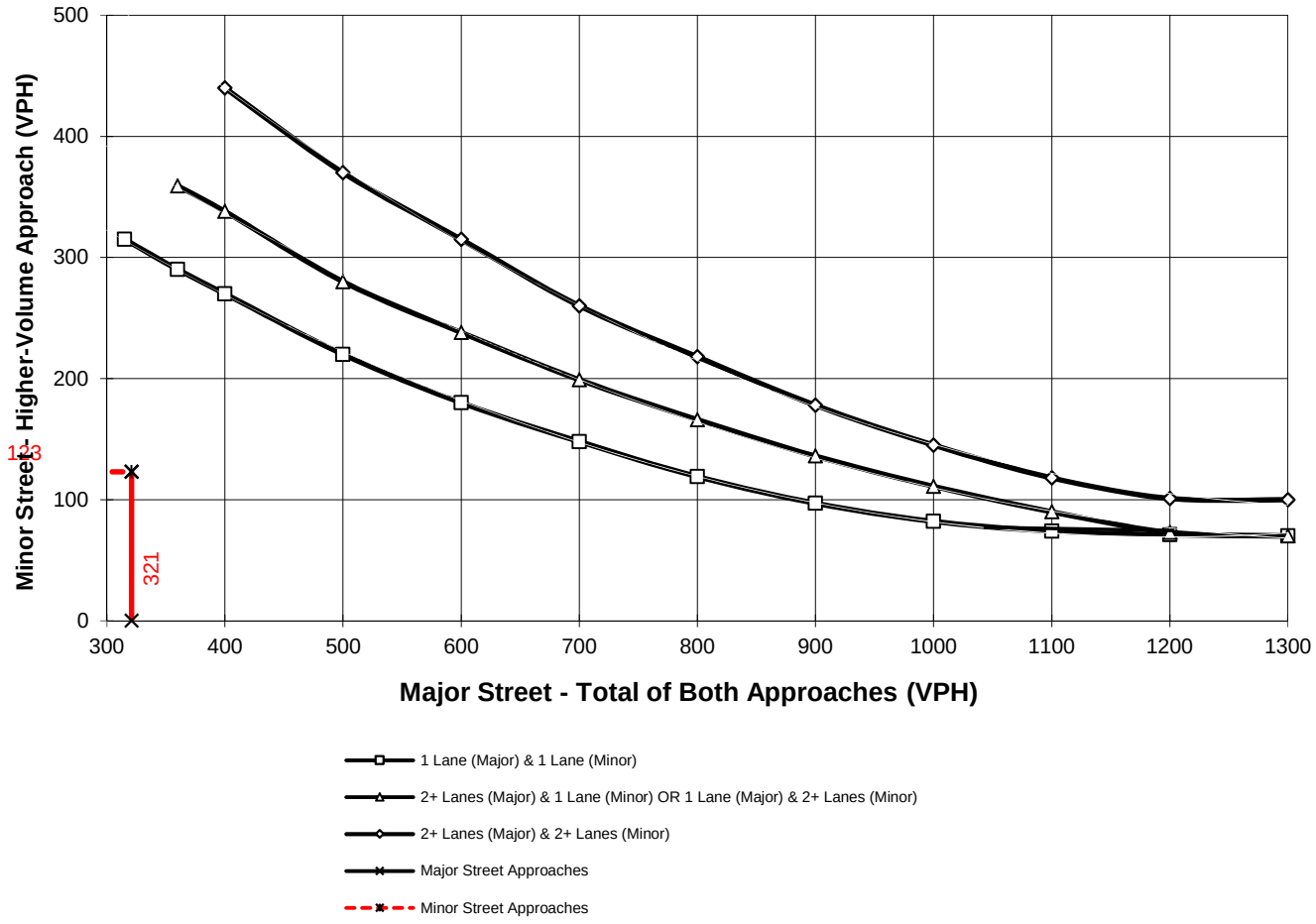
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2017/2018) AM Peak Hour Warrants**

Major Street Name = **Bedford Cyn. Rd.** Total of Both Approaches (VPH) = **321**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Georgetown Dr.** High Volume Approach (VPH) = **123**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #5

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

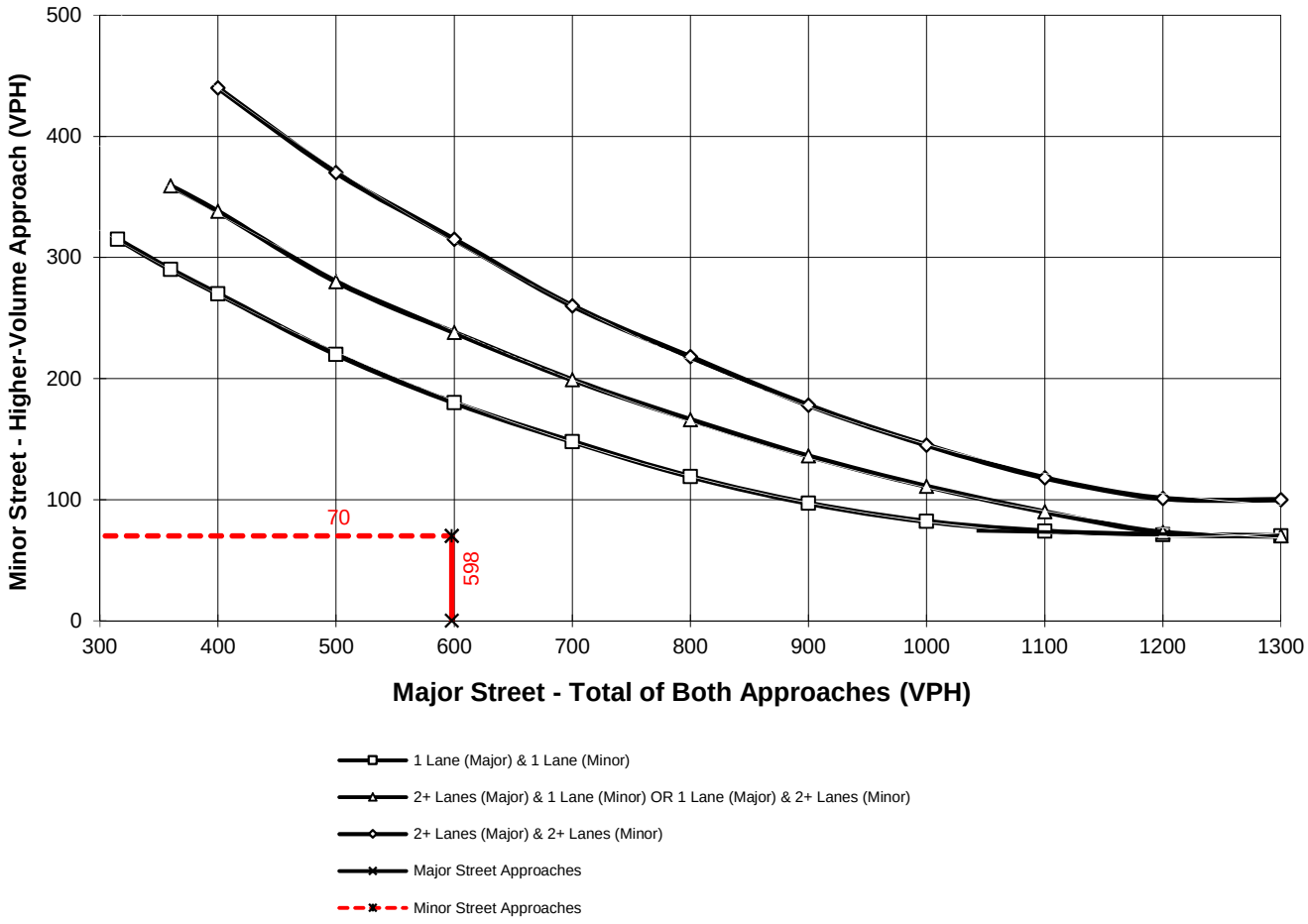
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2017/2018) PM Peak Hour Warrants**

Major Street Name = **Bedford Cyn. Rd.** Total of Both Approaches (VPH) = **598**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Georgetown Dr.** High Volume Approach (VPH) = **70**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #5

URBAN CROSSROADS

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

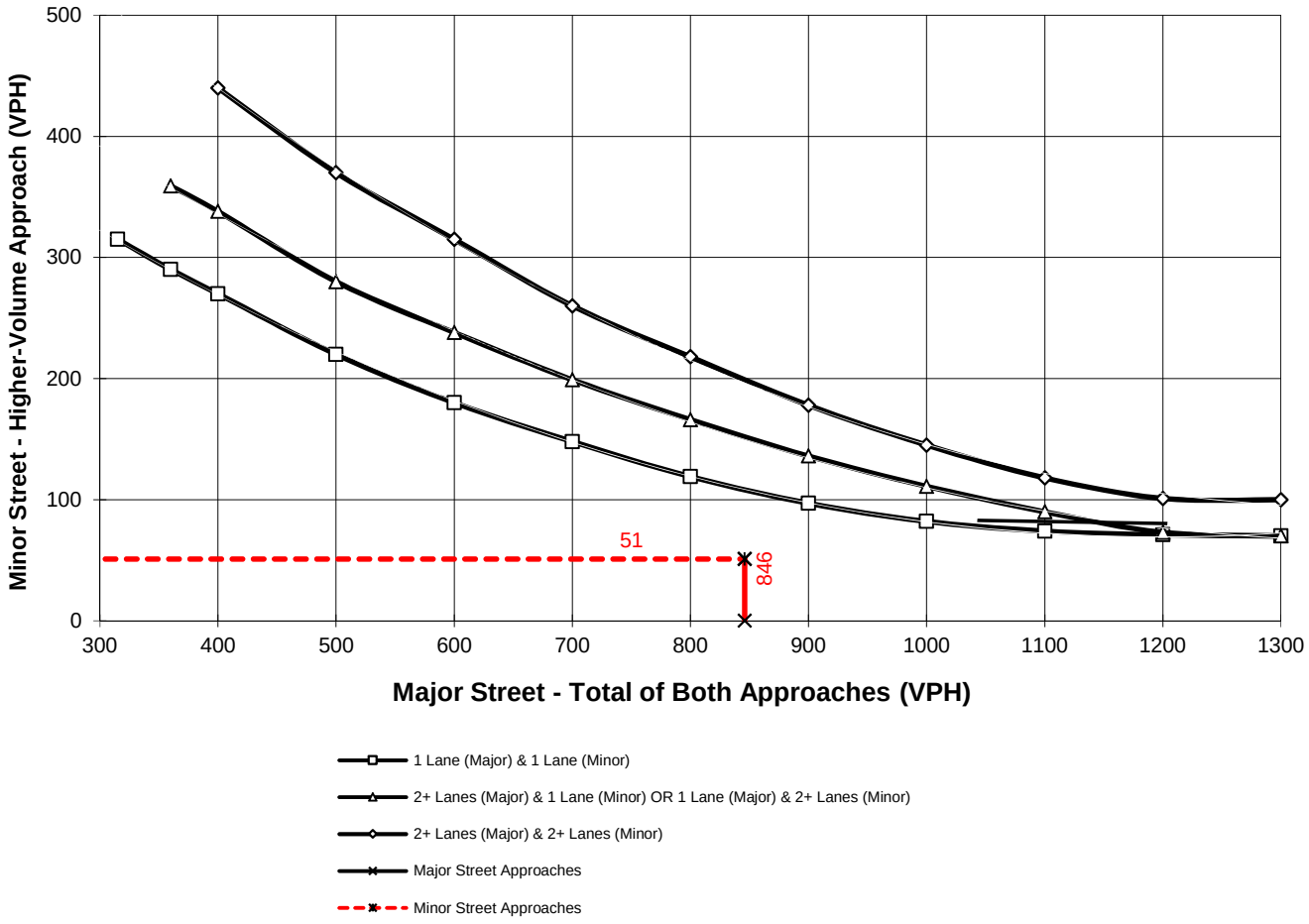
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2017/2018) AM Peak Hour Warrants**

Major Street Name = **Masters Dr.**
Total of Both Approaches (VPH) = **846**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Christopher Ln.**
High Volume Approach (VPH) = **51**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #18

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

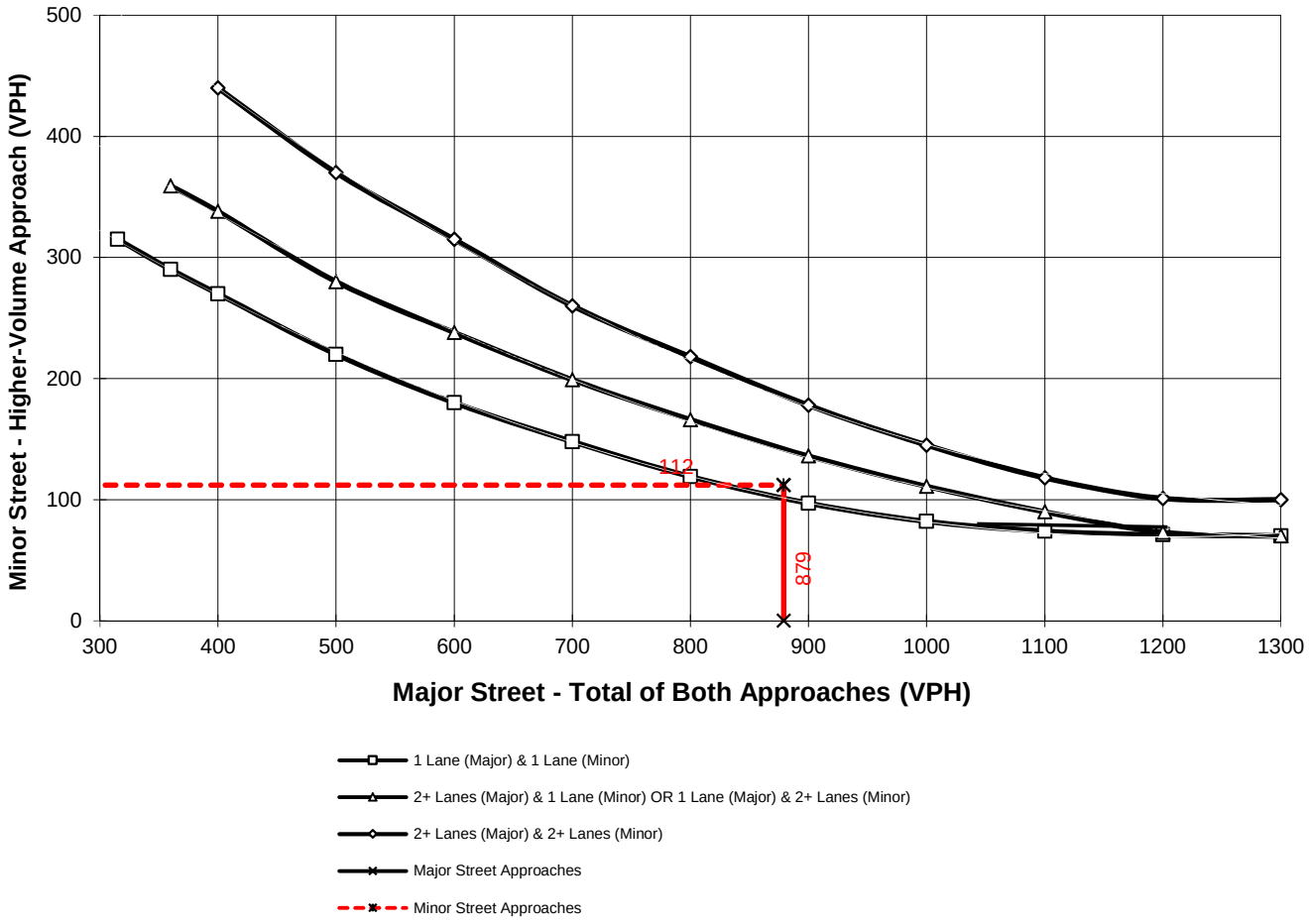
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2017/2018) PM Peak Hour Warrants**

Major Street Name = **Masters Dr.** Total of Both Approaches (VPH) = **879**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Christopher Ln.** High Volume Approach (VPH) = **112**
Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #18

URBAN CROSSROADS

R:\UXRjobs_12100-12500\12554\Warrants\01 Existing\18R_PM.xls\Fig 4C-4 (Rural Peak)

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

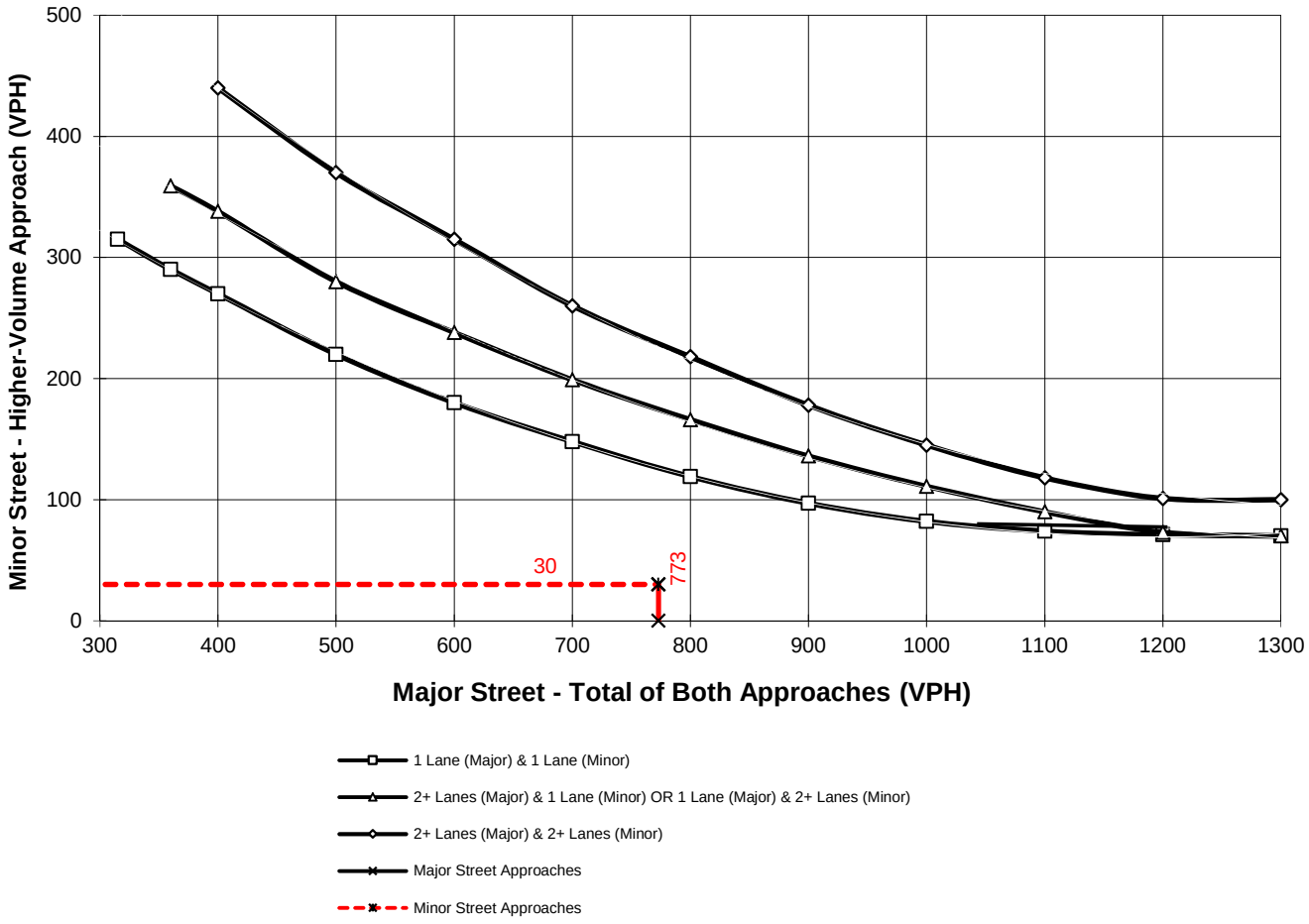
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2017/2018) AM Peak Hour Warrants**

Major Street Name = **Masters Dr.**
Total of Both Approaches (VPH) = **773**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Via Castilla St.**
High Volume Approach (VPH) = **30**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #19

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

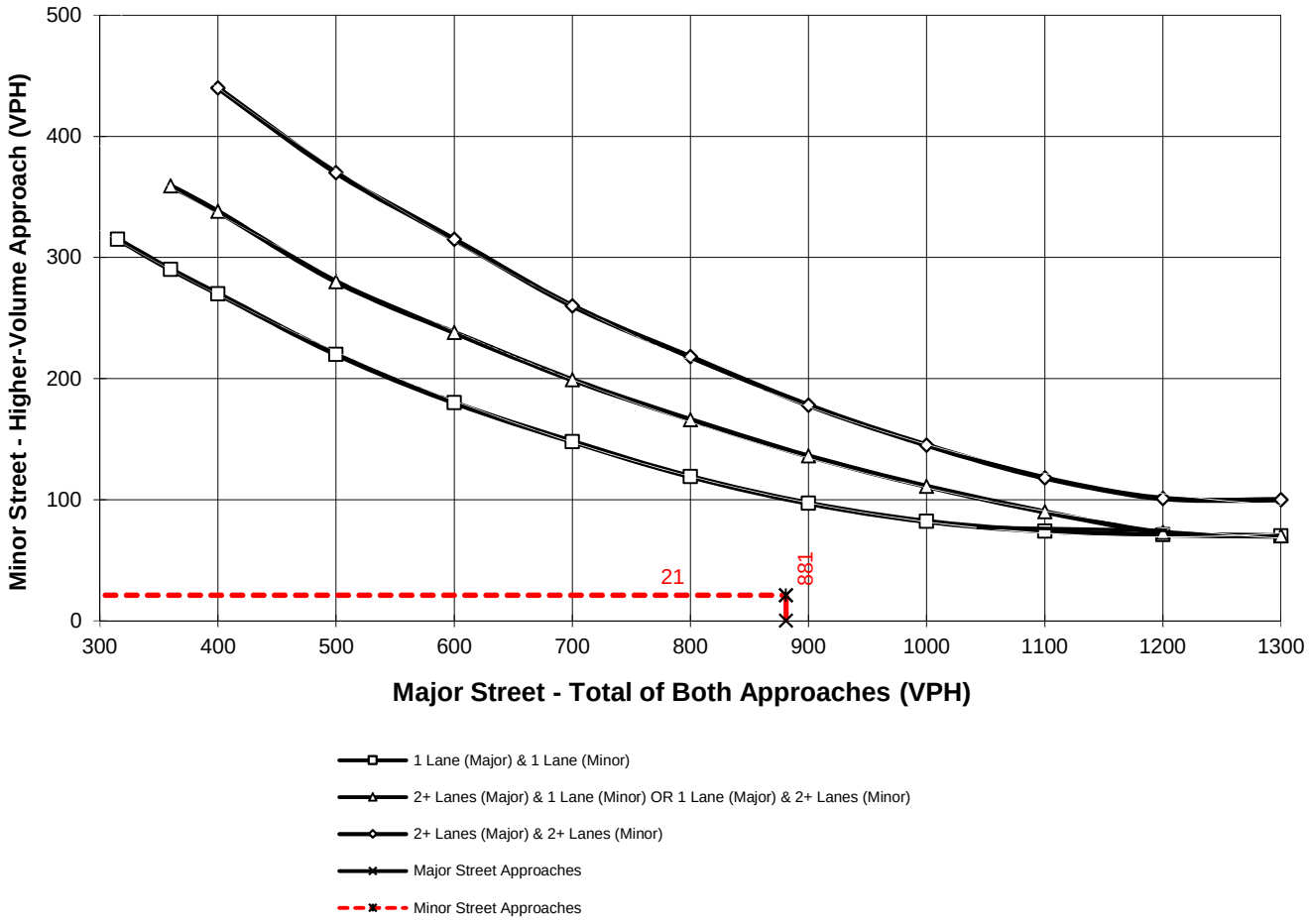
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2017/2018) PM Peak Hour Warrants**

Major Street Name = **Masters Dr.** Total of Both Approaches (VPH) = **881**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Via Castilla St.** High Volume Approach (VPH) = **21**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #19

URBAN CROSSROADS

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

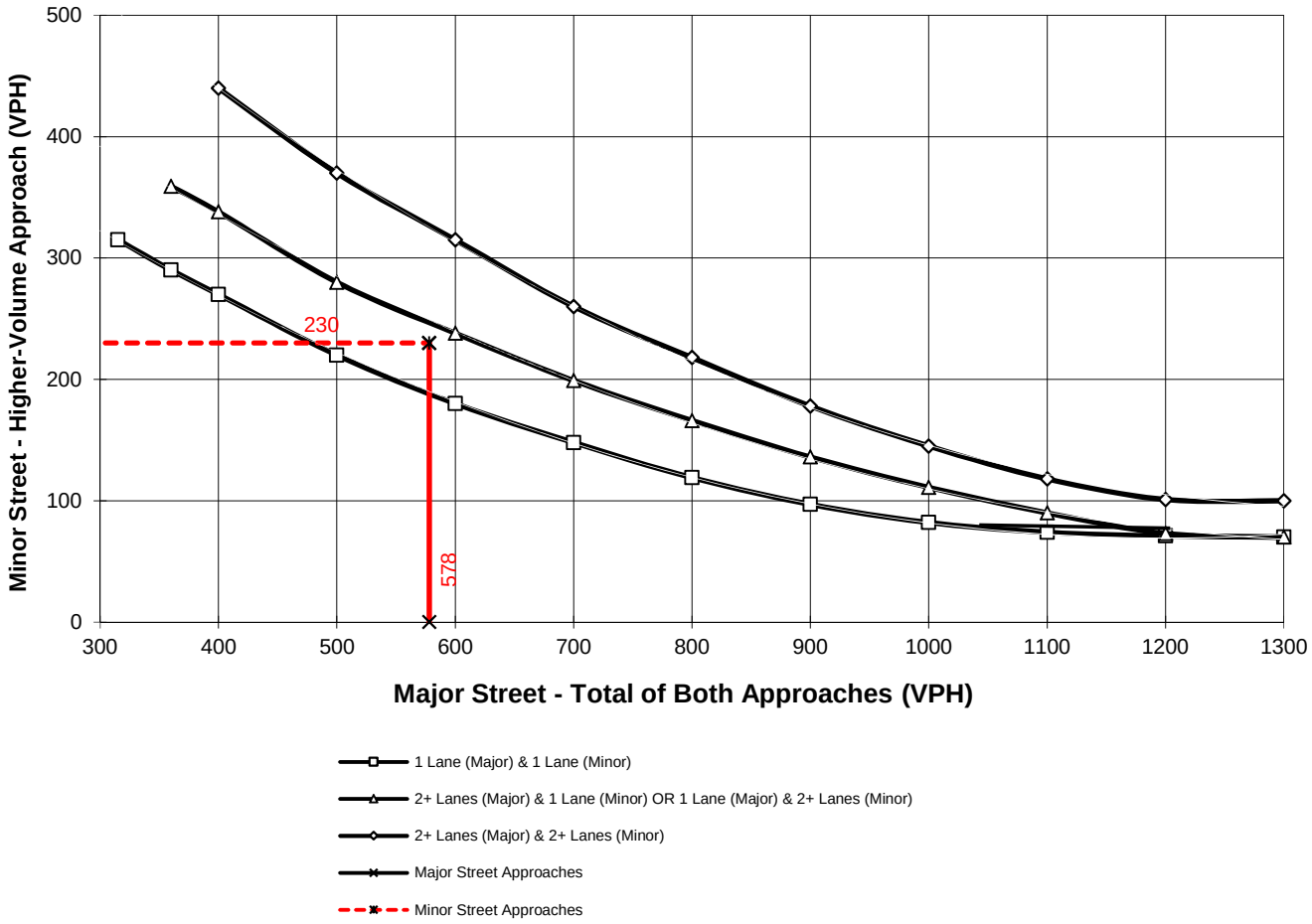
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2017/2018) AM Peak Hour Warrants**

Major Street Name = **Masters Dr.**
Total of Both Approaches (VPH) = **578**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Morales Wy.**
High Volume Approach (VPH) = **230**
Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #20

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

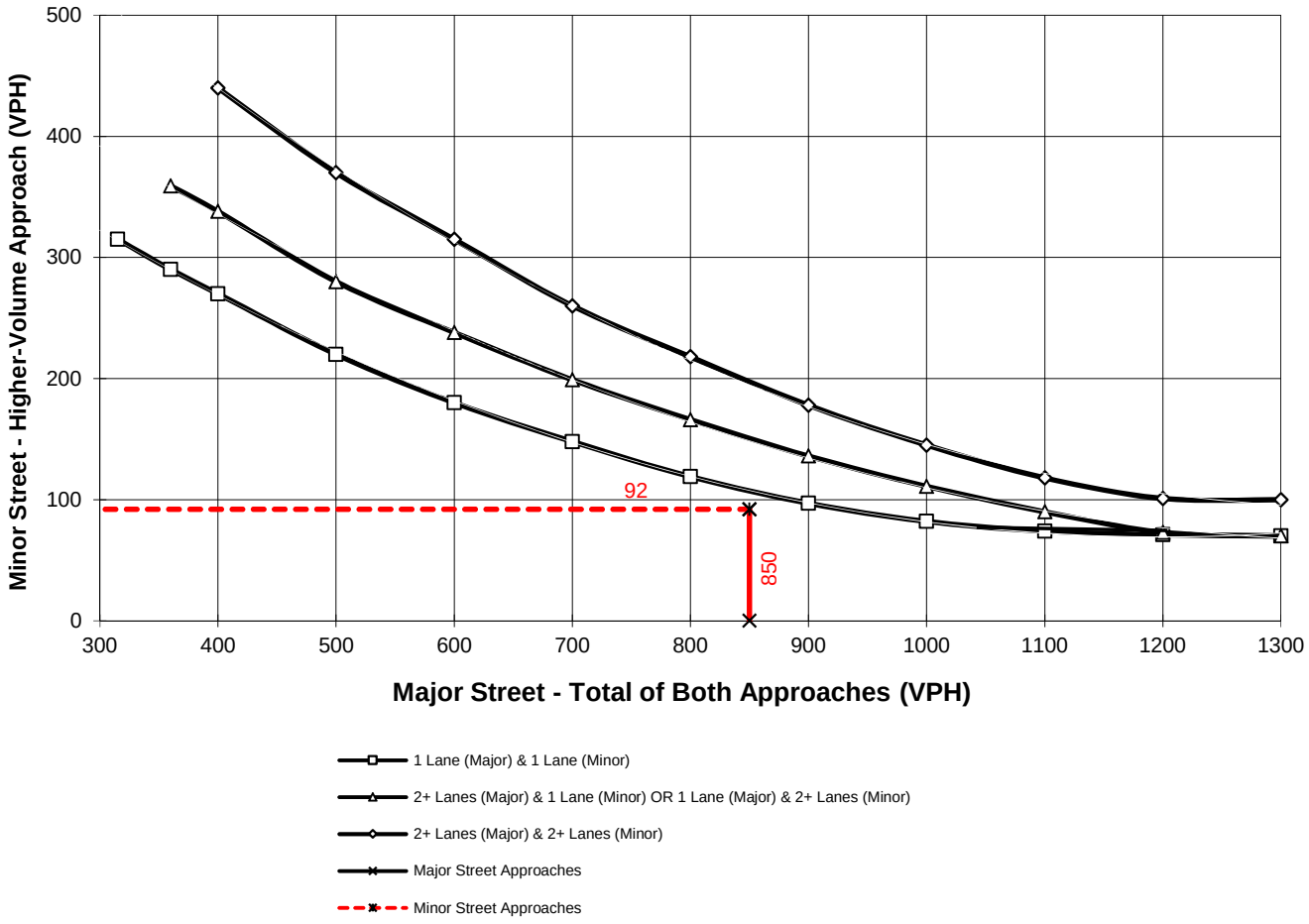
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2017/2018) PM Peak Hour Warrants**

Major Street Name = **Masters Dr.** Total of Both Approaches (VPH) = **850**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Morales Wy.** High Volume Approach (VPH) = **92**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #20

URBAN CROSSROADS

APPENDIX 5.1:

INTERIM YEAR (2021) WITHOUT PROJECT INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

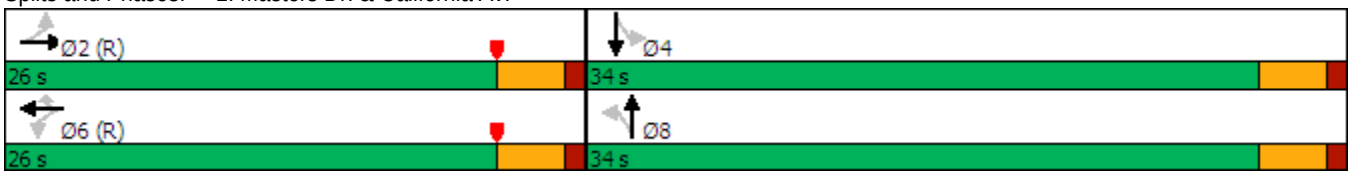
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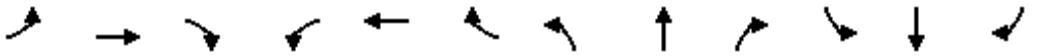
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	200	64	114	72	143	76	199	259	167	107	4
Future Volume (vph)	8	200	64	114	72	143	76	199	259	167	107	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	135		0	130		200	100		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	100			90			60			65		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		495			683			680			695	
Travel Time (s)		7.5			10.3			13.2			13.5	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6		6	8			4		
Detector Phase	2	2		6	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0	26.0	26.0	26.0		26.0	26.0	
Total Split (s)	26.0	26.0		26.0	26.0	26.0	34.0	34.0		34.0	34.0	
Total Split (%)	43.3%	43.3%		43.3%	43.3%	43.3%	56.7%	56.7%		56.7%	56.7%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	Max	Max		Max	Max	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 1: Masters Dr. & California Av.





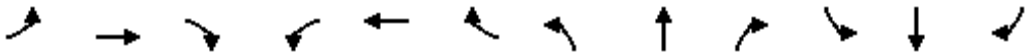
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	200	64	114	72	143	76	199	259	167	107	4
Future Volume (veh/h)	8	200	64	114	72	143	76	199	259	167	107	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	267	85	152	96	191	101	265	345	223	143	5
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	483	499	159	338	686	581	686	369	480	270	898	31
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.34	0.34	0.34	0.50	0.50	0.50
Sat Flow, veh/h	1092	1360	433	1029	1870	1585	1240	737	960	811	1796	63
Grp Volume(v), veh/h	11	0	352	152	96	191	101	0	610	223	0	148
Grp Sat Flow(s),veh/h/ln	1092	0	1792	1029	1870	1585	1240	0	1698	811	0	1859
Q Serve(g_s), s	0.4	0.0	9.3	8.2	2.1	5.2	3.6	0.0	18.9	11.1	0.0	2.6
Cycle Q Clear(g_c), s	2.5	0.0	9.3	17.5	2.1	5.2	6.2	0.0	18.9	30.0	0.0	2.6
Prop In Lane	1.00		0.24	1.00		1.00	1.00		0.57	1.00		0.03
Lane Grp Cap(c), veh/h	483	0	657	338	686	581	686	0	849	270	0	930
V/C Ratio(X)	0.02	0.00	0.54	0.45	0.14	0.33	0.15	0.00	0.72	0.83	0.00	0.16
Avail Cap(c_a), veh/h	483	0	657	338	686	581	686	0	849	270	0	930
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.83	0.00	0.83	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.5	0.0	15.0	21.9	12.7	13.7	13.0	0.0	16.3	26.3	0.0	8.1
Incr Delay (d2), s/veh	0.1	0.0	3.1	4.3	0.4	1.5	0.4	0.0	4.3	24.1	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	3.6	2.1	0.8	1.8	1.0	0.0	8.3	4.8	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.6	0.0	18.1	26.1	13.1	15.2	13.4	0.0	20.6	50.3	0.0	8.5
LnGrp LOS	B	A	B	C	B	B	B	A	C	D	A	A
Approach Vol, veh/h		363			439			711			371	
Approach Delay, s/veh		17.9			18.5			19.6			33.6	
Approach LOS		B			B			B			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		26.0		34.0		26.0		34.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		22.0		30.0		22.0		30.0				
Max Q Clear Time (g_c+I1), s		11.3		32.0		19.5		20.9				
Green Ext Time (p_c), s		1.4		0.0		0.5		3.1				

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

Notes

User approved pedestrian interval to be less than phase max green.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	22	34	6	13	39	10	267	9	54	199	25
Future Volume (vph)	32	22	34	6	13	39	10	267	9	54	199	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	110		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		537			564			936			637	
Travel Time (s)		10.5			11.0			18.2			12.4	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	11
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	22	34	6	13	39	10	267	9	54	199	25
Future Vol, veh/h	32	22	34	6	13	39	10	267	9	54	199	25
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	36	25	38	7	15	44	11	300	10	61	224	28
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

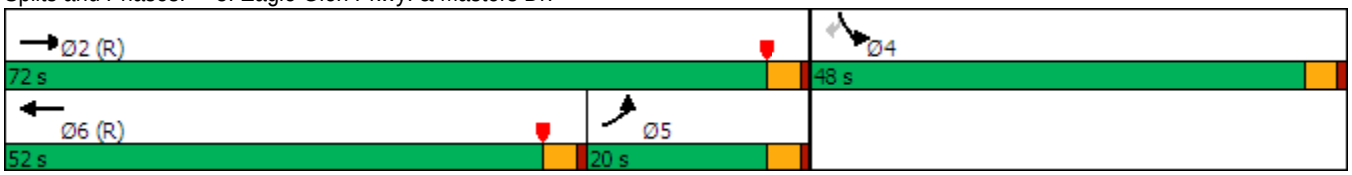
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	9.4	8.9	12.2	10.6
HCM LOS	A	A	B	B

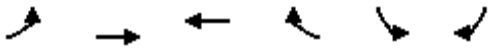
Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	36%	10%	100%	0%
Vol Thru, %	0%	97%	25%	22%	0%	89%
Vol Right, %	0%	3%	39%	67%	0%	11%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	10	276	88	58	54	224
LT Vol	10	0	32	6	54	0
Through Vol	0	267	22	13	0	199
RT Vol	0	9	34	39	0	25
Lane Flow Rate	11	310	99	65	61	252
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.018	0.452	0.148	0.095	0.097	0.363
Departure Headway (Hd)	5.772	5.245	5.394	5.236	5.771	5.188
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	616	682	658	676	616	687
Service Time	3.546	3.019	3.484	3.333	3.547	2.963
HCM Lane V/C Ratio	0.018	0.455	0.15	0.096	0.099	0.367
HCM Control Delay	8.7	12.3	9.4	8.9	9.2	10.9
HCM Lane LOS	A	B	A	A	A	B
HCM 95th-tile Q	0.1	2.4	0.5	0.3	0.3	1.7

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	53	638	279	249	222	23
Future Volume (vph)	53	638	279	249	222	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	130	0
Storage Lanes	1			0	1	1
Taper Length (ft)	120				60	
Right Turn on Red				Yes		Yes
Link Speed (mph)		45	45		35	
Link Distance (ft)		1267	546		936	
Travel Time (s)		19.2	8.3		18.2	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)						
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases						4
Detector Phase	5	2	6		4	4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0		4.0	4.0
Minimum Split (s)	8.0	26.0	26.0		26.0	26.0
Total Split (s)	20.0	72.0	52.0		48.0	48.0
Total Split (%)	16.7%	60.0%	43.3%		40.0%	40.0%
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0		4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: Eagle Glen Pkwy. & Masters Dr.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	53	638	279	249	222	23
Future Volume (veh/h)	53	638	279	249	222	23
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	717	313	280	249	26
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	606	2749	718	628	285	253
Arrive On Green	0.45	1.00	0.40	0.40	0.16	0.16
Sat Flow, veh/h	1781	3647	1889	1569	1781	1585
Grp Volume(v), veh/h	60	717	310	283	249	26
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1588	1781	1585
Q Serve(g_s), s	2.3	0.0	15.2	15.6	16.4	1.7
Cycle Q Clear(g_c), s	2.3	0.0	15.2	15.6	16.4	1.7
Prop In Lane	1.00			0.99	1.00	1.00
Lane Grp Cap(c), veh/h	606	2749	711	635	285	253
V/C Ratio(X)	0.10	0.26	0.44	0.45	0.87	0.10
Avail Cap(c_a), veh/h	606	2749	711	635	653	581
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.3	0.0	26.2	26.3	49.2	43.1
Incr Delay (d2), s/veh	0.1	0.2	1.9	2.3	8.3	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	1.0	0.1	6.5	6.1	7.9	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.4	0.2	28.1	28.6	57.6	43.2
LnGrp LOS	C	A	C	C	E	D
Approach Vol, veh/h		777	593		275	
Approach Delay, s/veh		1.9	28.3		56.2	
Approach LOS		A	C		E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		96.8		23.2	44.8	52.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		68.0		44.0	16.0	48.0
Max Q Clear Time (g_c+I1), s		2.0		18.4	4.3	17.6
Green Ext Time (p_c), s		5.2		0.8	0.1	3.6

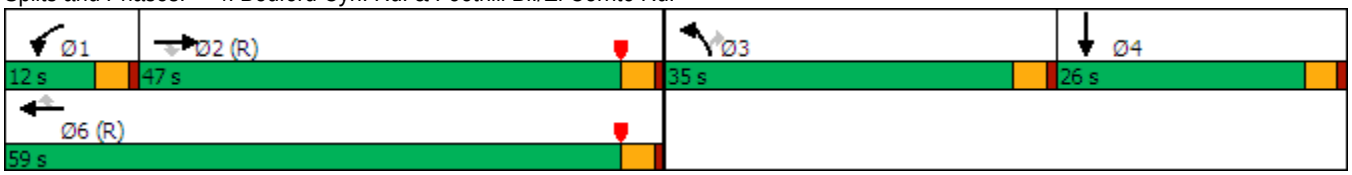
Intersection Summary	
HCM 6th Ctrl Delay	20.5
HCM 6th LOS	C

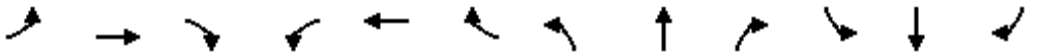
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1116	111	115	773	20	426	0	322	0	0	10
Future Volume (vph)	0	1116	111	115	773	20	426	0	322	0	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	135		135	0		125	0		0
Storage Lanes	0		1	1		1	1		1	0		0
Taper Length (ft)	100			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			45			40			30	
Link Distance (ft)		351			305			404			218	
Travel Time (s)		6.0			4.6			6.9			5.0	
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
Shared Lane Traffic (%)												
Turn Type		NA	Perm	Prot	NA	Perm	Prot		Perm		NA	
Protected Phases		2		1	6		3				4	
Permitted Phases			2			6			3			
Detector Phase		2	2	1	6	6	3		3		4	
Switch Phase												
Minimum Initial (s)		4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	
Minimum Split (s)		26.0	26.0	8.0	26.0	26.0	8.0		8.0		26.0	
Total Split (s)		47.0	47.0	12.0	59.0	59.0	35.0		35.0		26.0	
Total Split (%)		39.2%	39.2%	10.0%	49.2%	49.2%	29.2%		29.2%		21.7%	
Yellow Time (s)		3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	
All-Red Time (s)		1.0	1.0	1.0	1.0	1.0	1.0		1.0		1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	
Total Lost Time (s)		4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	
Lead/Lag		Lag	Lag	Lead			Lead		Lead		Lag	
Lead-Lag Optimize?		Yes	Yes	Yes			Yes		Yes		Yes	
Recall Mode		C-Max	C-Max	None	C-Max	C-Max	None		None		Min	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 4: Bedford Cyn. Rd. & Foothill Bl./El Cerrito Rd.





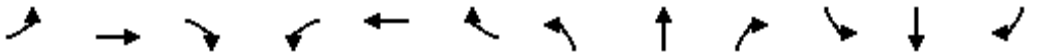
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1116	111	115	773	20	426	0	322	0	0	10
Future Volume (veh/h)	0	1116	111	115	773	20	426	0	322	0	0	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		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	0	1870	1870	1870	1870	1870	1870	0	1870	0	1870	1870
Adj Flow Rate, veh/h	0	1361	135	140	943	0	520	0	393	0	0	0
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, %	0	2	2	2	2	2	2	0	2	0	2	2
Cap, veh/h	0	2043	911	119	2399		460	0	0	0	2	
Arrive On Green	0.00	0.57	0.57	0.13	1.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	3647	1585	1781	3554	1585	1781	520		0	-74814	0
Grp Volume(v), veh/h	0	1361	135	140	943	0	520	127.1		0	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1777	1585	1781	F		0	1870	0
Q Serve(g_s), s	0.0	31.7	4.7	8.0	0.0	0.0	31.0			0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	31.7	4.7	8.0	0.0	0.0	31.0			0.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		1.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	2043	911	119	2399		460			0	2	
V/C Ratio(X)	0.00	0.67	0.15	1.18	0.39		1.13			0.00	0.00	
Avail Cap(c_a), veh/h	0	2043	911	119	2399		460			0	343	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.94	0.94	0.00	1.00			0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.6	11.8	52.0	0.0	0.0	44.5			0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.7	0.3	136.1	0.5	0.0	82.6			0.0	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
%ile BackOfQ(50%),veh/ln	0.0	12.4	1.7	7.7	0.2	0.0	23.8			0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	19.3	12.2	188.1	0.5	0.0	127.1			0.0	0.0	0.0
LnGrp LOS	A	B	B	F	A		F			A	A	
Approach Vol, veh/h		1496			1083	A					0	A
Approach Delay, s/veh		18.7			24.7						0.0	
Approach LOS		B			C							

Timer - Assigned Phs	1	2	3	4		6						
Phs Duration (G+Y+Rc), s	12.0	73.0	35.0	0.0		85.0						
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0		4.0						
Max Green Setting (Gmax), s	8.0	43.0	31.0	22.0		55.0						
Max Q Clear Time (g_c+I1), s	10.0	33.7	33.0	0.0		2.0						
Green Ext Time (p_c), s	0.0	6.1	0.0	0.0		7.4						

Intersection Summary												
HCM 6th Ctrl Delay			39.0									
HCM 6th LOS			D									

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	3	35	2	1	1	19	288	5	4	93	31
Future Volume (vph)	93	3	35	2	1	1	19	288	5	4	93	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	80		0	0		100
Storage Lanes	0		1	0		0	1		0	0		1
Taper Length (ft)	100			100			80			100		
Link Speed (mph)		45			45			30			45	
Link Distance (ft)		786			169			443			297	
Travel Time (s)		11.9			2.6			10.1			4.5	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	10.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	93	3	35	2	1	1	19	288	5	4	93	31
Future Vol, veh/h	93	3	35	2	1	1	19	288	5	4	93	31
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	103	3	39	2	1	1	21	320	6	4	103	34
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	1

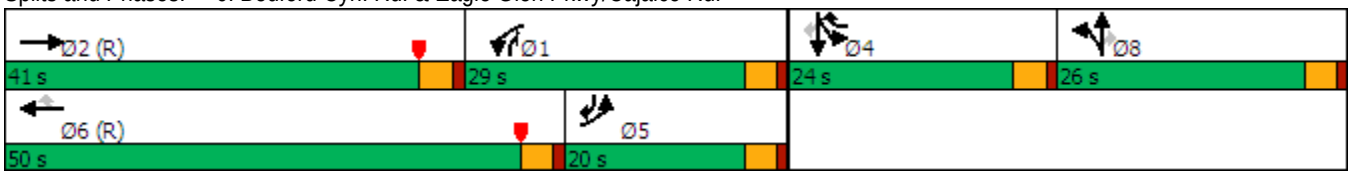
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay	9.8	9	11.9	8.7
HCM LOS	A	A	B	A

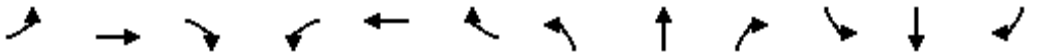
Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	97%	0%	50%	4%	0%
Vol Thru, %	0%	98%	3%	0%	25%	96%	0%
Vol Right, %	0%	2%	0%	100%	25%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	19	293	96	35	4	97	31
LT Vol	19	0	93	0	2	4	0
Through Vol	0	288	3	0	1	93	0
RT Vol	0	5	0	35	1	0	31
Lane Flow Rate	21	326	107	39	4	108	34
Geometry Grp	7	7	7	7	6	7	7
Degree of Util (X)	0.033	0.461	0.184	0.054	0.007	0.159	0.044
Departure Headway (Hd)	5.609	5.094	6.221	5.028	5.929	5.323	4.597
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	638	706	575	709	599	671	776
Service Time	3.347	2.833	3.978	2.785	4.007	3.071	2.345
HCM Lane V/C Ratio	0.033	0.462	0.186	0.055	0.007	0.161	0.044
HCM Control Delay	8.5	12.1	10.4	8.1	9	9.1	7.6
HCM Lane LOS	A	B	B	A	A	A	A
HCM 95th-tile Q	0.1	2.4	0.7	0.2	0	0.6	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	121	724	15	170	449	439	11	61	415	135	28	68
Future Volume (vph)	121	724	15	170	449	439	11	61	415	135	28	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	200		200	150		0	450		0
Storage Lanes	1		0	2		1	1		1	1		1
Taper Length (ft)	90			120			90			180		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		756			737			351			716	
Travel Time (s)		11.5			11.2			5.3			10.8	
Confl. Peds. (#/hr)						5						5
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
Shared Lane Traffic (%)										40%		
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2		1	6	4	8	8	1	4	4	5
Permitted Phases						6			8			4
Detector Phase	5	2		1	6	4	8	8	1	4	4	5
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	23.0		8.0	23.0	23.0	26.0	26.0	8.0	23.0	23.0	8.0
Total Split (s)	20.0	41.0		29.0	50.0	24.0	26.0	26.0	29.0	24.0	24.0	20.0
Total Split (%)	16.7%	34.2%		24.2%	41.7%	20.0%	21.7%	21.7%	24.2%	20.0%	20.0%	16.7%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lead		Lag	Lead				Lag			Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			Yes
Recall Mode	None	C-Max		None	C-Max	Max	None	None	None	Max	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 6: Bedford Cyn. Rd. & Eagle Glen Pkwy/Cajalco Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	724	15	170	449	439	11	61	415	135	28	68
Future Volume (veh/h)	121	724	15	170	449	439	11	61	415	135	28	68
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		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	127	762	16	179	473	462	12	64	437	163	0	72
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	449	1097	23	1130	1362	869	115	121	621	594	0	661
Arrive On Green	0.25	0.31	0.31	0.11	0.13	0.13	0.02	0.02	0.02	0.17	0.00	0.17
Sat Flow, veh/h	1781	3559	75	3456	3554	1579	1781	1870	1585	3563	0	1571
Grp Volume(v), veh/h	127	380	398	179	473	462	12	64	437	163	0	72
Grp Sat Flow(s),veh/h/ln	1781	1777	1857	1728	1777	1579	1781	1870	1585	1781	0	1571
Q Serve(g_s), s	6.9	22.6	22.6	5.6	14.6	24.8	0.8	4.1	0.0	4.8	0.0	0.0
Cycle Q Clear(g_c), s	6.9	22.6	22.6	5.6	14.6	24.8	0.8	4.1	0.0	4.8	0.0	0.0
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	449	548	573	1130	1362	869	115	121	621	594	0	661
V/C Ratio(X)	0.28	0.69	0.69	0.16	0.35	0.53	0.10	0.53	0.70	0.27	0.00	0.11
Avail Cap(c_a), veh/h	449	548	573	1130	1362	869	327	343	809	594	0	661
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.89	0.89	0.89	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.2	36.5	36.5	38.5	38.7	25.1	55.3	56.9	32.7	43.7	0.0	21.2
Incr Delay (d2), s/veh	0.3	7.1	6.8	0.1	0.6	2.1	0.4	3.5	1.9	1.1	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	10.5	10.9	2.4	7.0	14.8	0.4	2.0	11.1	2.2	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.5	43.6	43.3	38.6	39.3	27.2	55.7	60.4	34.6	44.8	0.0	21.6
LnGrp LOS	D	D	D	D	D	C	E	E	C	D	A	C
Approach Vol, veh/h		905			1114			513			235	
Approach Delay, s/veh		42.5			34.2			38.3			37.7	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	43.2	41.0		24.0	34.2	50.0		11.8				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	25.0	37.0		20.0	16.0	46.0		22.0				
Max Q Clear Time (g_c+I1), s	7.6	24.6		6.8	8.9	26.8		6.1				
Green Ext Time (p_c), s	0.5	2.5		0.7	0.2	4.1		1.7				

Intersection Summary			
HCM 6th Ctrl Delay		38.0	
HCM 6th LOS		D	

Notes

User approved volume balancing among the lanes for turning movement.

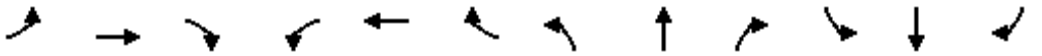
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1051	387	128	631	0	0	0	0	244	3	257
Future Volume (vph)	0	1051	387	128	631	0	0	0	0	244	3	257
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	90		0	0		0	0		525
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	100			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		305			387			1098			1308	
Travel Time (s)		4.6			5.9			16.6			19.8	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)												
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Detector Phase		2		1	6					4	4	4
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0					4.0	4.0	4.0
Minimum Split (s)		26.0		8.0	26.0					26.0	26.0	26.0
Total Split (s)		72.0		18.0	90.0					30.0	30.0	30.0
Total Split (%)		60.0%		15.0%	75.0%					25.0%	25.0%	25.0%
Yellow Time (s)		3.0		3.0	3.0					3.0	3.0	3.0
All-Red Time (s)		1.0		1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0						0.0	0.0
Total Lost Time (s)		4.0		4.0	4.0						4.0	4.0
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?		Yes		Yes								
Recall Mode		C-Max		None	C-Max					Max	Max	Max

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 18 (15%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 7: I-15 SB Ramps & El Cerrito Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1051	387	128	631	0	0	0	0	244	3	257
Future Volume (veh/h)	0	1051	387	128	631	0	0	0	0	244	3	257
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	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1251	461	152	751	0				290	4	306
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84				0.84	0.84	0.84
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1501	534	177	2547	0				381	5	343
Arrive On Green	0.00	1.00	1.00	0.20	1.00	0.00				0.22	0.22	0.22
Sat Flow, veh/h	0	2663	914	1781	3647	0				1758	24	1585
Grp Volume(v), veh/h	0	851	861	152	751	0				294	0	306
Grp Sat Flow(s),veh/h/ln	0	1777	1706	1781	1777	0				1782	0	1585
Q Serve(g_s), s	0.0	0.0	0.0	9.9	0.0	0.0				18.6	0.0	22.5
Cycle Q Clear(g_c), s	0.0	0.0	0.0	9.9	0.0	0.0				18.6	0.0	22.5
Prop In Lane	0.00		0.54	1.00		0.00				0.99		1.00
Lane Grp Cap(c), veh/h	0	1038	997	177	2547	0				386	0	343
V/C Ratio(X)	0.00	0.82	0.86	0.86	0.29	0.00				0.76	0.00	0.89
Avail Cap(c_a), veh/h	0	1038	997	208	2547	0				386	0	343
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.28	0.28	0.53	0.53	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	47.3	0.0	0.0				44.1	0.0	45.6
Incr Delay (d2), s/veh	0.0	2.2	3.1	15.5	0.2	0.0				13.2	0.0	27.5
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	0.6	0.8	4.6	0.1	0.0				9.4	0.0	11.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	2.2	3.1	62.8	0.2	0.0				57.3	0.0	73.1
LnGrp LOS	A	A	A	E	A	A				E	A	E
Approach Vol, veh/h		1712			903						600	
Approach Delay, s/veh		2.6			10.7						65.4	
Approach LOS		A			B						E	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	15.9	74.1		30.0		90.0						
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0						
Max Green Setting (Gmax), s	14.0	68.0		26.0		86.0						
Max Q Clear Time (g_c+I1), s	11.9	2.0		24.5		2.0						
Green Ext Time (p_c), s	0.1	20.4		0.5		5.5						

Intersection Summary												
HCM 6th Ctrl Delay			16.6									
HCM 6th LOS			B									

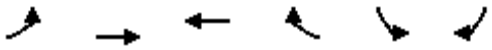
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	281	993	842	101	361	345
Future Volume (vph)	281	993	842	101	361	345
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290			250	0	0
Storage Lanes	2			0	2	2
Taper Length (ft)	120				25	
Right Turn on Red				Yes		Yes
Link Speed (mph)		45	45		45	
Link Distance (ft)		737	285		302	
Travel Time (s)		11.2	4.3		4.6	
Confl. Peds. (#/hr)						5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	23.7	30.7	30.7	8.5	8.5
Total Split (s)	26.0	88.0	62.0	62.0	32.0	32.0
Total Split (%)	21.7%	73.3%	51.7%	51.7%	26.7%	26.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 8: Cajalco Rd. & I-15 SB Ramps





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	281	993	842	101	361	345
Future Volume (veh/h)	281	993	842	101	361	345
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	296	1045	886	106	380	363
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	365	3574	1994	889	806	651
Arrive On Green	0.21	1.00	0.56	0.56	0.23	0.23
Sat Flow, veh/h	3456	5274	3647	1585	3456	2790
Grp Volume(v), veh/h	296	1045	886	106	380	363
Grp Sat Flow(s),veh/h/ln	1728	1702	1777	1585	1728	1395
Q Serve(g_s), s	9.8	0.0	17.5	3.8	11.4	13.8
Cycle Q Clear(g_c), s	9.8	0.0	17.5	3.8	11.4	13.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	365	3574	1994	889	806	651
V/C Ratio(X)	0.81	0.29	0.44	0.12	0.47	0.56
Avail Cap(c_a), veh/h	634	3574	1994	889	806	651
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.76	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.2	0.0	15.4	12.4	39.6	40.5
Incr Delay (d2), s/veh	3.4	0.2	0.7	0.3	2.0	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.1	6.7	1.3	4.9	11.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	49.6	0.2	16.1	12.7	41.6	44.0
LnGrp LOS	D	A	B	B	D	D
Approach Vol, veh/h		1341	992		743	
Approach Delay, s/veh		11.1	15.7		42.8	
Approach LOS		B	B		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		88.0		32.0	16.7	71.3
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		84.0		28.0	22.0	58.0
Max Q Clear Time (g_c+I1), s		2.0		15.8	11.8	19.5
Green Ext Time (p_c), s		5.6		2.9	0.9	5.0

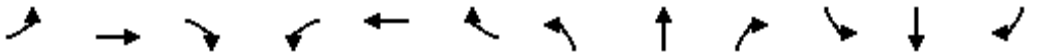
Intersection Summary	
HCM 6th Ctrl Delay	20.2
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	670	625	0	0	537	378	222	2	141	0	0	0
Future Volume (vph)	670	625	0	0	537	378	222	2	141	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	60			100			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		387			489			1198			782	
Travel Time (s)		5.9			7.4			18.2			11.8	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)												
Turn Type	Prot	NA			NA		Perm	NA				
Protected Phases	5	2			6			8				
Permitted Phases							8					
Detector Phase	5	2			6		8	8				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		4.0	4.0				
Minimum Split (s)	8.0	26.0			26.0		26.0	26.0				
Total Split (s)	35.0	79.0			44.0		41.0	41.0				
Total Split (%)	29.2%	65.8%			36.7%		34.2%	34.2%				
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0				
All-Red Time (s)	1.0	1.0			1.0		1.0	1.0				
Lost Time Adjust (s)	0.0	0.0			0.0			0.0				
Total Lost Time (s)	4.0	4.0			4.0			4.0				
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?	Yes				Yes							
Recall Mode	None	C-Max			C-Max		Max	Max				

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 9: I-15 NB Ramps & El Cerrito Rd.



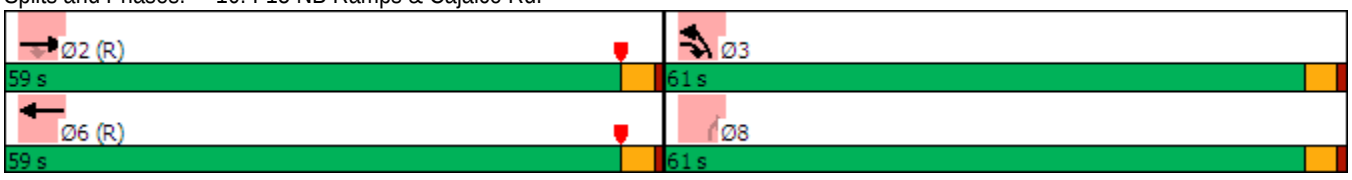


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	670	625	0	0	537	378	222	2	141	0	0	0
Future Volume (veh/h)	670	625	0	0	537	378	222	2	141	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
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	1870	1870	0	0	1870	1870	1900	1870	1900			
Adj Flow Rate, veh/h	798	744	0	0	639	450	264	2	168			
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	855	1169	0	0	719	505	319	2	203			
Arrive On Green	0.40	1.00	0.00	0.00	0.35	0.35	0.31	0.31	0.31			
Sat Flow, veh/h	3563	1870	0	0	2045	1437	1034	8	658			
Grp Volume(v), veh/h	798	744	0	0	584	505	434	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1870	1612	1700	0	0			
Q Serve(g_s), s	25.7	0.0	0.0	0.0	35.4	35.5	28.4	0.0	0.0			
Cycle Q Clear(g_c), s	25.7	0.0	0.0	0.0	35.4	35.5	28.4	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.89	0.61		0.39			
Lane Grp Cap(c), veh/h	855	1169	0	0	658	567	524	0	0			
V/C Ratio(X)	0.93	0.64	0.00	0.00	0.89	0.89	0.83	0.00	0.00			
Avail Cap(c_a), veh/h	920	1169	0	0	658	567	524	0	0			
HCM Platoon Ratio	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.38	0.38	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	35.0	0.0	0.0	0.0	36.7	36.7	38.5	0.0	0.0			
Incr Delay (d2), s/veh	7.1	1.0	0.0	0.0	16.5	18.7	14.0	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	9.8	0.3	0.0	0.0	18.4	16.2	13.4	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.1	1.0	0.0	0.0	53.2	55.5	52.5	0.0	0.0			
LnGrp LOS	D	A	A	A	D	E	D	A	A			
Approach Vol, veh/h		1542			1089			434				
Approach Delay, s/veh		22.3			54.2			52.5				
Approach LOS		C			D			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		79.0			32.8	46.2		41.0				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		75.0			31.0	40.0		37.0				
Max Q Clear Time (g_c+I1), s		2.0			27.7	37.5		30.4				
Green Ext Time (p_c), s		5.6			1.1	1.6		1.4				
Intersection Summary												
HCM 6th Ctrl Delay			37.9									
HCM 6th LOS			D									

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	619	735	0	1636	194	50
Future Volume (vph)	619	735	0	1636	194	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		330	0		500	500
Storage Lanes		0	0		0	0
Taper Length (ft)			25		130	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	45	
Link Distance (ft)	293			191	332	
Travel Time (s)	4.4			2.9	5.0	
Confl. Peds. (#/hr)						5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	0%	2%	2%	2%
Shared Lane Traffic (%)						
Turn Type	NA	pm+ov		NA	Prot	Perm
Protected Phases	2	3		6	3	
Permitted Phases		2				8
Detector Phase	2	3		6	3	8
Switch Phase						
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	23.7	8.5		30.7	8.5	8.5
Total Split (s)	59.0	61.0		59.0	61.0	61.0
Total Split (%)	49.2%	50.8%		49.2%	50.8%	50.8%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	Max		C-Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 95 (79%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	

Splits and Phases: 10: I-15 NB Ramps & Cajalco Rd.





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	619	735	0	1636	194	50
Future Volume (veh/h)	619	735	0	1636	194	50
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	652	774	0	1722	204	53
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	2340	1479	0	2949	1641	1325
Arrive On Green	0.46	0.46	0.00	0.46	0.47	0.47
Sat Flow, veh/h	5274	1585	0	6958	3456	2790
Grp Volume(v), veh/h	652	774	0	1722	204	53
Grp Sat Flow(s),veh/h/ln	1702	1585	0	1609	1728	1395
Q Serve(g_s), s	9.5	7.6	0.0	23.8	4.0	1.2
Cycle Q Clear(g_c), s	9.5	7.6	0.0	23.8	4.0	1.2
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2340	1479	0	2949	1641	1325
V/C Ratio(X)	0.28	0.52	0.00	0.58	0.12	0.04
Avail Cap(c_a), veh/h	2340	1479	0	2949	1641	1325
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.2	0.5	0.0	24.0	17.6	16.9
Incr Delay (d2), s/veh	0.3	1.3	0.0	0.9	0.2	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	3.7	0.5	0.0	8.7	1.5	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.5	1.8	0.0	24.9	17.7	16.9
LnGrp LOS	C	A	A	C	B	B
Approach Vol, veh/h	1426			1722	257	
Approach Delay, s/veh	10.4			24.9	17.6	
Approach LOS	B			C	B	

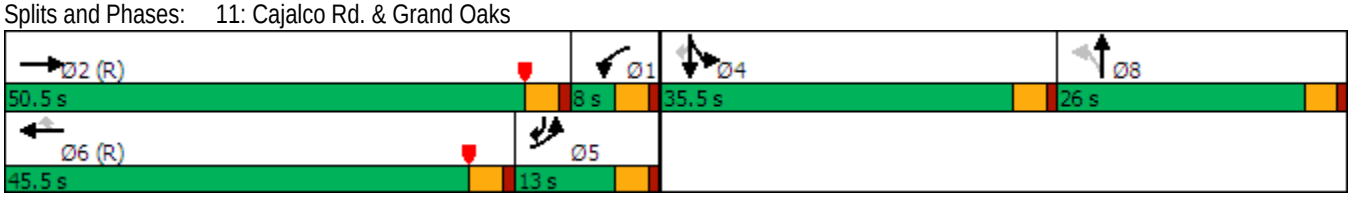
Timer - Assigned Phs	2				6	8
Phs Duration (G+Y+Rc), s	59.0				59.0	61.0
Change Period (Y+Rc), s	4.0				4.0	4.0
Max Green Setting (Gmax), s	55.0				55.0	57.0
Max Q Clear Time (g_c+I1), s	11.5				25.8	6.0
Green Ext Time (p_c), s	8.9				10.6	1.2

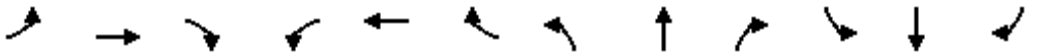
Intersection Summary	
HCM 6th Ctrl Delay	18.3
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	484	1	1	1493	88	1	1	1	29	1	116
Future Volume (vph)	185	484	1	1	1493	88	1	1	1	29	1	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	130		130	0		0	200		0
Storage Lanes	2		0	1		1	0		0	1		2
Taper Length (ft)	180			110			100			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		602			570			544			904	
Travel Time (s)		9.1			8.6			8.2			13.7	
Confl. Peds. (#/hr)						5				5		
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Split	NA	pm+ov
Protected Phases	5	2		1	6			8		4	4	5
Permitted Phases						6	8					4
Detector Phase	5	2		1	6	6	8	8		4	4	5
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	23.2		8.0	30.7	30.7	26.0	26.0		35.5	35.5	8.5
Total Split (s)	13.0	50.5		8.0	45.5	45.5	26.0	26.0		35.5	35.5	13.0
Total Split (%)	10.8%	42.1%		6.7%	37.9%	37.9%	21.7%	21.7%		29.6%	29.6%	10.8%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag	Lag	Lead		Lag	Lead	Lead						Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		Max	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 91 (76%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	

Splits and Phases: 11: Cajalco Rd. & Grand Oaks





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	185	484	1	1	1493	88	1	1	1	29	1	116
Future Volume (veh/h)	185	484	1	1	1493	88	1	1	1	29	1	116
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		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	201	526	1	1	1623	96	1	1	1	32	1	126
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	882	2039	4	380	1766	546	2	2	2	454	14	1440
Arrive On Green	0.26	0.39	0.39	0.21	0.35	0.35	0.00	0.00	0.00	0.26	0.26	0.26
Sat Flow, veh/h	3456	5263	10	1781	5106	1578	579	579	579	1730	54	2774
Grp Volume(v), veh/h	201	340	187	1	1623	96	3	0	0	33	0	126
Grp Sat Flow(s),veh/h/ln	1728	1702	1869	1781	1702	1578	1737	0	0	1784	0	1387
Q Serve(g_s), s	5.5	8.2	8.2	0.1	36.6	5.1	0.2	0.0	0.0	1.7	0.0	0.0
Cycle Q Clear(g_c), s	5.5	8.2	8.2	0.1	36.6	5.1	0.2	0.0	0.0	1.7	0.0	0.0
Prop In Lane	1.00		0.01	1.00		1.00	0.33		0.33	0.97		1.00
Lane Grp Cap(c), veh/h	882	1319	724	380	1766	546	6	0	0	468	0	1440
V/C Ratio(X)	0.23	0.26	0.26	0.00	0.92	0.18	0.54	0.00	0.00	0.07	0.00	0.09
Avail Cap(c_a), veh/h	882	1319	724	380	1766	546	318	0	0	468	0	1440
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	1.00
Uniform Delay (d), s/veh	35.3	25.0	25.0	37.1	37.6	27.3	59.7	0.0	0.0	33.2	0.0	14.6
Incr Delay (d2), s/veh	0.1	0.5	0.9	0.0	9.2	0.7	64.2	0.0	0.0	0.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	3.3	3.7	0.0	16.0	2.0	0.2	0.0	0.0	0.7	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.5	25.5	25.9	37.1	46.9	28.0	123.9	0.0	0.0	33.5	0.0	14.7
LnGrp LOS	D	C	C	D	D	C	F	A	A	C	A	B
Approach Vol, veh/h		728			1720			3			159	
Approach Delay, s/veh		28.3			45.8			123.9			18.6	
Approach LOS		C			D			F			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	29.6	50.5		35.5	34.6	45.5		4.4				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	4.0	46.5		31.5	9.0	41.5		22.0				
Max Q Clear Time (g_c+I1), s	2.1	10.2		3.7	7.5	38.6		2.2				
Green Ext Time (p_c), s	0.0	2.2		0.7	0.1	2.1		0.0				

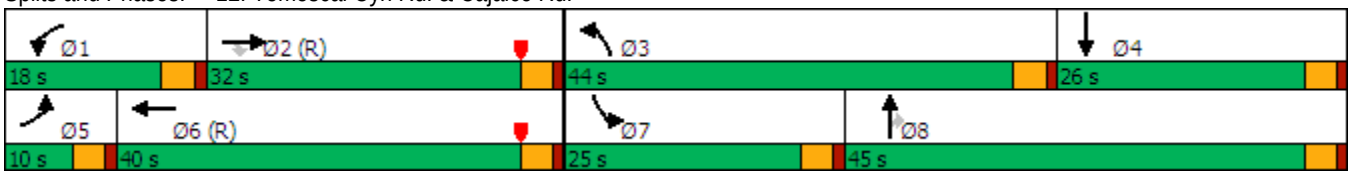
Intersection Summary			
HCM 6th Ctrl Delay		39.4	
HCM 6th LOS		D	

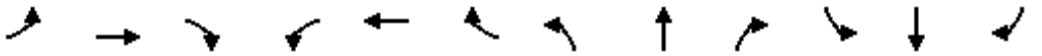
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	269	218	108	528	217	1018	808	394	42	50	35
Future Volume (vph)	26	269	218	108	528	217	1018	808	394	42	50	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	16	12	12	16	12	12	12
Storage Length (ft)	300		200	450		200	300		325	200		200
Storage Lanes	1		0	1		0	2		1	1		0
Taper Length (ft)	180			180			180			180		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		464			943			1167			1000	
Travel Time (s)		7.0			14.3			17.7			15.2	
Confl. Peds. (#/hr)			5			5						5
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	10.0	26.0	26.0	10.0	40.0		10.0	26.0	26.0	25.0	26.0	
Total Split (s)	10.0	32.0	32.0	18.0	40.0		44.0	45.0	45.0	25.0	26.0	
Total Split (%)	8.3%	26.7%	26.7%	15.0%	33.3%		36.7%	37.5%	37.5%	20.8%	21.7%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	Max	Max	None	Max	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 105
Control Type: Actuated-Coordinated

Splits and Phases: 12: Temescal Cyn Rd. & Cajalco Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	269	218	108	528	217	1018	808	394	42	50	35
Future Volume (veh/h)	26	269	218	108	528	217	1018	808	394	42	50	35
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		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1945	1870	1870	1945	1870	1870	1870
Adj Flow Rate, veh/h	27	277	225	111	544	224	1049	833	406	43	52	36
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	35	530	447	137	1219	487	1116	1688	783	56	383	240
Arrive On Green	0.02	0.28	0.28	0.08	0.34	0.34	0.32	0.48	0.48	0.03	0.18	0.18
Sat Flow, veh/h	1781	1870	1577	1781	3580	1430	3456	3554	1648	1781	2088	1310
Grp Volume(v), veh/h	27	277	225	111	516	252	1049	833	406	43	43	45
Grp Sat Flow(s),veh/h/ln	1781	1870	1577	1781	1702	1606	1728	1777	1648	1781	1777	1622
Q Serve(g_s), s	1.8	15.0	14.3	7.4	14.2	14.7	35.4	19.3	20.6	2.9	2.5	2.8
Cycle Q Clear(g_c), s	1.8	15.0	14.3	7.4	14.2	14.7	35.4	19.3	20.6	2.9	2.5	2.8
Prop In Lane	1.00		1.00	1.00		0.89	1.00		1.00	1.00		0.81
Lane Grp Cap(c), veh/h	35	530	447	137	1159	547	1116	1688	783	56	326	297
V/C Ratio(X)	0.77	0.52	0.50	0.81	0.45	0.46	0.94	0.49	0.52	0.77	0.13	0.15
Avail Cap(c_a), veh/h	89	530	447	208	1159	547	1152	1688	783	312	326	297
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	58.5	36.2	36.0	54.5	30.8	30.9	39.5	21.6	21.9	57.7	41.0	41.1
Incr Delay (d2), s/veh	28.5	3.7	4.0	13.0	1.2	2.8	14.2	1.0	2.4	19.5	0.8	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	7.1	5.8	3.7	5.8	5.9	16.5	7.8	8.0	1.6	1.1	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	87.0	39.8	40.0	67.6	32.0	33.7	53.6	22.6	24.4	77.2	41.9	42.2
LnGrp LOS	F	D	D	E	C	C	D	C	C	E	D	D
Approach Vol, veh/h		529			879			2288			131	
Approach Delay, s/veh		42.3			37.0			37.2			53.6	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	38.0	42.8	26.0	6.4	44.9	7.8	61.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	28.0	40.0	22.0	6.0	36.0	21.0	41.0
Max Q Clear Time (g_c+I1), s	9.4	17.0	37.4	4.8	3.8	16.7	4.9	22.6
Green Ext Time (p_c), s	0.1	1.5	1.4	0.2	0.0	3.2	0.1	5.6

Intersection Summary	
HCM 6th Ctrl Delay	38.4
HCM 6th LOS	D

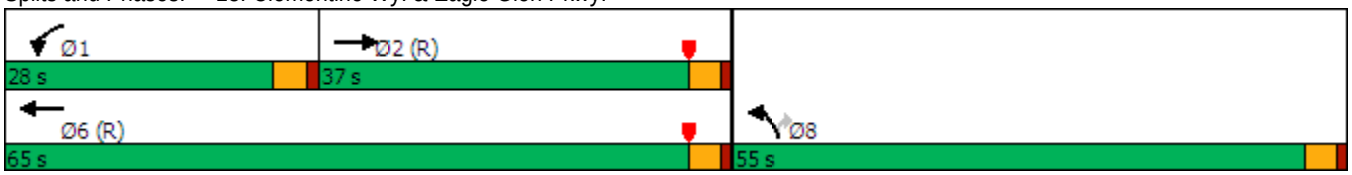
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	298	10	120	182	10	393
Future Volume (vph)	298	10	120	182	10	393
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	300		150	0
Storage Lanes		0	1		1	1
Taper Length (ft)			60		90	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	45	
Link Distance (ft)	366			1267	734	
Travel Time (s)	5.5			19.2	11.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	NA		Prot	NA	Prot	Perm
Protected Phases	2		1	6	8	
Permitted Phases						8
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	26.0		8.0	26.0	26.0	26.0
Total Split (s)	37.0		28.0	65.0	55.0	55.0
Total Split (%)	30.8%		23.3%	54.2%	45.8%	45.8%
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	C-Max		None	C-Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 13: Clementine Wy. & Eagle Glen Pkwy.

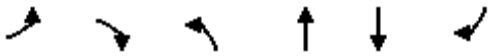




Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	298	10	120	182	10	393
Future Volume (veh/h)	298	10	120	182	10	393
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	314	11	126	192	11	414
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1360	48	155	1806	757	674
Arrive On Green	0.39	0.39	0.09	0.51	0.43	0.43
Sat Flow, veh/h	3596	122	1781	3647	1781	1585
Grp Volume(v), veh/h	159	166	126	192	11	414
Grp Sat Flow(s),veh/h/ln	1777	1848	1781	1777	1781	1585
Q Serve(g_s), s	7.2	7.3	8.3	3.4	0.4	24.4
Cycle Q Clear(g_c), s	7.2	7.3	8.3	3.4	0.4	24.4
Prop In Lane		0.07	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	690	718	155	1806	757	674
V/C Ratio(X)	0.23	0.23	0.82	0.11	0.01	0.61
Avail Cap(c_a), veh/h	690	718	356	1806	757	674
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.97	0.97	1.00	1.00
Uniform Delay (d), s/veh	24.7	24.7	53.8	15.3	20.0	26.9
Incr Delay (d2), s/veh	0.8	0.8	9.6	0.1	0.0	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	3.2	4.1	1.3	0.2	9.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.4	25.4	63.5	15.4	20.0	31.0
LnGrp LOS	C	C	E	B	B	C
Approach Vol, veh/h	325			318	425	
Approach Delay, s/veh	25.4			34.5	30.7	
Approach LOS	C			C	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	14.4	50.6				65.0	55.0
Change Period (Y+Rc), s	4.0	4.0				4.0	4.0
Max Green Setting (Gmax), s	24.0	33.0				61.0	51.0
Max Q Clear Time (g_c+I1), s	10.3	9.3				5.4	26.4
Green Ext Time (p_c), s	0.2	1.6				1.2	1.4

Intersection Summary		
HCM 6th Ctrl Delay		30.2
HCM 6th LOS		C



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	375	1	1	83	28	124
Future Volume (vph)	375	1	1	83	28	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			100
Storage Lanes	1	0	0			0
Taper Length (ft)	100		100			
Link Speed (mph)	45			45	45	
Link Distance (ft)	1253			542	608	
Travel Time (s)	19.0			8.2	9.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	4.9
Intersection LOS	A

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	396	88	160
Demand Flow Rate, veh/h	404	90	164
Vehicles Circulating, veh/h	30	403	1
Vehicles Exiting, veh/h	135	31	492
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.4	4.9	3.6
Approach LOS	A	A	A

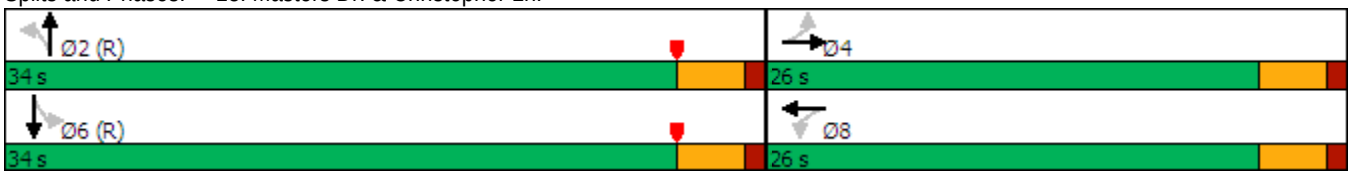
Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	404	90	164
Cap Entry Lane, veh/h	1338	915	1378
Entry HV Adj Factor	0.980	0.981	0.978
Flow Entry, veh/h	396	88	160
Cap Entry, veh/h	1312	897	1348
V/C Ratio	0.302	0.098	0.119
Control Delay, s/veh	5.4	4.9	3.6
LOS	A	A	A
95th %tile Queue, veh	1	0	0

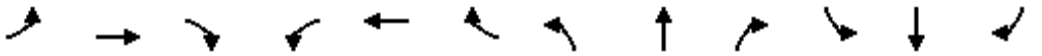
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	12	25	11	5	14	92	502	87	7	274	4
Future Volume (vph)	18	12	25	11	5	14	92	502	87	7	274	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		237			740			933			680	
Travel Time (s)		5.4			16.8			18.2			13.2	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Total Split (s)	26.0	26.0		26.0	26.0		34.0	34.0		34.0	34.0	
Total Split (%)	43.3%	43.3%		43.3%	43.3%		56.7%	56.7%		56.7%	56.7%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 18: Masters Dr. & Christopher Ln.

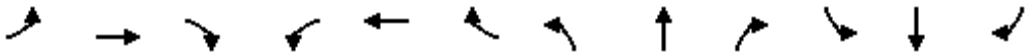




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	12	25	11	5	14	92	502	87	7	274	4
Future Volume (veh/h)	18	12	25	11	5	14	92	502	87	7	274	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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	24	16	33	15	7	19	123	669	116	9	365	5
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	111	29	50	115	29	54	821	1240	215	565	1470	20
Arrive On Green	0.07	0.07	0.07	0.07	0.07	0.07	0.80	0.80	0.80	0.54	0.54	0.54
Sat Flow, veh/h	467	432	741	489	421	787	1012	1553	269	689	1841	25
Grp Volume(v), veh/h	73	0	0	41	0	0	123	0	785	9	0	370
Grp Sat Flow(s),veh/h/ln	1639	0	0	1697	0	0	1012	0	1822	689	0	1866
Q Serve(g_s), s	1.2	0.0	0.0	0.0	0.0	0.0	2.6	0.0	9.1	0.4	0.0	6.4
Cycle Q Clear(g_c), s	2.5	0.0	0.0	1.3	0.0	0.0	8.9	0.0	9.1	9.6	0.0	6.4
Prop In Lane	0.33		0.45	0.37		0.46	1.00		0.15	1.00		0.01
Lane Grp Cap(c), veh/h	191	0	0	197	0	0	821	0	1455	565	0	1490
V/C Ratio(X)	0.38	0.00	0.00	0.21	0.00	0.00	0.15	0.00	0.54	0.02	0.00	0.25
Avail Cap(c_a), veh/h	658	0	0	654	0	0	821	0	1455	565	0	1490
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.95	0.00	0.95
Uniform Delay (d), s/veh	27.2	0.0	0.0	26.7	0.0	0.0	3.2	0.0	2.1	7.7	0.0	4.3
Incr Delay (d2), s/veh	1.2	0.0	0.0	0.5	0.0	0.0	0.4	0.0	1.4	0.0	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	0.6	0.0	0.0	0.4	0.0	0.9	0.1	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.4	0.0	0.0	27.2	0.0	0.0	3.6	0.0	3.6	7.7	0.0	4.7
LnGrp LOS	C	A	A	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		73			41			908			379	
Approach Delay, s/veh		28.4			27.2			3.6			4.7	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		51.9		8.1		51.9		8.1				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		30.0		22.0		30.0		22.0				
Max Q Clear Time (g_c+I1), s		11.1		4.5		11.6		3.3				
Green Ext Time (p_c), s		6.1		0.3		2.1		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			5.9									
HCM 6th LOS			A									



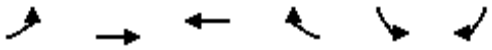
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	12	25	11	5	14	92	502	87	7	274	4
Future Volume (vph)	18	12	25	11	5	14	92	502	87	7	274	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	100			100			60			60		
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		237			740			933			680	
Travel Time (s)		5.4			16.8			18.2			13.2	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)												
Sign Control		Yield			Yield			Yield			Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	10.3
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	73	41	908	379
Demand Flow Rate, veh/h	74	41	925	386
Vehicles Circulating, veh/h	396	831	49	147
Vehicles Exiting, veh/h	137	143	421	725
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.7	6.9	12.7	6.2
Approach LOS	A	A	B	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	74	41	925	386
Cap Entry Lane, veh/h	921	591	1313	1188
Entry HV Adj Factor	0.982	0.997	0.981	0.981
Flow Entry, veh/h	73	41	908	379
Cap Entry, veh/h	905	589	1288	1165
V/C Ratio	0.080	0.069	0.705	0.325
Control Delay, s/veh	4.7	6.9	12.7	6.2
LOS	A	A	B	A
95th %tile Queue, veh	0	0	6	1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	1	292	576	6	11	22
Future Volume (vph)	1	292	576	6	11	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	60				100	
Link Speed (mph)		35	35		30	
Link Distance (ft)		1212	796		251	
Travel Time (s)		23.6	15.5		5.7	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

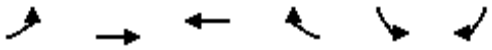
Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	292	576	6	11	22
Future Vol, veh/h	1	292	576	6	11	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	120	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	374	738	8	14	28

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	746	0	-	0	1118	742
Stage 1	-	-	-	-	742	-
Stage 2	-	-	-	-	376	-
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	862	-	-	-	229	416
Stage 1	-	-	-	-	471	-
Stage 2	-	-	-	-	694	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	862	-	-	-	229	416
Mov Cap-2 Maneuver	-	-	-	-	229	-
Stage 1	-	-	-	-	471	-
Stage 2	-	-	-	-	694	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	17.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	862	-	-	-	327
HCM Lane V/C Ratio	0.001	-	-	-	0.129
HCM Control Delay (s)	9.2	-	-	-	17.6
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.4



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	1	292	576	6	11	22
Future Volume (vph)	1	292	576	6	11	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	60				100	
Link Speed (mph)		35	35		30	
Link Distance (ft)		1212	796		251	
Travel Time (s)		23.6	15.5		5.7	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Shared Lane Traffic (%)						
Sign Control		Yield	Yield		Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

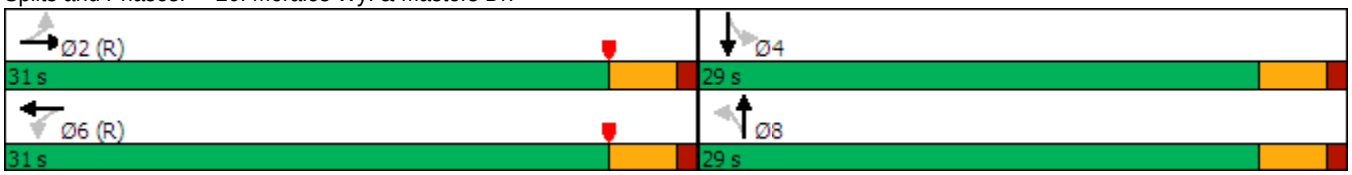
Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	375	746	42
Demand Flow Rate, veh/h	382	761	43
Vehicles Circulating, veh/h	14	1	753
Vehicles Exiting, veh/h	782	395	9
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.2	8.7	6.5
Approach LOS	A	A	A

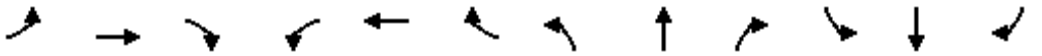
Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	382	761	43
Cap Entry Lane, veh/h	1360	1378	640
Entry HV Adj Factor	0.980	0.981	0.977
Flow Entry, veh/h	375	746	42
Cap Entry, veh/h	1334	1352	625
V/C Ratio	0.281	0.552	0.067
Control Delay, s/veh	5.2	8.7	6.5
LOS	A	A	A
95th %tile Queue, veh	1	4	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	206	92	32	338	2	189	2	54	5	1	4
Future Volume (vph)	1	206	92	32	338	2	189	2	54	5	1	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	60			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			30			45	
Link Distance (ft)		1243			906			626			709	
Travel Time (s)		24.2			17.6			14.2			10.7	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Total Split (s)	31.0	31.0		31.0	31.0		29.0	29.0		29.0	29.0	
Total Split (%)	51.7%	51.7%		51.7%	51.7%		48.3%	48.3%		48.3%	48.3%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		Max	Max		Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: Morales Wy. & Masters Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	206	92	32	338	2	189	2	54	5	1	4
Future Volume (veh/h)	1	206	92	32	338	2	189	2	54	5	1	4
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	1	245	110	38	402	2	225	2	64	6	1	5
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	413	550	247	440	837	4	562	18	133	384	83	269
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	981	1223	549	1026	1859	9	1093	43	320	705	199	645
Grp Volume(v), veh/h	1	0	355	38	0	404	291	0	0	12	0	0
Grp Sat Flow(s),veh/h/ln	981	0	1772	1026	0	1869	1456	0	0	1549	0	0
Q Serve(g_s), s	0.0	0.0	8.3	1.6	0.0	9.1	8.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.1	0.0	8.3	9.9	0.0	9.1	8.6	0.0	0.0	0.2	0.0	0.0
Prop In Lane	1.00		0.31	1.00		0.00	0.77		0.22	0.50		0.42
Lane Grp Cap(c), veh/h	413	0	797	440	0	841	713	0	0	735	0	0
V/C Ratio(X)	0.00	0.00	0.45	0.09	0.00	0.48	0.41	0.00	0.00	0.02	0.00	0.00
Avail Cap(c_a), veh/h	413	0	797	440	0	841	713	0	0	735	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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.8	0.0	11.3	14.7	0.0	11.6	12.7	0.0	0.0	10.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.8	0.4	0.0	2.0	1.7	0.0	0.0	0.0	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	0.0	0.0	3.1	0.4	0.0	3.6	2.8	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.8	0.0	13.1	15.1	0.0	13.5	14.4	0.0	0.0	10.3	0.0	0.0
LnGrp LOS	B	A	B	B	A	B	B	A	A	B	A	A
Approach Vol, veh/h		356			442			291			12	
Approach Delay, s/veh		13.2			13.7			14.4			10.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		31.0		29.0		31.0		29.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		27.0		25.0		27.0		25.0				
Max Q Clear Time (g_c+I1), s		11.1		2.2		11.9		10.6				
Green Ext Time (p_c), s		1.9		0.0		2.2		1.5				

Intersection Summary												
HCM 6th Ctrl Delay			13.7									
HCM 6th LOS			B									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	206	92	32	338	2	189	2	54	5	1	4
Future Volume (vph)	1	206	92	32	338	2	189	2	54	5	1	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	60			60			100			100		
Link Speed (mph)		35			35			30			45	
Link Distance (ft)		1243			906			626			709	
Travel Time (s)		24.2			17.6			14.2			10.7	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)												
Sign Control		Yield			Yield			Yield			Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	6.5
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	356	442	291	12
Demand Flow Rate, veh/h	363	451	297	12
Vehicles Circulating, veh/h	46	232	257	678
Vehicles Exiting, veh/h	644	321	152	5
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.2	7.8	6.2	5.4
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	363	451	297	12
Cap Entry Lane, veh/h	1317	1089	1062	691
Entry HV Adj Factor	0.981	0.980	0.980	0.998
Flow Entry, veh/h	356	442	291	12
Cap Entry, veh/h	1292	1067	1040	690
V/C Ratio	0.276	0.414	0.280	0.017
Control Delay, s/veh	5.2	7.8	6.2	5.4
LOS	A	A	A	A
95th %tile Queue, veh	1	2	1	0



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	3	9	453	5	17	149
Future Volume (vph)	3	9	453	5	17	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	200	
Storage Lanes	1	0		0	1	
Taper Length (ft)	100				60	
Link Speed (mph)	45		45			45
Link Distance (ft)	302		233			567
Travel Time (s)	4.6		3.5			8.6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	9	453	5	17	149
Future Vol, veh/h	3	9	453	5	17	149
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	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	9	477	5	18	157

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	595	241	0	0	482	0
Stage 1	480	-	-	-	-	-
Stage 2	115	-	-	-	-	-
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	436	760	-	-	1077	-
Stage 1	588	-	-	-	-	-
Stage 2	897	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	429	760	-	-	1077	-
Mov Cap-2 Maneuver	429	-	-	-	-	-
Stage 1	578	-	-	-	-	-
Stage 2	897	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.8	0	0.9
HCM LOS	B		

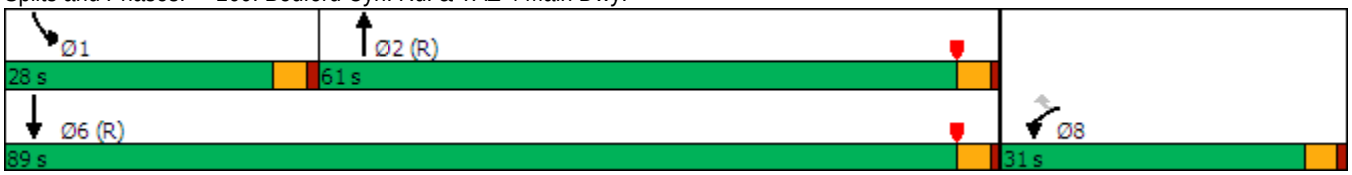
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	637	1077	-
HCM Lane V/C Ratio	-	-	0.02	0.017	-
HCM Control Delay (s)	-	-	10.8	8.4	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	5	26	453	9	52	161
Future Volume (vph)	5	26	453	9	52	161
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	200	
Storage Lanes	1	1		0	1	
Taper Length (ft)	100				60	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	45		45			45
Link Distance (ft)	264		567			343
Travel Time (s)	4.0		8.6			5.2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8				
Detector Phase	8	8	2		1	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0		4.0	4.0
Minimum Split (s)	26.0	26.0	26.0		8.0	26.0
Total Split (s)	31.0	31.0	61.0		28.0	89.0
Total Split (%)	25.8%	25.8%	50.8%		23.3%	74.2%
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	C-Max		None	C-Max

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 160: Bedford Cyn. Rd. & TAZ 4 Main Dwy.





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	5	26	453	9	52	161
Future Volume (veh/h)	5	26	453	9	52	161
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	27	477	9	55	169
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	40	35	2988	56	72	3237
Arrive On Green	0.02	0.02	0.84	0.84	0.04	0.91
Sat Flow, veh/h	1781	1585	3661	67	1781	3647
Grp Volume(v), veh/h	5	27	237	249	55	169
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1858	1781	1777
Q Serve(g_s), s	0.3	2.0	3.0	3.0	3.7	0.5
Cycle Q Clear(g_c), s	0.3	2.0	3.0	3.0	3.7	0.5
Prop In Lane	1.00	1.00		0.04	1.00	
Lane Grp Cap(c), veh/h	40	35	1488	1556	72	3237
V/C Ratio(X)	0.13	0.76	0.16	0.16	0.77	0.05
Avail Cap(c_a), veh/h	401	357	1488	1556	356	3237
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	57.5	58.3	1.8	1.8	57.0	0.5
Incr Delay (d2), s/veh	1.4	28.1	0.2	0.2	15.5	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	0.2	1.1	0.6	0.6	1.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	58.9	86.4	2.1	2.1	72.5	0.5
LnGrp LOS	E	F	A	A	E	A
Approach Vol, veh/h	32		486			224
Approach Delay, s/veh	82.1		2.1			18.2
Approach LOS	F		A			B

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	8.8	104.5			113.3	6.7
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0
Max Green Setting (Gmax), s	24.0	57.0			85.0	27.0
Max Q Clear Time (g_c+I1), s	5.7	5.0			2.5	4.0
Green Ext Time (p_c), s	0.1	2.8			1.0	0.1

Intersection Summary		
HCM 6th Ctrl Delay		10.4
HCM 6th LOS		B



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	9	479	1	0	213
Future Volume (vph)	0	9	479	1	0	213
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		45			45
Link Distance (ft)	221		343			351
Travel Time (s)	3.3		5.2			5.3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	9	479	1	0	213
Future Vol, veh/h	0	9	479	1	0	213
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	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	9	504	1	0	224

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	253	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	746	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	746	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

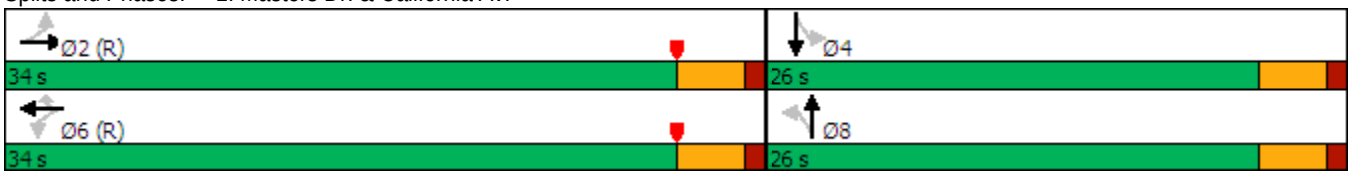
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	746	-
HCM Lane V/C Ratio	-	-	0.013	-
HCM Control Delay (s)	-	-	9.9	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0	-

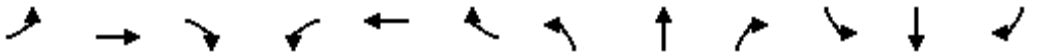
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	112	255	228	63	23	57	108	108	39	243	1
Future Volume (vph)	2	112	255	228	63	23	57	108	108	39	243	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	135		0	130		200	100		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	100			90			60			65		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		495			683			680			695	
Travel Time (s)		7.5			10.3			13.2			13.5	
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
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6		6	8			4		
Detector Phase	2	2		6	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0	26.0	26.0	26.0		26.0	26.0	
Total Split (s)	34.0	34.0		34.0	34.0	34.0	26.0	26.0		26.0	26.0	
Total Split (%)	56.7%	56.7%		56.7%	56.7%	56.7%	43.3%	43.3%		43.3%	43.3%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	Max	Max		Max	Max	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 33 (55%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 1: Masters Dr. & California Av.





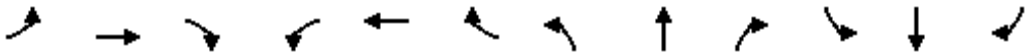
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	112	255	228	63	23	57	108	108	39	243	1
Future Volume (veh/h)	2	112	255	228	63	23	57	108	108	39	243	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		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	2	122	277	248	68	25	62	117	117	42	264	1
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	747	254	577	457	935	793	412	315	315	396	683	3
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.12	0.12	0.12	0.37	0.37	0.37
Sat Flow, veh/h	1303	508	1154	986	1870	1585	1114	858	858	1146	1862	7
Grp Volume(v), veh/h	2	0	399	248	68	25	62	0	234	42	0	265
Grp Sat Flow(s),veh/h/ln	1303	0	1663	986	1870	1585	1114	0	1716	1146	0	1869
Q Serve(g_s), s	0.0	0.0	9.5	13.3	1.1	0.5	3.1	0.0	7.5	1.7	0.0	6.3
Cycle Q Clear(g_c), s	1.2	0.0	9.5	22.7	1.1	0.5	9.4	0.0	7.5	9.3	0.0	6.3
Prop In Lane	1.00		0.69	1.00		1.00	1.00		0.50	1.00		0.00
Lane Grp Cap(c), veh/h	747	0	831	457	935	793	412	0	629	396	0	685
V/C Ratio(X)	0.00	0.00	0.48	0.54	0.07	0.03	0.15	0.00	0.37	0.11	0.00	0.39
Avail Cap(c_a), veh/h	747	0	831	457	935	793	412	0	629	396	0	685
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.99	0.00	0.99	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.1	0.0	9.9	17.3	7.8	7.6	23.7	0.0	20.0	17.9	0.0	14.0
Incr Delay (d2), s/veh	0.0	0.0	2.0	4.6	0.2	0.1	0.8	0.0	1.7	0.5	0.0	1.6
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	3.0	3.0	0.4	0.1	0.9	0.0	3.3	0.5	0.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.1	0.0	11.8	21.9	7.9	7.7	24.5	0.0	21.7	18.5	0.0	15.7
LnGrp LOS	A	A	B	C	A	A	C	A	C	B	A	B
Approach Vol, veh/h		401			341			296			307	
Approach Delay, s/veh		11.8			18.1			22.3			16.1	
Approach LOS		B			B			C			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		34.0		26.0		34.0		26.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		30.0		22.0		30.0		22.0				
Max Q Clear Time (g_c+I1), s		11.5		11.3		24.7		11.4				
Green Ext Time (p_c), s		2.2		1.2		0.7		1.1				

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

Notes

User approved pedestrian interval to be less than phase max green.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	6	21	6	23	18	24	181	11	23	480	95
Future Volume (vph)	33	6	21	6	23	18	24	181	11	23	480	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	110		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		537			564			936			637	
Travel Time (s)		10.5			11.0			18.2			12.4	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	22.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	33	6	21	6	23	18	24	181	11	23	480	95
Future Vol, veh/h	33	6	21	6	23	18	24	181	11	23	480	95
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	35	6	23	6	25	19	26	195	12	25	516	102
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

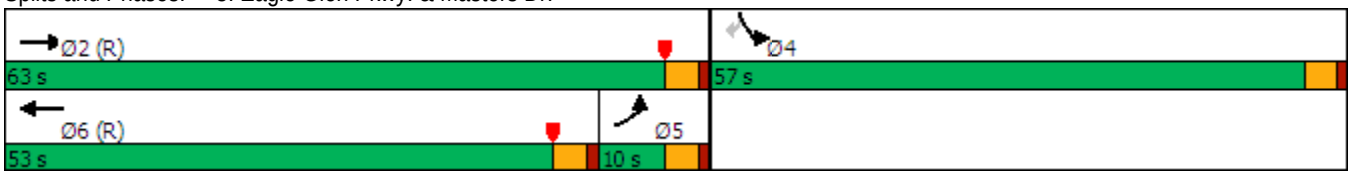
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	9.8	9.6	10.4	28.9
HCM LOS	A	A	B	D

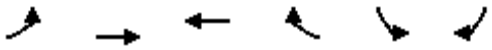
Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	55%	13%	100%	0%
Vol Thru, %	0%	94%	10%	49%	0%	83%
Vol Right, %	0%	6%	35%	38%	0%	17%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	24	192	60	47	23	575
LT Vol	24	0	33	6	23	0
Through Vol	0	181	6	23	0	480
RT Vol	0	11	21	18	0	95
Lane Flow Rate	26	206	65	51	25	618
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.043	0.309	0.109	0.084	0.038	0.853
Departure Headway (Hd)	5.934	5.389	6.081	6.015	5.584	4.965
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	598	661	593	599	637	723
Service Time	3.725	3.179	4.083	4.018	3.355	2.735
HCM Lane V/C Ratio	0.043	0.312	0.11	0.085	0.039	0.855
HCM Control Delay	9	10.6	9.8	9.6	8.6	29.7
HCM Lane LOS	A	B	A	A	A	D
HCM 95th-tile Q	0.1	1.3	0.4	0.3	0.1	9.9

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	35	444	669	234	481	59
Future Volume (vph)	35	444	669	234	481	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	130	0
Storage Lanes	1			0	1	1
Taper Length (ft)	120				60	
Right Turn on Red				Yes		Yes
Link Speed (mph)		45	45		35	
Link Distance (ft)		1267	546		936	
Travel Time (s)		19.2	8.3		18.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases						4
Detector Phase	5	2	6		4	4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0		4.0	4.0
Minimum Split (s)	8.0	26.0	26.0		26.0	26.0
Total Split (s)	10.0	63.0	53.0		57.0	57.0
Total Split (%)	8.3%	52.5%	44.2%		47.5%	47.5%
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0		4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 93 (78%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: Eagle Glen Pkwy. & Masters Dr.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	35	444	669	234	481	59
Future Volume (veh/h)	35	444	669	234	481	59
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	467	704	246	506	62
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	330	2228	1054	368	546	486
Arrive On Green	0.06	0.21	0.41	0.41	0.31	0.31
Sat Flow, veh/h	1781	3647	2676	902	1781	1585
Grp Volume(v), veh/h	37	467	484	466	506	62
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1708	1781	1585
Q Serve(g_s), s	2.4	13.1	26.6	26.6	33.0	3.4
Cycle Q Clear(g_c), s	2.4	13.1	26.6	26.6	33.0	3.4
Prop In Lane	1.00			0.53	1.00	1.00
Lane Grp Cap(c), veh/h	330	2228	726	697	546	486
V/C Ratio(X)	0.11	0.21	0.67	0.67	0.93	0.13
Avail Cap(c_a), veh/h	330	2228	726	697	787	700
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.0	22.9	28.9	28.9	40.3	30.0
Incr Delay (d2), s/veh	0.1	0.2	4.8	5.0	13.2	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	1.0	6.2	11.7	11.3	16.2	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	47.1	23.1	33.7	33.9	53.5	30.2
LnGrp LOS	D	C	C	C	D	C
Approach Vol, veh/h		504	950		568	
Approach Delay, s/veh		24.9	33.8		50.9	
Approach LOS		C	C		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		79.2		40.8	26.2	53.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		59.0		53.0	6.0	49.0
Max Q Clear Time (g_c+I1), s		15.1		35.0	4.4	28.6
Green Ext Time (p_c), s		3.1		1.7	0.0	5.7

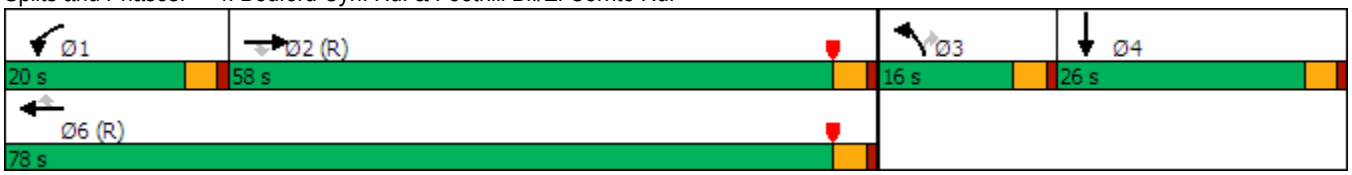
Intersection Summary		
HCM 6th Ctrl Delay		36.4
HCM 6th LOS		D

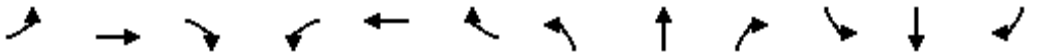
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1405	395	193	459	10	136	0	122	0	0	20
Future Volume (vph)	0	1405	395	193	459	10	136	0	122	0	0	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	135		135	0		125	0		0
Storage Lanes	0		1	1		1	1		1	0		0
Taper Length (ft)	100			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			45			40			30	
Link Distance (ft)		351			305			404			218	
Travel Time (s)		6.0			4.6			6.9			5.0	
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
Shared Lane Traffic (%)												
Turn Type		NA	Perm	Prot	NA	Perm	Prot		Perm		NA	
Protected Phases		2		1	6		3				4	
Permitted Phases			2			6			3			
Detector Phase		2	2	1	6	6	3		3		4	
Switch Phase												
Minimum Initial (s)		4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	
Minimum Split (s)		26.0	26.0	8.0	26.0	26.0	8.0		8.0		26.0	
Total Split (s)		58.0	58.0	20.0	78.0	78.0	16.0		16.0		26.0	
Total Split (%)		48.3%	48.3%	16.7%	65.0%	65.0%	13.3%		13.3%		21.7%	
Yellow Time (s)		3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	
All-Red Time (s)		1.0	1.0	1.0	1.0	1.0	1.0		1.0		1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	
Total Lost Time (s)		4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	
Lead/Lag		Lag	Lag	Lead			Lead		Lead		Lag	
Lead-Lag Optimize?		Yes	Yes	Yes			Yes		Yes		Yes	
Recall Mode		C-Max	C-Max	None	C-Max	C-Max	None		None		None	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 93 (78%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 4: Bedford Cyn. Rd. & Foothill Bl./El Cerrito Rd.





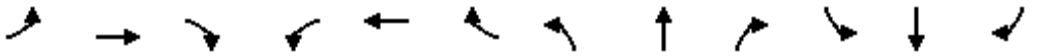
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1405	395	193	459	10	136	0	122	0	0	20
Future Volume (veh/h)	0	1405	395	193	459	10	136	0	122	0	0	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	1870	0	1870	0	1870	1870
Adj Flow Rate, veh/h	0	1434	403	197	468	0	139	0	124	0	0	0
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, %	0	2	2	2	2	2	2	0	2	0	2	2
Cap, veh/h	0	2429	1083	221	2987		165	0	0	0	2	
Arrive On Green	0.00	0.68	0.68	0.25	1.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	3647	1585	1781	3554	1585	1781	139		0	-74814	0
Grp Volume(v), veh/h	0	1434	403	197	468	0	139	80.9		0	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1777	1585	1781	F		0	1870	0
Q Serve(g_s), s	0.0	25.7	13.0	12.8	0.0	0.0	9.2			0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	25.7	13.0	12.8	0.0	0.0	9.2			0.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		1.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	2429	1083	221	2987		165			0	2	
V/C Ratio(X)	0.00	0.59	0.37	0.89	0.16		0.84			0.00	0.00	
Avail Cap(c_a), veh/h	0	2429	1083	238	2987		178			0	343	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.98	0.98	0.00	1.00			0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	10.1	8.1	44.4	0.0	0.0	53.6			0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.1	1.0	30.1	0.1	0.0	27.4			0.0	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
%ile BackOfQ(50%),veh/ln	0.0	9.0	4.2	6.6	0.0	0.0	5.3			0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	11.1	9.0	74.5	0.1	0.0	80.9			0.0	0.0	0.0
LnGrp LOS	A	B	A	E	A		F			A	A	
Approach Vol, veh/h		1837			665	A					0	A
Approach Delay, s/veh		10.7			22.1						0.0	
Approach LOS		B			C							

Timer - Assigned Phs	1	2	3	4		6
Phs Duration (G+Y+Rc), s	18.9	86.0	15.1	0.0		104.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	16.0	54.0	12.0	22.0		74.0
Max Q Clear Time (g_c+I1), s	14.8	27.7	11.2	0.0		2.0
Green Ext Time (p_c), s	0.1	14.0	0.0	0.0		3.1

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

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	1	29	1	1	2	40	217	8	8	415	104
Future Volume (vph)	48	1	29	1	1	2	40	217	8	8	415	104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	80		0	0		100
Storage Lanes	0		1	0		0	1		0	0		1
Taper Length (ft)	100			100			80			100		
Link Speed (mph)		45			45			30			45	
Link Distance (ft)		786			169			443			297	
Travel Time (s)		11.9			2.6			10.1			4.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	13.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	48	1	29	1	1	2	40	217	8	8	415	104
Future Vol, veh/h	48	1	29	1	1	2	40	217	8	8	415	104
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	54	1	33	1	1	2	45	244	9	9	466	117
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	1

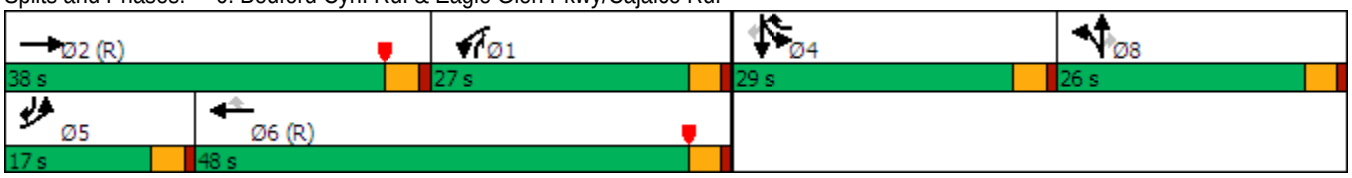
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay	10	9.6	11	15.9
HCM LOS	A	A	B	C

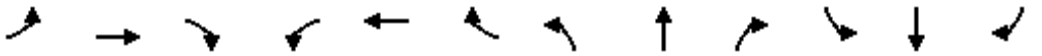
Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	98%	0%	25%	2%	0%
Vol Thru, %	0%	96%	2%	0%	25%	98%	0%
Vol Right, %	0%	4%	0%	100%	50%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	40	225	49	29	4	423	104
LT Vol	40	0	48	0	1	8	0
Through Vol	0	217	1	0	1	415	0
RT Vol	0	8	0	29	2	0	104
Lane Flow Rate	45	253	55	33	4	475	117
Geometry Grp	7	7	7	7	6	7	7
Degree of Util (X)	0.073	0.374	0.107	0.053	0.008	0.675	0.143
Departure Headway (Hd)	5.858	5.33	7.015	5.809	6.544	5.111	4.398
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	608	670	507	610	550	703	811
Service Time	3.625	3.096	4.81	3.603	4.544	2.864	2.15
HCM Lane V/C Ratio	0.074	0.378	0.108	0.054	0.007	0.676	0.144
HCM Control Delay	9.1	11.3	10.7	8.9	9.6	17.9	7.9
HCM Lane LOS	A	B	B	A	A	C	A
HCM 95th-tile Q	0.2	1.7	0.4	0.2	0	5.3	0.5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	786	45	529	744	73	39	61	359	447	87	120
Future Volume (vph)	94	786	45	529	744	73	39	61	359	447	87	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	200		200	150		0	450		0
Storage Lanes	1		0	2		1	1		1	1		1
Taper Length (ft)	90			120			90			180		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		756			737			351			716	
Travel Time (s)		11.5			11.2			5.3			10.8	
Confl. Peds. (#/hr)						5						5
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
Shared Lane Traffic (%)										41%		
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2		1	6	4	8	8	1	4	4	5
Permitted Phases						6			8			4
Detector Phase	5	2		1	6	4	8	8	1	4	4	5
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	23.0		8.0	23.0	23.0	26.0	26.0	8.0	23.0	23.0	8.0
Total Split (s)	17.0	38.0		27.0	48.0	29.0	26.0	26.0	27.0	29.0	29.0	17.0
Total Split (%)	14.2%	31.7%		22.5%	40.0%	24.2%	21.7%	21.7%	22.5%	24.2%	24.2%	14.2%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead		Lag	Lag				Lag			Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			Yes
Recall Mode	None	C-Max		None	C-Max	Max	None	None	None	Max	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 6: Bedford Cyn. Rd. & Eagle Glen Pkwy/Cajalco Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	786	45	529	744	73	39	61	359	447	87	120
Future Volume (veh/h)	94	786	45	529	744	73	39	61	359	447	87	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		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	99	827	47	557	783	77	41	64	378	537	0	126
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	124	968	55	1079	1869	1162	112	118	594	742	0	438
Arrive On Green	0.07	0.28	0.28	0.31	0.53	0.53	0.06	0.06	0.06	0.21	0.00	0.21
Sat Flow, veh/h	1781	3418	194	3456	3554	1581	1781	1870	1585	3563	0	1574
Grp Volume(v), veh/h	99	430	444	557	783	77	41	64	378	537	0	126
Grp Sat Flow(s),veh/h/ln	1781	1777	1835	1728	1777	1581	1781	1870	1585	1781	0	1574
Q Serve(g_s), s	6.6	27.4	27.5	15.9	16.1	1.6	2.6	4.0	0.0	16.9	0.0	7.5
Cycle Q Clear(g_c), s	6.6	27.4	27.5	15.9	16.1	1.6	2.6	4.0	0.0	16.9	0.0	7.5
Prop In Lane	1.00		0.11	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	124	503	520	1079	1869	1162	112	118	594	742	0	438
V/C Ratio(X)	0.80	0.85	0.85	0.52	0.42	0.07	0.37	0.54	0.64	0.72	0.00	0.29
Avail Cap(c_a), veh/h	193	503	520	1079	1869	1162	327	343	785	742	0	438
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.80	0.80	0.80	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	55.0	40.7	40.7	33.8	17.3	4.5	53.9	54.6	30.8	44.3	0.0	34.0
Incr Delay (d2), s/veh	12.1	16.7	16.2	0.3	0.6	0.1	2.0	3.9	1.1	6.1	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	13.9	14.2	6.5	6.3	1.0	1.2	2.0	8.8	7.8	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.1	57.3	56.9	34.2	17.8	4.5	55.9	58.4	31.9	50.3	0.0	35.7
LnGrp LOS	E	E	E	C	B	A	E	E	C	D	A	D
Approach Vol, veh/h		973			1417			483			663	
Approach Delay, s/veh		58.1			23.5			37.5			47.5	
Approach LOS		E			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	41.5	38.0		29.0	12.3	67.1		11.5				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	23.0	34.0		25.0	13.0	44.0		22.0				
Max Q Clear Time (g_c+I1), s	17.9	29.5		18.9	8.6	18.1		6.0				
Green Ext Time (p_c), s	1.0	1.6		1.6	0.1	4.0		1.6				

Intersection Summary			
HCM 6th Ctrl Delay		39.5	
HCM 6th LOS		D	

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

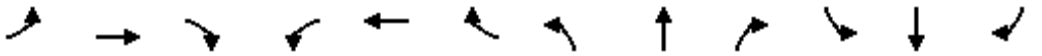
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	562	965	64	466	0	0	0	0	138	35	186
Future Volume (vph)	0	562	965	64	466	0	0	0	0	138	35	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	90		0	0		0	0		525
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	100			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		305			387			1098			1308	
Travel Time (s)		4.6			5.9			16.6			19.8	
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
Shared Lane Traffic (%)												
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Detector Phase		2		1	6					4	4	4
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0					4.0	4.0	4.0
Minimum Split (s)		50.0		30.0	26.0					35.0	35.0	35.0
Total Split (s)		52.0		32.0	84.0					36.0	36.0	36.0
Total Split (%)		43.3%		26.7%	70.0%					30.0%	30.0%	30.0%
Yellow Time (s)		3.0		3.0	3.0					3.0	3.0	3.0
All-Red Time (s)		1.0		1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0						0.0	0.0
Total Lost Time (s)		4.0		4.0	4.0						4.0	4.0
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?		Yes		Yes								
Recall Mode		C-Max		None	C-Max					Max	Max	Max

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 52 (43%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 115
Control Type: Actuated-Coordinated

Splits and Phases: 7: I-15 SB Ramps & El Cerrito Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	562	965	64	466	0	0	0	0	138	35	186
Future Volume (veh/h)	0	562	965	64	466	0	0	0	0	138	35	186
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	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	579	995	66	480	0				142	36	192
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	2	2	2	2	0				2	2	2
Cap, veh/h	0	1040	928	86	2369	0				383	97	423
Arrive On Green	0.00	0.98	0.98	0.06	0.89	0.00				0.27	0.27	0.27
Sat Flow, veh/h	0	1870	1585	1781	3647	0				1435	364	1585
Grp Volume(v), veh/h	0	579	995	66	480	0				178	0	192
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1777	0				1799	0	1585
Q Serve(g_s), s	0.0	2.0	70.2	4.4	2.2	0.0				9.7	0.0	12.1
Cycle Q Clear(g_c), s	0.0	2.0	70.2	4.4	2.2	0.0				9.7	0.0	12.1
Prop In Lane	0.00		1.00	1.00		0.00				0.80		1.00
Lane Grp Cap(c), veh/h	0	1040	928	86	2369	0				480	0	423
V/C Ratio(X)	0.00	0.56	1.07	0.77	0.20	0.00				0.37	0.00	0.45
Avail Cap(c_a), veh/h	0	1040	928	416	2369	0				480	0	423
HCM Platoon Ratio	1.00	1.67	1.67	1.33	1.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.68	0.68	0.98	0.98	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.6	1.4	55.5	2.4	0.0				35.8	0.0	36.7
Incr Delay (d2), s/veh	0.0	1.5	46.4	13.2	0.2	0.0				2.2	0.0	3.5
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	0.8	12.5	2.2	0.7	0.0				4.4	0.0	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	2.1	47.8	68.7	2.6	0.0				38.0	0.0	40.2
LnGrp LOS	A	A	F	E	A	A				D	A	D
Approach Vol, veh/h		1574			546						370	
Approach Delay, s/veh		31.0			10.6						39.2	
Approach LOS		C			B						D	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	9.8	74.2		36.0		84.0						
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0						
Max Green Setting (Gmax), s	28.0	48.0		32.0		80.0						
Max Q Clear Time (g_c+I1), s	6.4	72.2		14.1		4.2						
Green Ext Time (p_c), s	0.1	0.0		1.4		3.2						

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

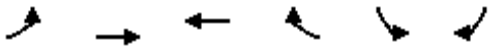
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	549	1043	848	361	328	657
Future Volume (vph)	549	1043	848	361	328	657
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290			250	0	0
Storage Lanes	2			0	2	2
Taper Length (ft)	120				25	
Right Turn on Red				Yes		Yes
Link Speed (mph)		45	45		45	
Link Distance (ft)		737	285		302	
Travel Time (s)		11.2	4.3		4.6	
Confl. Peds. (#/hr)						5
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	23.7	30.7	30.7	8.5	8.5
Total Split (s)	36.0	86.0	50.0	50.0	34.0	34.0
Total Split (%)	30.0%	71.7%	41.7%	41.7%	28.3%	28.3%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 93 (78%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 8: Cajalco Rd. & I-15 SB Ramps





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	549	1043	848	361	328	657
Future Volume (veh/h)	549	1043	848	361	328	657
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	566	1075	874	372	338	677
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	673	3489	1618	721	864	697
Arrive On Green	0.06	0.23	0.46	0.46	0.25	0.25
Sat Flow, veh/h	3456	5274	3647	1585	3456	2790
Grp Volume(v), veh/h	566	1075	874	372	338	677
Grp Sat Flow(s),veh/h/ln	1728	1702	1777	1585	1728	1395
Q Serve(g_s), s	19.4	21.0	21.3	20.0	9.8	28.8
Cycle Q Clear(g_c), s	19.4	21.0	21.3	20.0	9.8	28.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	673	3489	1618	721	864	697
V/C Ratio(X)	0.84	0.31	0.54	0.52	0.39	0.97
Avail Cap(c_a), veh/h	922	3489	1618	721	864	697
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.65	0.65	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.3	22.9	23.6	23.3	37.4	44.6
Incr Delay (d2), s/veh	3.5	0.1	1.3	2.6	1.3	27.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.3	9.5	8.8	7.6	4.2	22.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	57.8	23.0	24.9	25.9	38.7	72.2
LnGrp LOS	E	C	C	C	D	E
Approach Vol, veh/h		1641	1246		1015	
Approach Delay, s/veh		35.0	25.2		61.1	
Approach LOS		C	C		E	

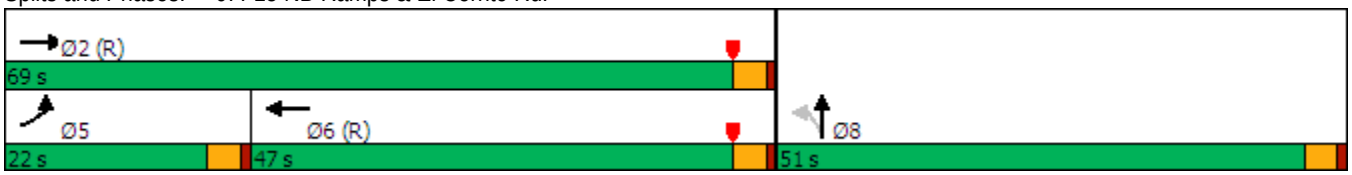
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		86.0		34.0	27.4	58.6
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		82.0		30.0	32.0	46.0
Max Q Clear Time (g_c+I1), s		23.0		30.8	21.4	23.3
Green Ext Time (p_c), s		5.8		0.0	1.9	6.0

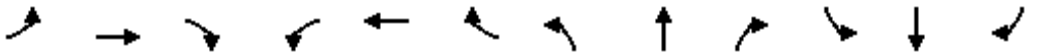
Intersection Summary		
HCM 6th Ctrl Delay	38.6	
HCM 6th LOS	D	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	224	476	0	0	232	74	298	6	63	0	0	0
Future Volume (vph)	224	476	0	0	232	74	298	6	63	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	60			100			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		387			489			1198			782	
Travel Time (s)		5.9			7.4			18.2			11.8	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA			NA		Perm	NA				
Protected Phases	5	2			6			8				
Permitted Phases							8					
Detector Phase	5	2			6		8	8				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		4.0	4.0				
Minimum Split (s)	8.0	26.0			26.0		26.0	26.0				
Total Split (s)	22.0	69.0			47.0		51.0	51.0				
Total Split (%)	18.3%	57.5%			39.2%		42.5%	42.5%				
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0				
All-Red Time (s)	1.0	1.0			1.0		1.0	1.0				
Lost Time Adjust (s)	0.0	0.0			0.0			0.0				
Total Lost Time (s)	4.0	4.0			4.0			4.0				
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?	Yes				Yes							
Recall Mode	None	C-Max			C-Max		Max	Max				

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 93 (78%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 9: I-15 NB Ramps & El Cerrito Rd.



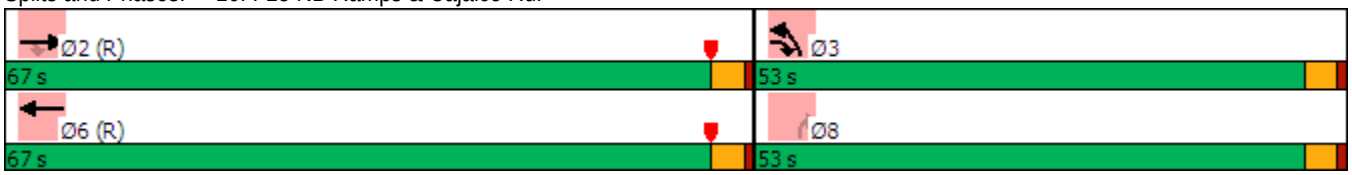


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	224	476	0	0	232	74	298	6	63	0	0	0
Future Volume (veh/h)	224	476	0	0	232	74	298	6	63	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking 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	1870	1870	0	0	1870	1870	1900	1870	1900			
Adj Flow Rate, veh/h	246	523	0	0	255	81	327	7	69			
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	314	1013	0	0	1115	346	555	12	117			
Arrive On Green	0.06	0.36	0.00	0.00	0.42	0.42	0.39	0.39	0.39			
Sat Flow, veh/h	3456	1870	0	0	2763	829	1417	30	299			
Grp Volume(v), veh/h	246	523	0	0	168	168	403	0	0			
Grp Sat Flow(s),veh/h/ln	1728	1870	0	0	1777	1721	1746	0	0			
Q Serve(g_s), s	8.4	26.3	0.0	0.0	7.3	7.6	21.9	0.0	0.0			
Cycle Q Clear(g_c), s	8.4	26.3	0.0	0.0	7.3	7.6	21.9	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.48	0.81		0.17			
Lane Grp Cap(c), veh/h	314	1013	0	0	742	719	684	0	0			
V/C Ratio(X)	0.78	0.52	0.00	0.00	0.23	0.23	0.59	0.00	0.00			
Avail Cap(c_a), veh/h	518	1013	0	0	742	719	684	0	0			
HCM Platoon Ratio	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.52	0.52	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	55.2	25.9	0.0	0.0	22.5	22.6	28.9	0.0	0.0			
Incr Delay (d2), s/veh	2.3	1.0	0.0	0.0	0.7	0.8	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	3.8	12.4	0.0	0.0	3.1	3.1	9.4	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.5	26.9	0.0	0.0	23.2	23.3	32.6	0.0	0.0			
LnGrp LOS	E	C	A	A	C	C	C	A	A			
Approach Vol, veh/h		769			336			403				
Approach Delay, s/veh		36.7			23.2			32.6				
Approach LOS		D			C			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		69.0			14.9	54.1		51.0				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		65.0			18.0	43.0		47.0				
Max Q Clear Time (g_c+I1), s		28.3			10.4	9.6		23.9				
Green Ext Time (p_c), s		3.3			0.5	1.8		2.3				
Intersection Summary												
HCM 6th Ctrl Delay			32.6									
HCM 6th LOS			C									

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	872	499	0	1395	366	268
Future Volume (vph)	872	499	0	1395	366	268
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		330	0		500	500
Storage Lanes		0	0		0	0
Taper Length (ft)			25		130	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	45	
Link Distance (ft)	293			191	332	
Travel Time (s)	4.4			2.9	5.0	
Confl. Peds. (#/hr)						5
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	0%	2%	2%	2%
Shared Lane Traffic (%)						
Turn Type	NA	pm+ov		NA	Prot	Perm
Protected Phases	2	3		6	3	
Permitted Phases		2				8
Detector Phase	2	3		6	3	8
Switch Phase						
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	23.7	8.5		30.7	8.5	8.5
Total Split (s)	67.0	53.0		67.0	53.0	53.0
Total Split (%)	55.8%	44.2%		55.8%	44.2%	44.2%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	Max		C-Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 68 (57%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	

Splits and Phases: 10: I-15 NB Ramps & Cajalco Rd.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	872	499	0	1395	366	268
Future Volume (veh/h)	872	499	0	1395	366	268
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	908	520	0	1453	381	279
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	2681	1479	0	3378	1411	1139
Arrive On Green	0.52	0.52	0.00	0.52	0.41	0.41
Sat Flow, veh/h	5274	1585	0	6958	3456	2790
Grp Volume(v), veh/h	908	520	0	1453	381	279
Grp Sat Flow(s),veh/h/ln	1702	1585	0	1609	1728	1395
Q Serve(g_s), s	12.3	3.9	0.0	16.6	8.8	7.9
Cycle Q Clear(g_c), s	12.3	3.9	0.0	16.6	8.8	7.9
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2681	1479	0	3378	1411	1139
V/C Ratio(X)	0.34	0.35	0.00	0.43	0.27	0.24
Avail Cap(c_a), veh/h	2681	1479	0	3378	1411	1139
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.5	0.4	0.0	17.5	23.6	23.3
Incr Delay (d2), s/veh	0.3	0.7	0.0	0.4	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	0.3	0.0	5.8	3.5	2.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.8	1.1	0.0	17.9	24.1	23.9
LnGrp LOS	B	A	A	B	C	C
Approach Vol, veh/h	1428			1453	660	
Approach Delay, s/veh	11.1			17.9	24.0	
Approach LOS	B			B	C	

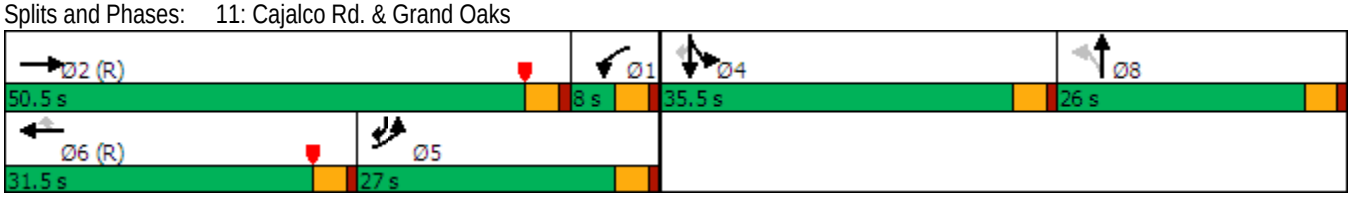
Timer - Assigned Phs	2				6	8
Phs Duration (G+Y+Rc), s	67.0				67.0	53.0
Change Period (Y+Rc), s	4.0				4.0	4.0
Max Green Setting (Gmax), s	63.0				63.0	49.0
Max Q Clear Time (g_c+I1), s	14.3				18.6	10.8
Green Ext Time (p_c), s	8.3				8.9	3.2

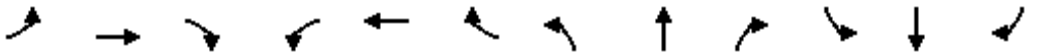
Intersection Summary	
HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	527	613	1	1	830	209	1	1	1	158	1	517
Future Volume (vph)	527	613	1	1	830	209	1	1	1	158	1	517
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	130		130	0		0	200		0
Storage Lanes	2		0	1		1	0		0	1		2
Taper Length (ft)	180			110			100			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		602			570			544			904	
Travel Time (s)		9.1			8.6			8.2			13.7	
Confl. Peds. (#/hr)						5				5		
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Split	NA	pm+ov
Protected Phases	5	2		1	6			8		4	4	5
Permitted Phases						6	8					4
Detector Phase	5	2		1	6	6	8	8		4	4	5
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	23.2		8.0	30.7	30.7	26.0	26.0		35.5	35.5	8.5
Total Split (s)	27.0	50.5		8.0	31.5	31.5	26.0	26.0		35.5	35.5	27.0
Total Split (%)	22.5%	42.1%		6.7%	26.3%	26.3%	21.7%	21.7%		29.6%	29.6%	22.5%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag	Lag	Lead		Lag	Lead	Lead						Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		Max	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 64 (53%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	

Splits and Phases: 11: Cajalco Rd. & Grand Oaks





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	527	613	1	1	830	209	1	1	1	158	1	517
Future Volume (veh/h)	527	613	1	1	830	209	1	1	1	158	1	517
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		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	538	626	1	1	847	213	1	1	1	161	1	528
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1285	2040	3	380	1170	361	2	2	2	465	3	1765
Arrive On Green	0.37	0.39	0.39	0.21	0.23	0.23	0.00	0.00	0.00	0.26	0.26	0.26
Sat Flow, veh/h	3456	5264	8	1781	5106	1575	579	579	579	1771	11	2774
Grp Volume(v), veh/h	538	405	222	1	847	213	3	0	0	162	0	528
Grp Sat Flow(s),veh/h/ln	1728	1702	1869	1781	1702	1575	1737	0	0	1782	0	1387
Q Serve(g_s), s	13.9	9.9	9.9	0.1	18.4	14.5	0.2	0.0	0.0	8.9	0.0	0.0
Cycle Q Clear(g_c), s	13.9	9.9	9.9	0.1	18.4	14.5	0.2	0.0	0.0	8.9	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.33		0.33	0.99		1.00
Lane Grp Cap(c), veh/h	1285	1319	724	380	1170	361	6	0	0	468	0	1765
V/C Ratio(X)	0.42	0.31	0.31	0.00	0.72	0.59	0.54	0.00	0.00	0.35	0.00	0.30
Avail Cap(c_a), veh/h	1285	1319	724	380	1170	361	318	0	0	468	0	1765
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	1.00
Uniform Delay (d), s/veh	28.0	25.5	25.5	37.1	42.7	41.2	59.7	0.0	0.0	35.9	0.0	9.9
Incr Delay (d2), s/veh	0.2	0.6	1.1	0.0	3.9	6.9	64.2	0.0	0.0	2.0	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	4.0	4.5	0.0	7.9	6.1	0.2	0.0	0.0	4.0	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.3	26.1	26.6	37.1	46.6	48.2	123.9	0.0	0.0	37.9	0.0	10.3
LnGrp LOS	C	C	C	D	D	D	F	A	A	D	A	B
Approach Vol, veh/h		1165			1061			3			690	
Approach Delay, s/veh		27.2			46.9			123.9			16.8	
Approach LOS		C			D			F			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	29.6	50.5		35.5	48.6	31.5		4.4				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	4.0	46.5		31.5	23.0	27.5		22.0				
Max Q Clear Time (g_c+I1), s	2.1	11.9		10.9	15.9	20.4		2.2				
Green Ext Time (p_c), s	0.0	2.6		3.5	1.5	2.9		0.0				

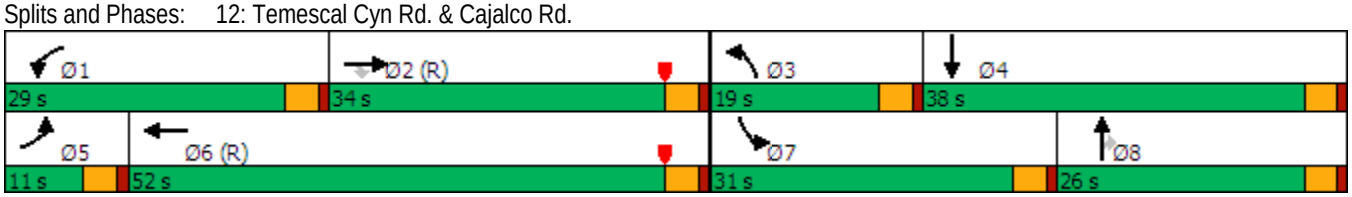
Intersection Summary			
HCM 6th Ctrl Delay		32.0	
HCM 6th LOS		C	

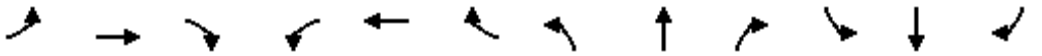
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	379	352	298	622	148	333	215	155	329	616	84
Future Volume (vph)	40	379	352	298	622	148	333	215	155	329	616	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	16	12	12	16	12	12	12
Storage Length (ft)	300		200	105		200	300		325	200		200
Storage Lanes	1		0	1		0	2		1	1		0
Taper Length (ft)	180			180			180			180		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		464			943			1167			1000	
Travel Time (s)		7.0			14.3			17.7			15.2	
Confl. Peds. (#/hr)			5			5						5
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	10.0	26.0	26.0	10.0	40.0		10.0	26.0	26.0	25.0	26.0	
Total Split (s)	11.0	34.0	34.0	29.0	52.0		19.0	26.0	26.0	31.0	38.0	
Total Split (%)	9.2%	28.3%	28.3%	24.2%	43.3%		15.8%	21.7%	21.7%	25.8%	31.7%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	Max	Max	None	Max	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 93 (78%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 105
Control Type: Actuated-Coordinated

Splits and Phases: 12: Temescal Cyn Rd. & Cajalco Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	379	352	298	622	148	333	215	155	329	616	84
Future Volume (veh/h)	40	379	352	298	622	148	333	215	155	329	616	84
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		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1945	1870	1870	1945	1870	1870	1870
Adj Flow Rate, veh/h	41	387	359	304	635	151	340	219	158	336	629	86
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	53	527	444	333	1812	424	398	689	319	364	889	121
Arrive On Green	0.03	0.28	0.28	0.19	0.44	0.44	0.12	0.19	0.19	0.20	0.28	0.28
Sat Flow, veh/h	1781	1870	1577	1781	4131	966	3456	3554	1648	1781	3139	428
Grp Volume(v), veh/h	41	387	359	304	521	265	340	219	158	336	356	359
Grp Sat Flow(s),veh/h/ln	1781	1870	1577	1781	1702	1693	1728	1777	1648	1781	1777	1791
Q Serve(g_s), s	2.7	22.5	25.4	20.1	12.2	12.5	11.6	6.4	10.3	22.2	21.5	21.6
Cycle Q Clear(g_c), s	2.7	22.5	25.4	20.1	12.2	12.5	11.6	6.4	10.3	22.2	21.5	21.6
Prop In Lane	1.00		1.00	1.00		0.57	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	53	527	444	333	1493	743	398	689	319	364	503	507
V/C Ratio(X)	0.78	0.74	0.81	0.91	0.35	0.36	0.86	0.32	0.49	0.92	0.71	0.71
Avail Cap(c_a), veh/h	104	527	444	371	1493	743	432	689	319	401	503	507
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	39.1	40.1	47.8	22.3	22.4	52.1	41.6	43.1	46.8	38.5	38.6
Incr Delay (d2), s/veh	21.5	8.8	14.7	25.0	0.6	1.3	14.5	1.2	5.4	25.3	8.1	8.1
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	11.2	11.3	10.9	4.8	5.0	5.7	2.8	4.5	12.1	10.2	10.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.3	47.9	54.8	72.8	23.0	23.7	66.7	42.8	48.5	72.1	46.6	46.7
LnGrp LOS	E	D	D	E	C	C	E	D	D	E	D	D
Approach Vol, veh/h		787			1090			717			1051	
Approach Delay, s/veh		52.7			37.1			55.4			54.8	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.4	37.8	17.8	38.0	7.5	56.6	28.6	27.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	25.0	30.0	15.0	34.0	7.0	48.0	27.0	22.0
Max Q Clear Time (g_c+I1), s	22.1	27.4	13.6	23.6	4.7	14.5	24.2	12.3
Green Ext Time (p_c), s	0.3	0.9	0.2	2.1	0.0	3.5	0.4	1.1

Intersection Summary	
HCM 6th Ctrl Delay	49.1
HCM 6th LOS	D

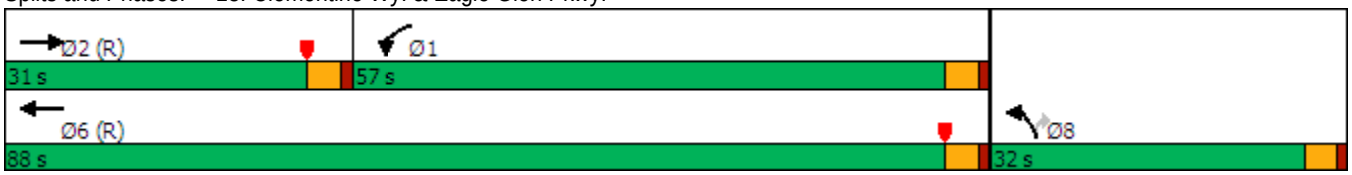
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	243	10	394	334	10	236
Future Volume (vph)	243	10	394	334	10	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	300		150	0
Storage Lanes		0	1		1	1
Taper Length (ft)			60		90	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	45	
Link Distance (ft)	366			1267	734	
Travel Time (s)	5.5			19.2	11.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	NA		Prot	NA	Prot	Perm
Protected Phases	2		1	6	8	
Permitted Phases						8
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	26.0		8.0	26.0	26.0	26.0
Total Split (s)	31.0		57.0	88.0	32.0	32.0
Total Split (%)	25.8%		47.5%	73.3%	26.7%	26.7%
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	C-Max		None	C-Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 31 (26%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	

Splits and Phases: 13: Clementine Wy. & Eagle Glen Pkwy.

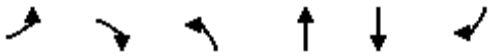




Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	243	10	394	334	10	236
Future Volume (veh/h)	243	10	394	334	10	236
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	256	11	415	352	11	248
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	781	33	787	2488	416	370
Arrive On Green	0.22	0.22	0.44	0.70	0.23	0.23
Sat Flow, veh/h	3565	149	1781	3647	1781	1585
Grp Volume(v), veh/h	131	136	415	352	11	248
Grp Sat Flow(s),veh/h/ln	1777	1844	1781	1777	1781	1585
Q Serve(g_s), s	7.4	7.4	20.4	4.0	0.6	17.1
Cycle Q Clear(g_c), s	7.4	7.4	20.4	4.0	0.6	17.1
Prop In Lane		0.08	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	400	415	787	2488	416	370
V/C Ratio(X)	0.33	0.33	0.53	0.14	0.03	0.67
Avail Cap(c_a), veh/h	400	415	787	2488	416	370
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.87	0.87	1.00	1.00
Uniform Delay (d), s/veh	38.9	38.9	24.4	6.0	35.5	41.8
Incr Delay (d2), s/veh	2.2	2.1	0.6	0.1	0.1	9.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	3.5	8.3	1.3	0.3	7.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	41.1	41.0	25.0	6.1	35.6	51.1
LnGrp LOS	D	D	C	A	D	D
Approach Vol, veh/h	267			767	259	
Approach Delay, s/veh	41.0			16.3	50.5	
Approach LOS	D			B	D	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	57.0	31.0				88.0	32.0
Change Period (Y+Rc), s	4.0	4.0				4.0	4.0
Max Green Setting (Gmax), s	53.0	27.0				84.0	28.0
Max Q Clear Time (g_c+I1), s	22.4	9.4				6.0	19.1
Green Ext Time (p_c), s	1.2	1.2				2.3	0.5

Intersection Summary		
HCM 6th Ctrl Delay		28.3
HCM 6th LOS		C



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	252	1	1	53	95	433
Future Volume (vph)	252	1	1	53	95	433
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			100
Storage Lanes	1	0	0			0
Taper Length (ft)	100		100			
Link Speed (mph)	45			45	45	
Link Distance (ft)	1253			542	608	
Travel Time (s)	19.0			8.2	9.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	5.9
Intersection LOS	A

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	266	57	556
Demand Flow Rate, veh/h	271	58	567
Vehicles Circulating, veh/h	102	270	1
Vehicles Exiting, veh/h	466	103	327
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.9	4.0	6.6
Approach LOS	A	A	A

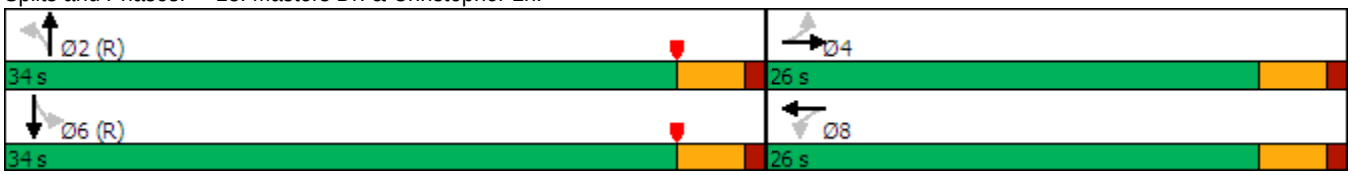
Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	271	58	567
Cap Entry Lane, veh/h	1244	1048	1378
Entry HV Adj Factor	0.982	0.981	0.981
Flow Entry, veh/h	266	57	556
Cap Entry, veh/h	1221	1028	1352
V/C Ratio	0.218	0.055	0.411
Control Delay, s/veh	4.9	4.0	6.6
LOS	A	A	A
95th %tile Queue, veh	1	0	2

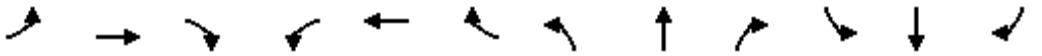
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	2	113	27	1	4	12	264	13	11	705	10
Future Volume (vph)	5	2	113	27	1	4	12	264	13	11	705	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		237			740			933			680	
Travel Time (s)		5.4			16.8			18.2			13.2	
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
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Total Split (s)	26.0	26.0		26.0	26.0		34.0	34.0		34.0	34.0	
Total Split (%)	43.3%	43.3%		43.3%	43.3%		56.7%	56.7%		56.7%	56.7%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 33 (55%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 18: Masters Dr. & Christopher Ln.

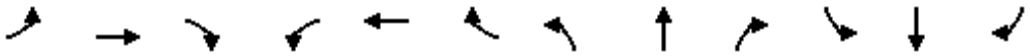




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	2	113	27	1	4	12	264	13	11	705	10
Future Volume (veh/h)	5	2	113	27	1	4	12	264	13	11	705	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	2	122	29	1	4	13	284	14	12	758	11
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	66	7	170	249	14	20	450	1332	66	884	1386	20
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.75	0.75	0.75	0.50	0.50	0.50
Sat Flow, veh/h	28	58	1504	1217	124	179	700	1768	87	1081	1839	27
Grp Volume(v), veh/h	129	0	0	34	0	0	13	0	298	12	0	769
Grp Sat Flow(s),veh/h/ln	1590	0	0	1520	0	0	700	0	1855	1081	0	1866
Q Serve(g_s), s	1.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	2.8	0.4	0.0	16.9
Cycle Q Clear(g_c), s	4.7	0.0	0.0	1.1	0.0	0.0	17.5	0.0	2.8	3.2	0.0	16.9
Prop In Lane	0.04		0.95	0.85		0.12	1.00		0.05	1.00		0.01
Lane Grp Cap(c), veh/h	242	0	0	283	0	0	450	0	1398	884	0	1406
V/C Ratio(X)	0.53	0.00	0.00	0.12	0.00	0.00	0.03	0.00	0.21	0.01	0.00	0.55
Avail Cap(c_a), veh/h	643	0	0	615	0	0	450	0	1398	884	0	1406
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.87	0.00	0.87
Uniform Delay (d), s/veh	25.7	0.0	0.0	24.1	0.0	0.0	8.5	0.0	2.2	5.2	0.0	7.8
Incr Delay (d2), s/veh	1.8	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.3	0.0	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.0	0.4	0.0	0.0	0.1	0.0	0.5	0.1	0.0	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.5	0.0	0.0	24.3	0.0	0.0	8.6	0.0	2.5	5.2	0.0	9.2
LnGrp LOS	C	A	A	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		129			34			311			781	
Approach Delay, s/veh		27.5			24.3			2.8			9.1	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		49.2		10.8		49.2		10.8				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		30.0		22.0		30.0		22.0				
Max Q Clear Time (g_c+I1), s		19.5		6.7		18.9		3.1				
Green Ext Time (p_c), s		1.3		0.6		4.0		0.1				

Intersection Summary	
HCM 6th Ctrl Delay	9.8
HCM 6th LOS	A



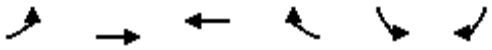
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	2	113	27	1	4	12	264	13	11	705	10
Future Volume (vph)	5	2	113	27	1	4	12	264	13	11	705	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	100			100			60			60		
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		237			740			933			680	
Travel Time (s)		5.4			16.8			18.2			13.2	
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
Shared Lane Traffic (%)												
Sign Control		Yield			Yield			Yield			Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	129	34	311	781
Demand Flow Rate, veh/h	131	35	317	796
Vehicles Circulating, veh/h	815	308	19	44
Vehicles Exiting, veh/h	25	28	927	299
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	8.9	4.0	4.7	9.9
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	131	35	317	796
Cap Entry Lane, veh/h	601	1008	1353	1319
Entry HV Adj Factor	0.984	0.971	0.982	0.981
Flow Entry, veh/h	129	34	311	781
Cap Entry, veh/h	592	979	1329	1294
V/C Ratio	0.218	0.035	0.234	0.603
Control Delay, s/veh	8.9	4.0	4.7	9.9
LOS	A	A	A	A
95th %tile Queue, veh	1	0	1	4



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	3	751	253	16	19	5
Future Volume (vph)	3	751	253	16	19	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	60				100	
Link Speed (mph)		35	35		30	
Link Distance (ft)		1212	796		251	
Travel Time (s)		23.6	15.5		5.7	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

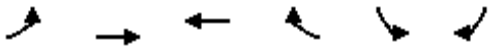
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	751	253	16	19	5
Future Vol, veh/h	3	751	253	16	19	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	120	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	884	298	19	22	6

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	317	0	-	0	1200	308
Stage 1	-	-	-	-	308	-
Stage 2	-	-	-	-	892	-
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	1243	-	-	-	204	732
Stage 1	-	-	-	-	745	-
Stage 2	-	-	-	-	400	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1243	-	-	-	203	732
Mov Cap-2 Maneuver	-	-	-	-	203	-
Stage 1	-	-	-	-	743	-
Stage 2	-	-	-	-	400	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	22.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1243	-	-	-	239
HCM Lane V/C Ratio	0.003	-	-	-	0.118
HCM Control Delay (s)	7.9	-	-	-	22.1
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.4



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	3	751	253	16	19	5
Future Volume (vph)	3	751	253	16	19	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	60				100	
Link Speed (mph)		35	35		30	
Link Distance (ft)		1212	796		251	
Travel Time (s)		23.6	15.5		5.7	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Sign Control		Yield	Yield		Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

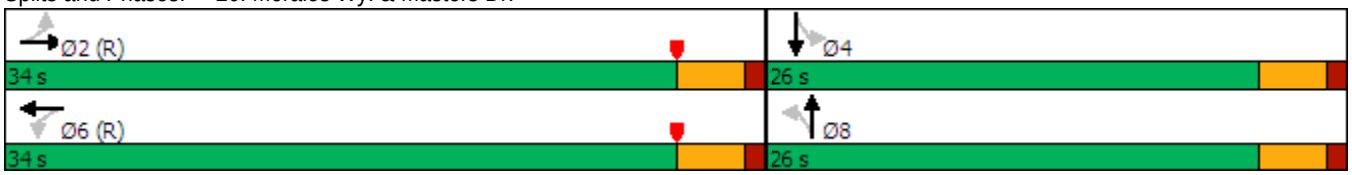
Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	888	317	28
Demand Flow Rate, veh/h	906	323	28
Vehicles Circulating, veh/h	22	4	304
Vehicles Exiting, veh/h	310	924	23
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	11.4	4.7	3.8
Approach LOS	B	A	A

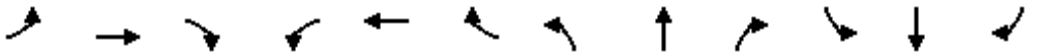
Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	906	323	28
Cap Entry Lane, veh/h	1349	1374	1012
Entry HV Adj Factor	0.980	0.982	1.000
Flow Entry, veh/h	888	317	28
Cap Entry, veh/h	1323	1349	1012
V/C Ratio	0.671	0.235	0.028
Control Delay, s/veh	11.4	4.7	3.8
LOS	B	A	A
95th %tile Queue, veh	6	1	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	585	169	46	192	4	60	2	39	2	1	3
Future Volume (vph)	1	585	169	46	192	4	60	2	39	2	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	60			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			30			45	
Link Distance (ft)		1243			906			626			709	
Travel Time (s)		24.2			17.6			14.2			10.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Total Split (s)	34.0	34.0		34.0	34.0		26.0	26.0		26.0	26.0	
Total Split (%)	56.7%	56.7%		56.7%	56.7%		43.3%	43.3%		43.3%	43.3%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		Max	Max		Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 33 (55%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: Morales Wy. & Masters Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	585	169	46	192	4	60	2	39	2	1	3
Future Volume (veh/h)	1	585	169	46	192	4	60	2	39	2	1	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		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	1	650	188	51	213	4	67	2	43	2	1	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	625	697	202	162	915	17	401	33	211	234	134	288
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.37	0.37	0.37	0.37	0.37	0.37
Sat Flow, veh/h	1164	1394	403	656	1830	34	832	91	575	421	365	786
Grp Volume(v), veh/h	1	0	838	51	0	217	112	0	0	6	0	0
Grp Sat Flow(s),veh/h/ln	1164	0	1798	656	0	1864	1497	0	0	1571	0	0
Q Serve(g_s), s	0.0	0.0	26.2	3.8	0.0	4.0	1.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.0	0.0	26.2	30.0	0.0	4.0	2.8	0.0	0.0	0.1	0.0	0.0
Prop In Lane	1.00		0.22	1.00		0.02	0.60		0.38	0.33		0.50
Lane Grp Cap(c), veh/h	625	0	899	162	0	932	645	0	0	656	0	0
V/C Ratio(X)	0.00	0.00	0.93	0.32	0.00	0.23	0.17	0.00	0.00	0.01	0.00	0.00
Avail Cap(c_a), veh/h	625	0	899	162	0	932	645	0	0	656	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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.6	0.0	14.0	28.4	0.0	8.5	12.9	0.0	0.0	12.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	17.5	5.1	0.0	0.6	0.6	0.0	0.0	0.0	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	0.0	0.0	12.6	0.9	0.0	1.4	1.0	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.6	0.0	31.6	33.5	0.0	9.1	13.5	0.0	0.0	12.1	0.0	0.0
LnGrp LOS	A	A	C	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		839			268			112			6	
Approach Delay, s/veh		31.5			13.7			13.5			12.1	
Approach LOS		C			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		34.0		26.0		34.0		26.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		30.0		22.0		30.0		22.0				
Max Q Clear Time (g_c+I1), s		28.2		2.1		32.0		4.8				
Green Ext Time (p_c), s		1.0		0.0		0.0		0.5				

Intersection Summary												
HCM 6th Ctrl Delay			25.9									
HCM 6th LOS			C									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	585	169	46	192	4	60	2	39	2	1	3
Future Volume (vph)	1	585	169	46	192	4	60	2	39	2	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	60			60			100			100		
Link Speed (mph)		35			35			30			45	
Link Distance (ft)		1243			906			626			709	
Travel Time (s)		24.2			17.6			14.2			10.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Sign Control		Yield			Yield			Yield			Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	839	268	112	6
Demand Flow Rate, veh/h	856	273	114	6
Vehicles Circulating, veh/h	55	71	666	337
Vehicles Exiting, veh/h	288	709	245	7
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	11.3	4.7	7.1	3.7
Approach LOS	B	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	856	273	114	6
Cap Entry Lane, veh/h	1305	1283	700	979
Entry HV Adj Factor	0.980	0.981	0.982	0.997
Flow Entry, veh/h	839	268	112	6
Cap Entry, veh/h	1279	1259	687	975
V/C Ratio	0.656	0.213	0.163	0.006
Control Delay, s/veh	11.3	4.7	7.1	3.7
LOS	B	A	A	A
95th %tile Queue, veh	5	1	1	0



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	29	37	294	12	104	500
Future Volume (vph)	29	37	294	12	104	500
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	200	
Storage Lanes	1	0		0	1	
Taper Length (ft)	100				60	
Link Speed (mph)	45		45			45
Link Distance (ft)	302		233			567
Travel Time (s)	4.6		3.5			8.6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	37	294	12	104	500
Future Vol, veh/h	29	37	294	12	104	500
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	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	39	309	13	109	526

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	797	161	0	0	322	0
Stage 1	316	-	-	-	-	-
Stage 2	481	-	-	-	-	-
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	324	855	-	-	1235	-
Stage 1	712	-	-	-	-	-
Stage 2	588	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	295	855	-	-	1235	-
Mov Cap-2 Maneuver	295	-	-	-	-	-
Stage 1	649	-	-	-	-	-
Stage 2	588	-	-	-	-	-

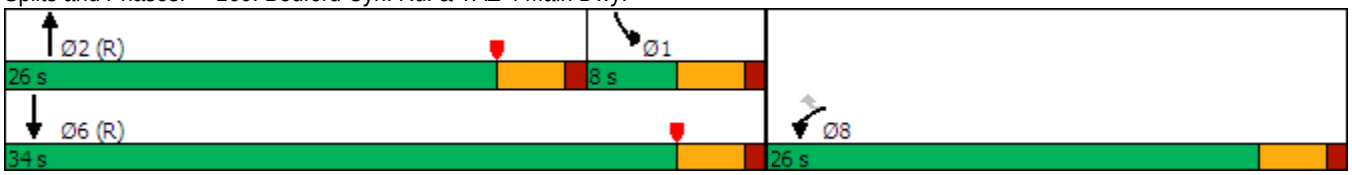
Approach	WB	NB	SB
HCM Control Delay, s	14.1	0	1.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	466	1235	-
HCM Lane V/C Ratio	-	-	0.149	0.089	-
HCM Control Delay (s)	-	-	14.1	8.2	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0.3	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	52	112	311	20	110	551
Future Volume (vph)	52	112	311	20	110	551
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	200	
Storage Lanes	1	1		0	1	
Taper Length (ft)	100				60	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	45		45			45
Link Distance (ft)	264		567			343
Travel Time (s)	4.0		8.6			5.2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8				
Detector Phase	8	8	2		1	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0		4.0	4.0
Minimum Split (s)	26.0	26.0	26.0		8.0	26.0
Total Split (s)	26.0	26.0	26.0		8.0	34.0
Total Split (%)	43.3%	43.3%	43.3%		13.3%	56.7%
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 160: Bedford Cyn. Rd. & TAZ 4 Main Dwy.





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	52	112	311	20	110	551
Future Volume (veh/h)	52	112	311	20	110	551
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	55	118	327	21	116	580
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	188	168	1244	79	584	2704
Arrive On Green	0.11	0.11	0.37	0.37	0.33	0.76
Sat Flow, veh/h	1781	1585	3485	217	1781	3647
Grp Volume(v), veh/h	55	118	171	177	116	580
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1831	1781	1777
Q Serve(g_s), s	1.7	4.3	4.0	4.1	2.8	2.8
Cycle Q Clear(g_c), s	1.7	4.3	4.0	4.1	2.8	2.8
Prop In Lane	1.00	1.00		0.12	1.00	
Lane Grp Cap(c), veh/h	188	168	652	671	584	2704
V/C Ratio(X)	0.29	0.70	0.26	0.26	0.20	0.21
Avail Cap(c_a), veh/h	653	581	652	671	584	2704
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	24.8	25.9	13.3	13.3	14.5	2.0
Incr Delay (d2), s/veh	0.8	5.3	1.0	1.0	0.2	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	0.7	1.7	1.5	1.6	1.0	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.6	31.2	14.3	14.3	14.7	2.2
LnGrp LOS	C	C	B	B	B	A
Approach Vol, veh/h	173		348			696
Approach Delay, s/veh	29.4		14.3			4.3
Approach LOS	C		B			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	23.7	26.0			49.7	10.3
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0
Max Green Setting (Gmax), s	4.0	22.0			30.0	22.0
Max Q Clear Time (g_c+I1), s	4.8	6.1			4.8	6.3
Green Ext Time (p_c), s	0.0	1.5			3.7	0.4

Intersection Summary		
HCM 6th Ctrl Delay		10.7
HCM 6th LOS		B



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	37	421	2	0	662
Future Volume (vph)	0	37	421	2	0	662
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		45			45
Link Distance (ft)	221		343			351
Travel Time (s)	3.3		5.2			5.3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	37	421	2	0	662
Future Vol, veh/h	0	37	421	2	0	662
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	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	39	443	2	0	697

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	223	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	780	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	780	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	780	-
HCM Lane V/C Ratio	-	-	0.05	-
HCM Control Delay (s)	-	-	9.9	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0.2	-

APPENDIX 5.2:

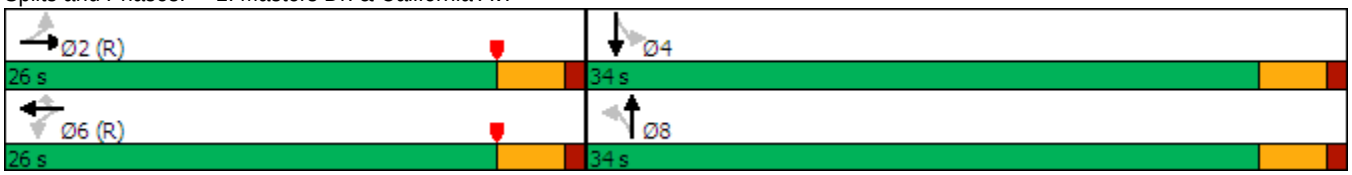
INTERIM YEAR (2021) WITH PROJECT INTERSECTION OPERATIONS ANALYSIS WORKSHEETS AND QUEUEING ANALYSIS WORKSHEETS

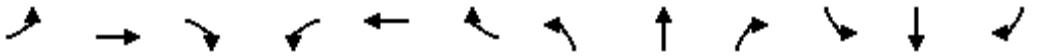
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	200	67	115	72	143	79	200	260	167	108	4
Future Volume (vph)	8	200	67	115	72	143	79	200	260	167	108	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	135		0	130		200	100		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	100			90			60			65		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		495			683			680			695	
Travel Time (s)		7.5			10.3			13.2			13.5	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6		6	8			4		
Detector Phase	2	2		6	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0	26.0	26.0	26.0		26.0	26.0	
Total Split (s)	26.0	26.0		26.0	26.0	26.0	34.0	34.0		34.0	34.0	
Total Split (%)	43.3%	43.3%		43.3%	43.3%	43.3%	56.7%	56.7%		56.7%	56.7%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	Max	Max		Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 1: Masters Dr. & California Av.





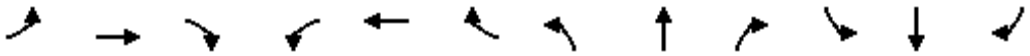
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	200	67	115	72	143	79	200	260	167	108	4
Future Volume (veh/h)	8	200	67	115	72	143	79	200	260	167	108	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	267	89	153	96	191	105	267	347	223	144	5
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	483	492	164	335	686	581	685	369	480	268	898	31
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.34	0.34	0.34	0.50	0.50	0.50
Sat Flow, veh/h	1092	1342	447	1025	1870	1585	1239	738	959	808	1797	62
Grp Volume(v), veh/h	11	0	356	153	96	191	105	0	614	223	0	149
Grp Sat Flow(s),veh/h/ln	1092	0	1790	1025	1870	1585	1239	0	1698	808	0	1859
Q Serve(g_s), s	0.4	0.0	9.4	8.3	2.1	5.2	3.7	0.0	19.0	11.0	0.0	2.6
Cycle Q Clear(g_c), s	2.5	0.0	9.4	17.8	2.1	5.2	6.4	0.0	19.0	30.0	0.0	2.6
Prop In Lane	1.00		0.25	1.00		1.00	1.00		0.57	1.00		0.03
Lane Grp Cap(c), veh/h	483	0	656	335	686	581	685	0	849	268	0	930
V/C Ratio(X)	0.02	0.00	0.54	0.46	0.14	0.33	0.15	0.00	0.72	0.83	0.00	0.16
Avail Cap(c_a), veh/h	483	0	656	335	686	581	685	0	849	268	0	930
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.82	0.00	0.82	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.5	0.0	15.0	22.0	12.7	13.7	13.1	0.0	16.3	26.4	0.0	8.2
Incr Delay (d2), s/veh	0.1	0.0	3.2	4.4	0.4	1.5	0.4	0.0	4.4	25.2	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	3.7	2.1	0.8	1.8	1.0	0.0	8.3	4.9	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.6	0.0	18.2	26.5	13.1	15.2	13.4	0.0	20.7	51.6	0.0	8.5
LnGrp LOS	B	A	B	C	B	B	B	A	C	D	A	A
Approach Vol, veh/h		367			440			719			372	
Approach Delay, s/veh		18.1			18.7			19.6			34.3	
Approach LOS		B			B			B			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		26.0		34.0		26.0		34.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		22.0		30.0		22.0		30.0				
Max Q Clear Time (g_c+I1), s		11.4		32.0		19.8		21.0				
Green Ext Time (p_c), s		1.4		0.0		0.4		3.1				

Intersection Summary												
HCM 6th Ctrl Delay			22.0									
HCM 6th LOS			C									

Notes

User approved pedestrian interval to be less than phase max green.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	22	34	9	13	39	10	282	12	54	212	25
Future Volume (vph)	32	22	34	9	13	39	10	282	12	54	212	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	110		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		537			564			936			637	
Travel Time (s)		10.5			11.0			18.2			12.4	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	11.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	22	34	9	13	39	10	282	12	54	212	25
Future Vol, veh/h	32	22	34	9	13	39	10	282	12	54	212	25
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	36	25	38	10	15	44	11	317	13	61	238	28
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

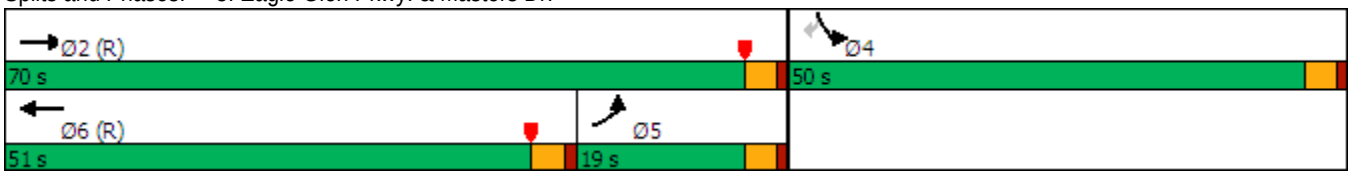
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	9.6	9.1	12.9	10.9
HCM LOS	A	A	B	B

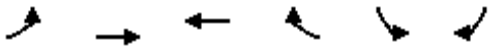
Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	36%	15%	100%	0%
Vol Thru, %	0%	96%	25%	21%	0%	89%
Vol Right, %	0%	4%	39%	64%	0%	11%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	10	294	88	61	54	237
LT Vol	10	0	32	9	54	0
Through Vol	0	282	22	13	0	212
RT Vol	0	12	34	39	0	25
Lane Flow Rate	11	330	99	69	61	266
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.018	0.484	0.153	0.104	0.098	0.387
Departure Headway (Hd)	5.805	5.273	5.586	5.461	5.809	5.23
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	611	677	646	660	611	682
Service Time	3.596	3.063	3.589	3.464	3.602	3.022
HCM Lane V/C Ratio	0.018	0.487	0.153	0.105	0.1	0.39
HCM Control Delay	8.7	13	9.6	9.1	9.2	11.3
HCM Lane LOS	A	B	A	A	A	B
HCM 95th-tile Q	0.1	2.7	0.5	0.3	0.3	1.8

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	53	608	279	267	238	23
Future Volume (vph)	53	608	279	267	238	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	130	0
Storage Lanes	1			0	1	1
Taper Length (ft)	120				60	
Right Turn on Red				Yes		Yes
Link Speed (mph)		45	45		35	
Link Distance (ft)		1267	546		936	
Travel Time (s)		19.2	8.3		18.2	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)						
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases						4
Detector Phase	5	2	6		4	4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0		4.0	4.0
Minimum Split (s)	8.0	26.0	26.0		26.0	26.0
Total Split (s)	19.0	70.0	51.0		50.0	50.0
Total Split (%)	15.8%	58.3%	42.5%		41.7%	41.7%
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0		4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: Eagle Glen Pkwy. & Masters Dr.





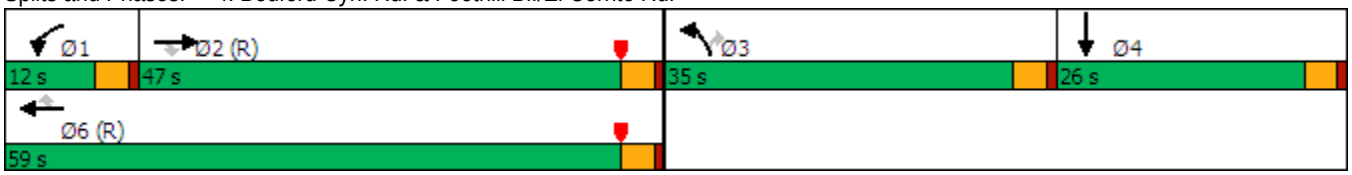
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	53	608	279	267	238	23
Future Volume (veh/h)	53	608	279	267	238	23
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	683	313	300	267	26
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	603	2712	696	621	303	270
Arrive On Green	0.11	0.25	0.39	0.39	0.17	0.17
Sat Flow, veh/h	1781	3647	1870	1585	1781	1585
Grp Volume(v), veh/h	60	683	313	300	267	26
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	3.6	18.4	15.6	17.0	17.6	1.7
Cycle Q Clear(g_c), s	3.6	18.4	15.6	17.0	17.6	1.7
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	603	2712	696	621	303	270
V/C Ratio(X)	0.10	0.25	0.45	0.48	0.88	0.10
Avail Cap(c_a), veh/h	603	2712	696	621	683	608
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.9	17.5	27.0	27.4	48.6	42.0
Incr Delay (d2), s/veh	0.1	0.2	2.1	2.7	8.3	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	1.6	8.8	6.8	6.6	8.4	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	37.0	17.7	29.0	30.1	56.9	42.2
LnGrp LOS	D	B	C	C	E	D
Approach Vol, veh/h		743	613		293	
Approach Delay, s/veh		19.3	29.5		55.6	
Approach LOS		B	C		E	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		95.6		24.4	44.6	51.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		66.0		46.0	15.0	47.0
Max Q Clear Time (g_c+I1), s		20.4		19.6	5.6	19.0
Green Ext Time (p_c), s		4.8		0.9	0.1	3.7
Intersection Summary						
HCM 6th Ctrl Delay			29.5			
HCM 6th LOS			C			

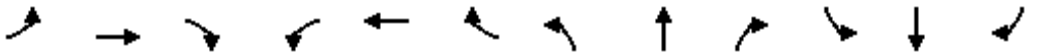
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1116	123	120	773	20	439	0	328	0	0	10
Future Volume (vph)	0	1116	123	120	773	20	439	0	328	0	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	135		135	0		125	0		0
Storage Lanes	0		1	1		1	1		1	0		0
Taper Length (ft)	100			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			45			40			30	
Link Distance (ft)		351			305			404			350	
Travel Time (s)		6.0			4.6			6.9			8.0	
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
Shared Lane Traffic (%)												
Turn Type		NA	Perm	Prot	NA	Perm	Prot		Perm		NA	
Protected Phases		2		1	6		3				4	
Permitted Phases			2			6			3			
Detector Phase		2	2	1	6	6	3		3		4	
Switch Phase												
Minimum Initial (s)		4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	
Minimum Split (s)		26.0	26.0	8.0	26.0	26.0	8.0		8.0		26.0	
Total Split (s)		47.0	47.0	12.0	59.0	59.0	35.0		35.0		26.0	
Total Split (%)		39.2%	39.2%	10.0%	49.2%	49.2%	29.2%		29.2%		21.7%	
Yellow Time (s)		3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	
All-Red Time (s)		1.0	1.0	1.0	1.0	1.0	1.0		1.0		1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	
Total Lost Time (s)		4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	
Lead/Lag		Lag	Lag	Lead			Lead		Lead		Lag	
Lead-Lag Optimize?		Yes	Yes	Yes			Yes		Yes		Yes	
Recall Mode		C-Max	C-Max	None	C-Max	C-Max	None		None		Min	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 4: Bedford Cyn. Rd. & Foothill Bl./El Cerrito Rd.





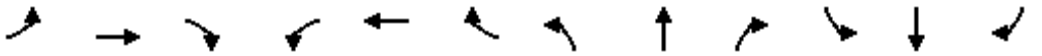
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1116	123	120	773	20	439	0	328	0	0	10
Future Volume (veh/h)	0	1116	123	120	773	20	439	0	328	0	0	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		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	0	1870	1870	1870	1870	1870	1870	0	1870	0	1870	1870
Adj Flow Rate, veh/h	0	1361	150	146	943	0	535	0	400	0	0	0
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, %	0	2	2	2	2	2	2	0	2	0	2	2
Cap, veh/h	0	2043	911	119	2399		460	0	0	0	2	
Arrive On Green	0.00	0.57	0.57	0.13	1.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	3647	1585	1781	3554	1585	1781	535		0	-74814	0
Grp Volume(v), veh/h	0	1361	150	146	943	0	535	139.3		0	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1777	1585	1781	F		0	1870	0
Q Serve(g_s), s	0.0	31.7	5.3	8.0	0.0	0.0	31.0			0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	31.7	5.3	8.0	0.0	0.0	31.0			0.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		1.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	2043	911	119	2399		460			0	2	
V/C Ratio(X)	0.00	0.67	0.16	1.23	0.39		1.16			0.00	0.00	
Avail Cap(c_a), veh/h	0	2043	911	119	2399		460			0	343	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.94	0.94	0.00	1.00			0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.6	12.0	52.0	0.0	0.0	44.5			0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.7	0.4	154.3	0.5	0.0	94.8			0.0	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
%ile BackOfQ(50%),veh/ln	0.0	12.4	1.9	8.3	0.2	0.0	25.4			0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	19.3	12.4	206.3	0.5	0.0	139.3			0.0	0.0	0.0
LnGrp LOS	A	B	B	F	A		F			A	A	
Approach Vol, veh/h		1511			1089	A					0	A
Approach Delay, s/veh		18.6			28.1						0.0	
Approach LOS		B			C							

Timer - Assigned Phs	1	2	3	4		6
Phs Duration (G+Y+Rc), s	12.0	73.0	35.0	0.0		85.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	43.0	31.0	22.0		55.0
Max Q Clear Time (g_c+I1), s	10.0	33.7	33.0	0.0		2.0
Green Ext Time (p_c), s	0.0	6.1	0.0	0.0		7.4

Intersection Summary	
HCM 6th Ctrl Delay	42.5
HCM 6th LOS	D

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	3	38	2	1	1	22	307	5	4	110	31
Future Volume (vph)	93	3	38	2	1	1	22	307	5	4	110	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	80		0	0		100
Storage Lanes	0		1	0		0	1		0	0		1
Taper Length (ft)	100			100			80			100		
Link Speed (mph)		45			45			30			45	
Link Distance (ft)		786			169			443			297	
Travel Time (s)		11.9			2.6			10.1			4.5	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	11.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	93	3	38	2	1	1	22	307	5	4	110	31
Future Vol, veh/h	93	3	38	2	1	1	22	307	5	4	110	31
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	103	3	42	2	1	1	24	341	6	4	122	34
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	1

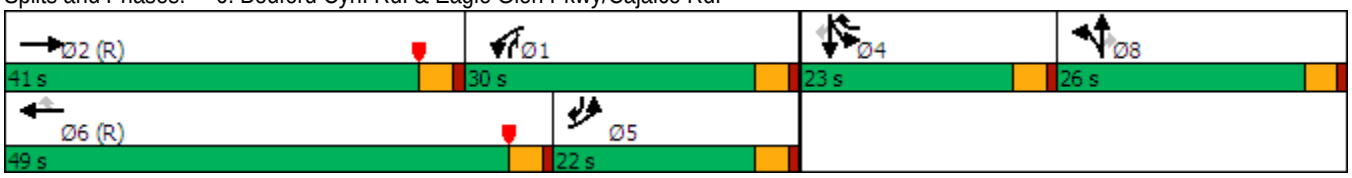
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay	9.9	9.2	12.5	9
HCM LOS	A	A	B	A

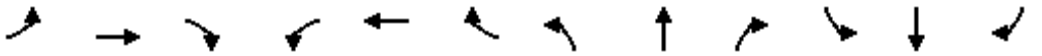
Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	97%	0%	50%	4%	0%
Vol Thru, %	0%	98%	3%	0%	25%	96%	0%
Vol Right, %	0%	2%	0%	100%	25%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	22	312	96	38	4	114	31
LT Vol	22	0	93	0	2	4	0
Through Vol	0	307	3	0	1	110	0
RT Vol	0	5	0	38	1	0	31
Lane Flow Rate	24	347	107	42	4	127	34
Geometry Grp	7	7	7	7	6	7	7
Degree of Util (X)	0.038	0.494	0.187	0.06	0.007	0.189	0.044
Departure Headway (Hd)	5.641	5.127	6.323	5.13	6.046	5.36	4.636
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	634	700	565	694	587	666	768
Service Time	3.386	2.872	4.089	2.895	4.137	3.114	2.39
HCM Lane V/C Ratio	0.038	0.496	0.189	0.061	0.007	0.191	0.044
HCM Control Delay	8.6	12.8	10.6	8.2	9.2	9.4	7.6
HCM Lane LOS	A	B	B	A	A	A	A
HCM 95th-tile Q	0.1	2.8	0.7	0.2	0	0.7	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	121	685	40	297	420	439	58	83	568	128	55	68
Future Volume (vph)	121	685	40	297	420	439	58	83	568	128	55	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	200		200	150		0	450		0
Storage Lanes	1		0	2		1	1		1	1		1
Taper Length (ft)	90			120			90			180		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		756			737			351			716	
Travel Time (s)		11.5			11.2			5.3			10.8	
Confl. Peds. (#/hr)						5						5
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
Shared Lane Traffic (%)										30%		
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2		1	6	4	8	8	1	4	4	5
Permitted Phases						6			8			4
Detector Phase	5	2		1	6	4	8	8	1	4	4	5
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	23.0		8.0	23.0	23.0	26.0	26.0	8.0	23.0	23.0	8.0
Total Split (s)	22.0	41.0		30.0	49.0	23.0	26.0	26.0	30.0	23.0	23.0	22.0
Total Split (%)	18.3%	34.2%		25.0%	40.8%	19.2%	21.7%	21.7%	25.0%	19.2%	19.2%	18.3%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lead		Lag	Lead				Lag			Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			Yes
Recall Mode	None	C-Max		None	C-Max	Max	None	None	None	Max	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 6: Bedford Cyn. Rd. & Eagle Glen Pkwy/Cajalco Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	685	40	297	420	439	58	83	568	128	55	68
Future Volume (veh/h)	121	685	40	297	420	439	58	83	568	128	55	68
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		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	127	721	42	313	442	462	61	87	598	96	112	72
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	303	1052	61	819	1333	843	290	305	634	282	296	518
Arrive On Green	0.17	0.31	0.31	0.08	0.12	0.12	0.05	0.05	0.05	0.16	0.16	0.16
Sat Flow, veh/h	1781	3413	199	3456	3554	1579	1781	1870	1585	1781	1870	1570
Grp Volume(v), veh/h	127	375	388	313	442	462	61	87	598	96	112	72
Grp Sat Flow(s),veh/h/ln	1781	1777	1835	1728	1777	1579	1781	1870	1585	1781	1870	1570
Q Serve(g_s), s	7.6	22.2	22.2	10.3	13.6	25.4	3.9	5.4	16.5	5.8	6.4	0.0
Cycle Q Clear(g_c), s	7.6	22.2	22.2	10.3	13.6	25.4	3.9	5.4	16.5	5.8	6.4	0.0
Prop In Lane	1.00		0.11	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	303	548	566	819	1333	843	290	305	634	282	296	518
V/C Ratio(X)	0.42	0.68	0.69	0.38	0.33	0.55	0.21	0.29	0.94	0.34	0.38	0.14
Avail Cap(c_a), veh/h	303	548	566	819	1333	843	327	343	666	282	296	518
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.87	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.5	36.4	36.4	47.0	38.8	26.6	49.4	50.1	41.2	44.9	45.2	28.3
Incr Delay (d2), s/veh	0.9	6.8	6.6	0.3	0.6	2.2	0.4	0.5	21.5	3.3	3.6	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	3.4	10.3	10.6	4.7	6.6	14.9	1.8	2.6	10.2	2.7	3.2	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.4	43.2	43.0	47.2	39.4	28.9	49.7	50.6	62.7	48.2	48.9	28.9
LnGrp LOS	D	D	D	D	D	C	D	D	E	D	D	C
Approach Vol, veh/h		890			1217			746			280	
Approach Delay, s/veh		43.4			37.4			60.2			43.5	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	32.4	41.0		23.0	24.4	49.0		23.6				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	26.0	37.0		19.0	18.0	45.0		22.0				
Max Q Clear Time (g_c+I1), s	12.3	24.2		8.4	9.6	27.4		18.5				
Green Ext Time (p_c), s	0.9	2.5		0.8	0.2	3.9		1.1				

Intersection Summary			
HCM 6th Ctrl Delay		45.1	
HCM 6th LOS		D	

Notes

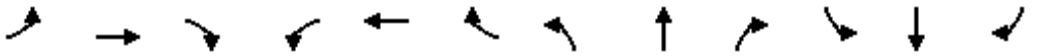
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1057	387	128	636	0	0	0	0	244	3	257
Future Volume (vph)	0	1057	387	128	636	0	0	0	0	244	3	257
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	90		0	0		0	0		525
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	100			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		305			387			1098			1308	
Travel Time (s)		4.6			5.9			16.6			19.8	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)												
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Detector Phase		2		1	6					4	4	4
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0					4.0	4.0	4.0
Minimum Split (s)		26.0		8.0	26.0					26.0	26.0	26.0
Total Split (s)		72.0		18.0	90.0					30.0	30.0	30.0
Total Split (%)		60.0%		15.0%	75.0%					25.0%	25.0%	25.0%
Yellow Time (s)		3.0		3.0	3.0					3.0	3.0	3.0
All-Red Time (s)		1.0		1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0						0.0	0.0
Total Lost Time (s)		4.0		4.0	4.0						4.0	4.0
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?		Yes		Yes								
Recall Mode		C-Max		None	C-Max					Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 18 (15%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: I-15 SB Ramps & El Cerrito Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1057	387	128	636	0	0	0	0	244	3	257
Future Volume (veh/h)	0	1057	387	128	636	0	0	0	0	244	3	257
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	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1258	461	152	757	0				290	4	306
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84				0.84	0.84	0.84
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1504	531	177	2547	0				381	5	343
Arrive On Green	0.00	1.00	1.00	0.20	1.00	0.00				0.22	0.22	0.22
Sat Flow, veh/h	0	2667	910	1781	3647	0				1758	24	1585
Grp Volume(v), veh/h	0	854	865	152	757	0				294	0	306
Grp Sat Flow(s),veh/h/ln	0	1777	1707	1781	1777	0				1782	0	1585
Q Serve(g_s), s	0.0	0.0	0.0	9.9	0.0	0.0				18.6	0.0	22.5
Cycle Q Clear(g_c), s	0.0	0.0	0.0	9.9	0.0	0.0				18.6	0.0	22.5
Prop In Lane	0.00		0.53	1.00		0.00				0.99		1.00
Lane Grp Cap(c), veh/h	0	1038	997	177	2547	0				386	0	343
V/C Ratio(X)	0.00	0.82	0.87	0.86	0.30	0.00				0.76	0.00	0.89
Avail Cap(c_a), veh/h	0	1038	997	208	2547	0				386	0	343
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.24	0.24	0.53	0.53	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	47.3	0.0	0.0				44.1	0.0	45.6
Incr Delay (d2), s/veh	0.0	1.9	2.7	15.5	0.2	0.0				13.2	0.0	27.5
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	0.5	0.8	4.6	0.1	0.0				9.4	0.0	11.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	1.9	2.7	62.8	0.2	0.0				57.3	0.0	73.1
LnGrp LOS	A	A	A	E	A	A				E	A	E
Approach Vol, veh/h		1719			909						600	
Approach Delay, s/veh		2.3			10.6						65.4	
Approach LOS		A			B						E	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	15.9	74.1		30.0		90.0						
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0						
Max Green Setting (Gmax), s	14.0	68.0		26.0		86.0						
Max Q Clear Time (g_c+I1), s	11.9	2.0		24.5		2.0						
Green Ext Time (p_c), s	0.1	20.6		0.5		5.6						

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

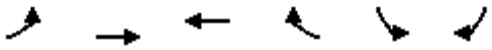
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	322	1059	896	101	361	389
Future Volume (vph)	322	1059	896	101	361	389
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290			250	0	0
Storage Lanes	2			0	2	2
Taper Length (ft)	120				25	
Right Turn on Red				Yes		Yes
Link Speed (mph)		45	45		45	
Link Distance (ft)		737	285		302	
Travel Time (s)		11.2	4.3		4.6	
Confl. Peds. (#/hr)						5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	23.7	30.7	30.7	8.5	8.5
Total Split (s)	28.0	89.0	61.0	61.0	31.0	31.0
Total Split (%)	23.3%	74.2%	50.8%	50.8%	25.8%	25.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 8: Cajalco Rd. & I-15 SB Ramps





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	322	1059	896	101	361	389
Future Volume (veh/h)	322	1059	896	101	361	389
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	339	1115	943	106	380	409
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	410	3617	1977	882	778	628
Arrive On Green	0.24	1.00	0.56	0.56	0.22	0.22
Sat Flow, veh/h	3456	5274	3647	1585	3456	2790
Grp Volume(v), veh/h	339	1115	943	106	380	409
Grp Sat Flow(s),veh/h/ln	1728	1702	1777	1585	1728	1395
Q Serve(g_s), s	11.2	0.0	19.2	3.8	11.5	16.0
Cycle Q Clear(g_c), s	11.2	0.0	19.2	3.8	11.5	16.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	410	3617	1977	882	778	628
V/C Ratio(X)	0.83	0.31	0.48	0.12	0.49	0.65
Avail Cap(c_a), veh/h	691	3617	1977	882	778	628
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.62	0.62	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.6	0.0	16.1	12.7	40.5	42.2
Incr Delay (d2), s/veh	2.7	0.1	0.8	0.3	2.2	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.0	7.4	1.3	5.0	12.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	47.3	0.1	16.9	12.9	42.7	47.4
LnGrp LOS	D	A	B	B	D	D
Approach Vol, veh/h		1454	1049		789	
Approach Delay, s/veh		11.1	16.5		45.1	
Approach LOS		B	B		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		89.0		31.0	18.2	70.8
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		85.0		27.0	24.0	57.0
Max Q Clear Time (g_c+I1), s		2.0		18.0	13.2	21.2
Green Ext Time (p_c), s		6.1		2.6	1.1	5.4

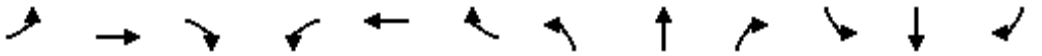
Intersection Summary		
HCM 6th Ctrl Delay		21.0
HCM 6th LOS		C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	670	631	0	0	542	378	222	2	141	0	0	0
Future Volume (vph)	670	631	0	0	542	378	222	2	141	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	60			100			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		387			489			1198			782	
Travel Time (s)		5.9			7.4			18.2			11.8	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)												
Turn Type	Prot	NA			NA		Perm	NA				
Protected Phases	5	2			6			8				
Permitted Phases							8					
Detector Phase	5	2			6		8	8				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		4.0	4.0				
Minimum Split (s)	8.0	26.0			26.0		26.0	26.0				
Total Split (s)	35.0	79.0			44.0		41.0	41.0				
Total Split (%)	29.2%	65.8%			36.7%		34.2%	34.2%				
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0				
All-Red Time (s)	1.0	1.0			1.0		1.0	1.0				
Lost Time Adjust (s)	0.0	0.0			0.0			0.0				
Total Lost Time (s)	4.0	4.0			4.0			4.0				
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?	Yes				Yes							
Recall Mode	None	C-Max			C-Max		Max	Max				

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 9: I-15 NB Ramps & El Cerrito Rd.



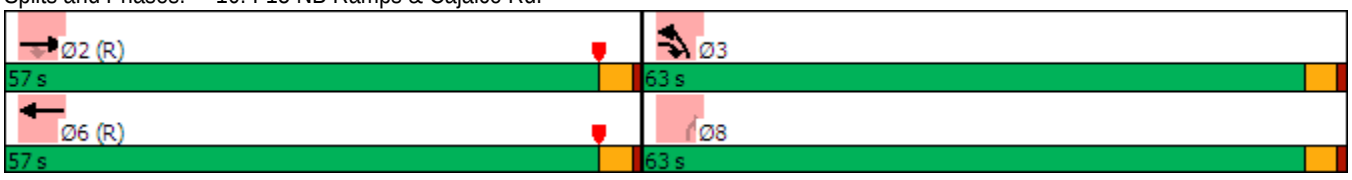


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	670	631	0	0	542	378	222	2	141	0	0	0
Future Volume (veh/h)	670	631	0	0	542	378	222	2	141	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
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	1870	1870	0	0	1870	1870	1900	1870	1900			
Adj Flow Rate, veh/h	798	751	0	0	645	450	264	2	168			
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	855	1169	0	0	722	503	319	2	203			
Arrive On Green	0.40	1.00	0.00	0.00	0.35	0.35	0.31	0.31	0.31			
Sat Flow, veh/h	3563	1870	0	0	2053	1430	1034	8	658			
Grp Volume(v), veh/h	798	751	0	0	587	508	434	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1870	1613	1700	0	0			
Q Serve(g_s), s	25.7	0.0	0.0	0.0	35.6	35.7	28.4	0.0	0.0			
Cycle Q Clear(g_c), s	25.7	0.0	0.0	0.0	35.6	35.7	28.4	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.89	0.61		0.39			
Lane Grp Cap(c), veh/h	855	1169	0	0	658	567	524	0	0			
V/C Ratio(X)	0.93	0.64	0.00	0.00	0.89	0.90	0.83	0.00	0.00			
Avail Cap(c_a), veh/h	920	1169	0	0	658	567	524	0	0			
HCM Platoon Ratio	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.38	0.38	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	35.0	0.0	0.0	0.0	36.8	36.8	38.5	0.0	0.0			
Incr Delay (d2), s/veh	7.1	1.0	0.0	0.0	16.9	19.3	14.0	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	9.8	0.3	0.0	0.0	18.6	16.4	13.4	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.1	1.0	0.0	0.0	53.7	56.1	52.5	0.0	0.0			
LnGrp LOS	D	A	A	A	D	E	D	A	A			
Approach Vol, veh/h		1549			1095			434				
Approach Delay, s/veh		22.2			54.8			52.5				
Approach LOS		C			D			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		79.0			32.8	46.2		41.0				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		75.0			31.0	40.0		37.0				
Max Q Clear Time (g_c+I1), s		2.0			27.7	37.7		30.4				
Green Ext Time (p_c), s		5.7			1.1	1.4		1.4				
Intersection Summary												
HCM 6th Ctrl Delay			38.1									
HCM 6th LOS			D									

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	637	784	0	1652	232	50
Future Volume (vph)	637	784	0	1652	232	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		330	0		500	500
Storage Lanes		0	0		0	0
Taper Length (ft)			25		130	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	45	
Link Distance (ft)	293			191	332	
Travel Time (s)	4.4			2.9	5.0	
Confl. Peds. (#/hr)						5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	0%	2%	2%	2%
Shared Lane Traffic (%)						
Turn Type	NA	pm+ov		NA	Prot	Perm
Protected Phases	2	3		6	3	
Permitted Phases		2				8
Detector Phase	2	3		6	3	8
Switch Phase						
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	23.7	8.5		30.7	8.5	8.5
Total Split (s)	57.0	63.0		57.0	63.0	63.0
Total Split (%)	47.5%	52.5%		47.5%	52.5%	52.5%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	Max		C-Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 95 (79%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	

Splits and Phases: 10: I-15 NB Ramps & Cajalco Rd.





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	637	784	0	1652	232	50
Future Volume (veh/h)	637	784	0	1652	232	50
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	671	825	0	1739	244	53
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	2255	1479	0	2842	1699	1372
Arrive On Green	0.44	0.44	0.00	0.44	0.49	0.49
Sat Flow, veh/h	5274	1585	0	6958	3456	2790
Grp Volume(v), veh/h	671	825	0	1739	244	53
Grp Sat Flow(s),veh/h/ln	1702	1585	0	1609	1728	1395
Q Serve(g_s), s	10.1	8.7	0.0	24.8	4.6	1.2
Cycle Q Clear(g_c), s	10.1	8.7	0.0	24.8	4.6	1.2
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2255	1479	0	2842	1699	1372
V/C Ratio(X)	0.30	0.56	0.00	0.61	0.14	0.04
Avail Cap(c_a), veh/h	2255	1479	0	2842	1699	1372
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	0.6	0.0	25.6	16.7	15.8
Incr Delay (d2), s/veh	0.3	1.5	0.0	1.0	0.2	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	3.9	0.6	0.0	9.1	1.8	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.9	2.1	0.0	26.6	16.9	15.9
LnGrp LOS	C	A	A	C	B	B
Approach Vol, veh/h	1496			1739	297	
Approach Delay, s/veh	11.0			26.6	16.7	
Approach LOS	B			C	B	

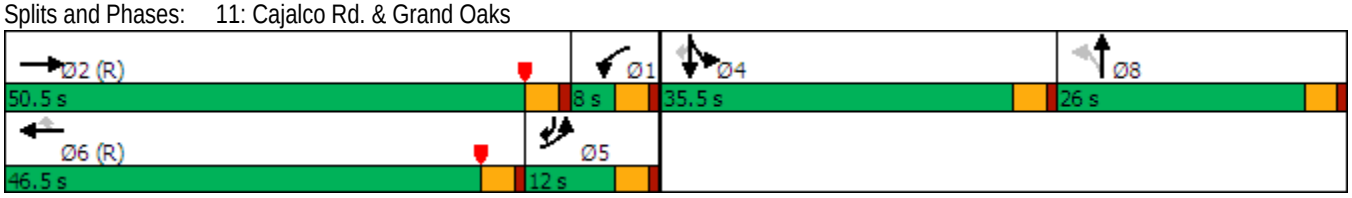
Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	57.0			57.0	63.0
Change Period (Y+Rc), s	4.0			4.0	4.0
Max Green Setting (Gmax), s	53.0			53.0	59.0
Max Q Clear Time (g_c+I1), s	12.1			26.8	6.6
Green Ext Time (p_c), s	9.7			10.3	1.4

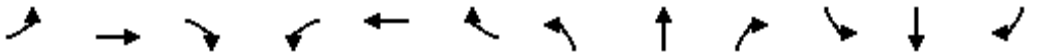
Intersection Summary	
HCM 6th Ctrl Delay	19.2
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	502	1	1	1509	88	1	1	1	29	1	116
Future Volume (vph)	185	502	1	1	1509	88	1	1	1	29	1	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	130		130	0		0	200		0
Storage Lanes	2		0	1		1	0		0	1		2
Taper Length (ft)	180			110			100			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		602			570			544			904	
Travel Time (s)		9.1			8.6			8.2			13.7	
Confl. Peds. (#/hr)						5				5		
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Split	NA	pm+ov
Protected Phases	5	2		1	6			8		4	4	5
Permitted Phases						6	8					4
Detector Phase	5	2		1	6	6	8	8		4	4	5
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	23.2		8.0	30.7	30.7	26.0	26.0		35.5	35.5	8.5
Total Split (s)	12.0	50.5		8.0	46.5	46.5	26.0	26.0		35.5	35.5	12.0
Total Split (%)	10.0%	42.1%		6.7%	38.8%	38.8%	21.7%	21.7%		29.6%	29.6%	10.0%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag	Lag	Lead		Lag	Lead	Lead						Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		Max	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 91 (76%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	

Splits and Phases: 11: Cajalco Rd. & Grand Oaks





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	185	502	1	1	1509	88	1	1	1	29	1	116
Future Volume (veh/h)	185	502	1	1	1509	88	1	1	1	29	1	116
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		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	201	546	1	1	1640	96	1	1	1	32	1	126
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	853	2039	4	380	1808	559	2	2	2	454	14	1417
Arrive On Green	0.25	0.39	0.39	0.21	0.35	0.35	0.00	0.00	0.00	0.26	0.26	0.26
Sat Flow, veh/h	3456	5263	10	1781	5106	1578	579	579	579	1730	54	2774
Grp Volume(v), veh/h	201	353	194	1	1640	96	3	0	0	33	0	126
Grp Sat Flow(s),veh/h/ln	1728	1702	1869	1781	1702	1578	1737	0	0	1784	0	1387
Q Serve(g_s), s	5.6	8.5	8.5	0.1	36.7	5.0	0.2	0.0	0.0	1.7	0.0	0.0
Cycle Q Clear(g_c), s	5.6	8.5	8.5	0.1	36.7	5.0	0.2	0.0	0.0	1.7	0.0	0.0
Prop In Lane	1.00		0.01	1.00		1.00	0.33		0.33	0.97		1.00
Lane Grp Cap(c), veh/h	853	1319	724	380	1808	559	6	0	0	468	0	1417
V/C Ratio(X)	0.24	0.27	0.27	0.00	0.91	0.17	0.54	0.00	0.00	0.07	0.00	0.09
Avail Cap(c_a), veh/h	853	1319	724	380	1808	559	318	0	0	468	0	1417
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	1.00
Uniform Delay (d), s/veh	36.1	25.1	25.1	37.1	36.9	26.6	59.7	0.0	0.0	33.2	0.0	15.1
Incr Delay (d2), s/veh	0.1	0.5	0.9	0.0	8.1	0.7	64.2	0.0	0.0	0.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	3.4	3.8	0.0	15.8	1.9	0.2	0.0	0.0	0.7	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.3	25.6	26.0	37.1	45.0	27.3	123.9	0.0	0.0	33.5	0.0	15.3
LnGrp LOS	D	C	C	D	D	C	F	A	A	C	A	B
Approach Vol, veh/h		748			1737			3			159	
Approach Delay, s/veh		28.6			44.0			123.9			19.0	
Approach LOS		C			D			F			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	29.6	50.5		35.5	33.6	46.5		4.4				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	4.0	46.5		31.5	8.0	42.5		22.0				
Max Q Clear Time (g_c+I1), s	2.1	10.5		3.7	7.6	38.7		2.2				
Green Ext Time (p_c), s	0.0	2.2		0.7	0.0	2.8		0.0				

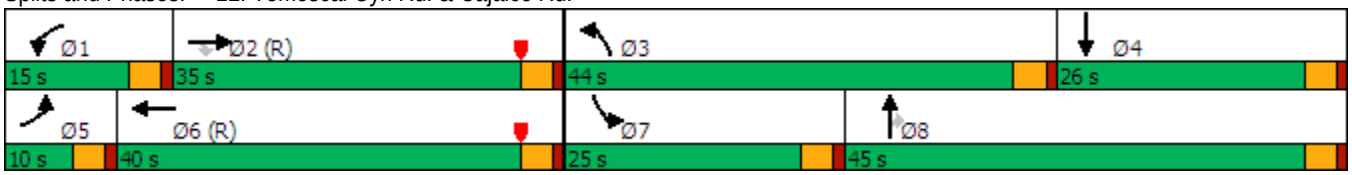
Intersection Summary			
HCM 6th Ctrl Delay		38.2	
HCM 6th LOS		D	

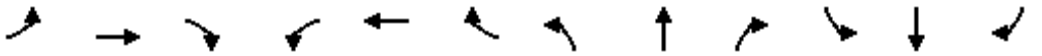
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	278	222	108	536	217	1022	808	394	42	50	39
Future Volume (vph)	30	278	222	108	536	217	1022	808	394	42	50	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	16	12	12	16	12	12	12
Storage Length (ft)	300		200	450		200	300		325	200		200
Storage Lanes	1		0	1		0	2		1	1		0
Taper Length (ft)	180			180			180			180		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		464			943			1167			1000	
Travel Time (s)		7.0			14.3			17.7			15.2	
Confl. Peds. (#/hr)			5			5						5
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	10.0	26.0	26.0	10.0	40.0		10.0	26.0	26.0	25.0	26.0	
Total Split (s)	10.0	35.0	35.0	15.0	40.0		44.0	45.0	45.0	25.0	26.0	
Total Split (%)	8.3%	29.2%	29.2%	12.5%	33.3%		36.7%	37.5%	37.5%	20.8%	21.7%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	Max	Max	None	Max	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 105
Control Type: Actuated-Coordinated

Splits and Phases: 12: Temescal Cyn Rd. & Cajalco Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	278	222	108	536	217	1022	808	394	42	50	39
Future Volume (veh/h)	30	278	222	108	536	217	1022	808	394	42	50	39
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		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1945	1870	1870	1945	1870	1870	1870
Adj Flow Rate, veh/h	31	287	229	111	553	224	1054	833	406	43	52	40
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	39	529	446	136	1214	477	1120	1691	785	56	367	254
Arrive On Green	0.02	0.28	0.28	0.08	0.34	0.34	0.32	0.48	0.48	0.03	0.18	0.18
Sat Flow, veh/h	1781	1870	1577	1781	3597	1415	3456	3554	1648	1781	2002	1383
Grp Volume(v), veh/h	31	287	229	111	522	255	1054	833	406	43	45	47
Grp Sat Flow(s),veh/h/ln	1781	1870	1577	1781	1702	1608	1728	1777	1648	1781	1777	1608
Q Serve(g_s), s	2.1	15.6	14.6	7.4	14.4	15.0	35.6	19.3	20.5	2.9	2.6	2.9
Cycle Q Clear(g_c), s	2.1	15.6	14.6	7.4	14.4	15.0	35.6	19.3	20.5	2.9	2.6	2.9
Prop In Lane	1.00		1.00	1.00		0.88	1.00		1.00	1.00		0.86
Lane Grp Cap(c), veh/h	39	529	446	136	1149	543	1120	1691	785	56	326	295
V/C Ratio(X)	0.79	0.54	0.51	0.81	0.45	0.47	0.94	0.49	0.52	0.77	0.14	0.16
Avail Cap(c_a), veh/h	89	529	446	163	1149	543	1152	1691	785	312	326	295
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	58.4	36.4	36.1	54.6	31.1	31.3	39.5	21.5	21.9	57.7	41.1	41.2
Incr Delay (d2), s/veh	29.1	4.0	4.2	22.8	1.3	2.9	14.5	1.0	2.4	19.5	0.9	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	7.5	6.0	4.1	5.9	6.0	16.7	7.8	8.0	1.6	1.2	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	87.6	40.4	40.3	77.3	32.4	34.2	53.9	22.6	24.3	77.2	42.0	42.3
LnGrp LOS	F	D	D	E	C	C	D	C	C	E	D	D
Approach Vol, veh/h		547			888			2293			135	
Approach Delay, s/veh		43.0			38.5			37.3			53.3	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	37.9	42.9	26.0	6.6	44.5	7.8	61.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	31.0	40.0	22.0	6.0	36.0	21.0	41.0
Max Q Clear Time (g_c+I1), s	9.4	17.6	37.6	4.9	4.1	17.0	4.9	22.5
Green Ext Time (p_c), s	0.0	1.7	1.3	0.2	0.0	3.2	0.1	5.6

Intersection Summary	
HCM 6th Ctrl Delay	38.9
HCM 6th LOS	D

Notes

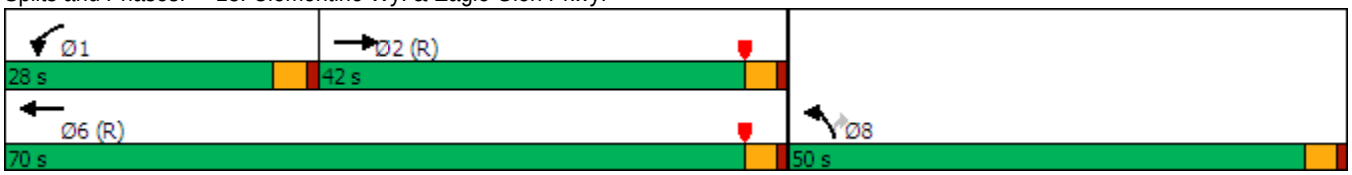
User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	298	10	120	182	10	363
Future Volume (vph)	298	10	120	182	10	363
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	300		150	0
Storage Lanes		0	1		1	1
Taper Length (ft)			60		90	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	45	
Link Distance (ft)	366			1267	734	
Travel Time (s)	5.5			19.2	11.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	NA		Prot	NA	Prot	Perm
Protected Phases	2		1	6	8	
Permitted Phases						8
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	26.0		8.0	26.0	26.0	26.0
Total Split (s)	42.0		28.0	70.0	50.0	50.0
Total Split (%)	35.0%		23.3%	58.3%	41.7%	41.7%
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	C-Max		None	C-Max	Max	Max

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 86 (72%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 13: Clementine Wy. & Eagle Glen Pkwy.

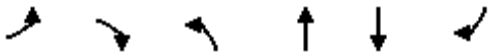




Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	298	10	120	182	10	363
Future Volume (veh/h)	298	10	120	182	10	363
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	314	11	126	192	11	382
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1506	53	155	1955	683	608
Arrive On Green	0.43	0.43	0.09	0.55	0.38	0.38
Sat Flow, veh/h	3596	122	1781	3647	1781	1585
Grp Volume(v), veh/h	159	166	126	192	11	382
Grp Sat Flow(s),veh/h/ln	1777	1848	1781	1777	1781	1585
Q Serve(g_s), s	6.7	6.8	8.3	3.1	0.5	23.5
Cycle Q Clear(g_c), s	6.7	6.8	8.3	3.1	0.5	23.5
Prop In Lane		0.07	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	764	795	155	1955	683	608
V/C Ratio(X)	0.21	0.21	0.82	0.10	0.02	0.63
Avail Cap(c_a), veh/h	764	795	356	1955	683	608
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.97	0.97	1.00	1.00
Uniform Delay (d), s/veh	21.4	21.4	53.8	12.8	23.0	30.1
Incr Delay (d2), s/veh	0.6	0.6	9.6	0.1	0.0	4.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	3.0	4.1	1.2	0.2	9.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.0	22.0	63.5	12.9	23.0	34.9
LnGrp LOS	C	C	E	B	C	C
Approach Vol, veh/h	325			318	393	
Approach Delay, s/veh	22.0			33.0	34.6	
Approach LOS	C			C	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	14.4	55.6				70.0	50.0
Change Period (Y+Rc), s	4.0	4.0				4.0	4.0
Max Green Setting (Gmax), s	24.0	38.0				66.0	46.0
Max Q Clear Time (g_c+I1), s	10.3	8.8				5.1	25.5
Green Ext Time (p_c), s	0.2	1.7				1.2	1.3

Intersection Summary			
HCM 6th Ctrl Delay		30.2	
HCM 6th LOS		C	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	434	1	1	86	28	126
Future Volume (vph)	434	1	1	86	28	126
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			100
Storage Lanes	1	0	0			0
Taper Length (ft)	100		100			
Link Speed (mph)	45			45	45	
Link Distance (ft)	1253			542	608	
Travel Time (s)	19.0			8.2	9.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	5.3
Intersection LOS	A

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	458	92	162
Demand Flow Rate, veh/h	467	94	166
Vehicles Circulating, veh/h	30	466	1
Vehicles Exiting, veh/h	137	31	559
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	6.0	5.4	3.6
Approach LOS	A	A	A

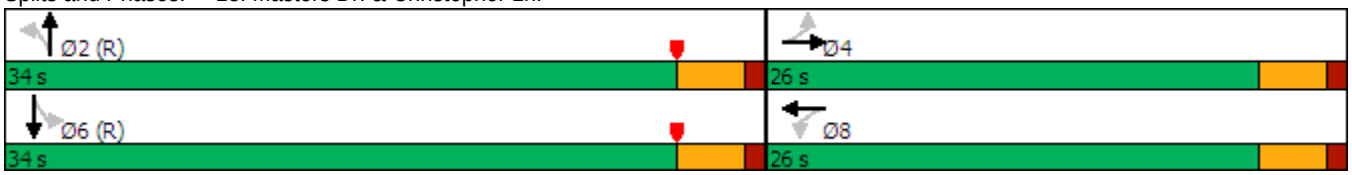
Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	467	94	166
Cap Entry Lane, veh/h	1338	858	1378
Entry HV Adj Factor	0.981	0.981	0.978
Flow Entry, veh/h	458	92	162
Cap Entry, veh/h	1312	841	1349
V/C Ratio	0.349	0.110	0.120
Control Delay, s/veh	6.0	5.4	3.6
LOS	A	A	A
95th %tile Queue, veh	2	0	0

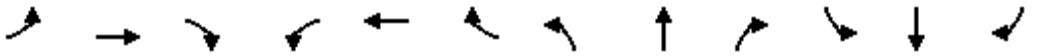
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	12	26	12	5	14	93	508	88	7	279	4
Future Volume (vph)	18	12	26	12	5	14	93	508	88	7	279	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		237			740			933			680	
Travel Time (s)		5.4			16.8			18.2			13.2	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Total Split (s)	26.0	26.0		26.0	26.0		34.0	34.0		34.0	34.0	
Total Split (%)	43.3%	43.3%		43.3%	43.3%		56.7%	56.7%		56.7%	56.7%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 18: Masters Dr. & Christopher Ln.





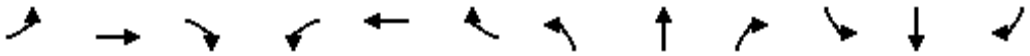
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	12	26	12	5	14	93	508	88	7	279	4
Future Volume (veh/h)	18	12	26	12	5	14	93	508	88	7	279	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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	24	16	35	16	7	19	124	677	117	9	372	5
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	110	30	53	118	29	54	812	1238	214	557	1467	20
Arrive On Green	0.07	0.07	0.07	0.07	0.07	0.07	0.80	0.80	0.80	0.53	0.53	0.53
Sat Flow, veh/h	447	426	764	507	421	767	1006	1554	268	684	1841	25
Grp Volume(v), veh/h	75	0	0	42	0	0	124	0	794	9	0	377
Grp Sat Flow(s),veh/h/ln	1637	0	0	1695	0	0	1006	0	1822	684	0	1866
Q Serve(g_s), s	1.2	0.0	0.0	0.0	0.0	0.0	2.6	0.0	9.4	0.5	0.0	6.5
Cycle Q Clear(g_c), s	2.6	0.0	0.0	1.4	0.0	0.0	9.2	0.0	9.4	9.9	0.0	6.5
Prop In Lane	0.32		0.47	0.38		0.45	1.00		0.15	1.00		0.01
Lane Grp Cap(c), veh/h	194	0	0	201	0	0	812	0	1452	557	0	1487
V/C Ratio(X)	0.39	0.00	0.00	0.21	0.00	0.00	0.15	0.00	0.55	0.02	0.00	0.25
Avail Cap(c_a), veh/h	658	0	0	654	0	0	812	0	1452	557	0	1487
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.94	0.00	0.94
Uniform Delay (d), s/veh	27.1	0.0	0.0	26.6	0.0	0.0	3.3	0.0	2.2	7.9	0.0	4.4
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.5	0.0	0.0	0.4	0.0	1.5	0.0	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	0.6	0.0	0.0	0.4	0.0	1.0	0.1	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.4	0.0	0.0	27.1	0.0	0.0	3.7	0.0	3.7	7.9	0.0	4.8
LnGrp LOS	C	A	A	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		75			42			918			386	
Approach Delay, s/veh		28.4			27.1			3.7			4.8	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		51.8		8.2		51.8		8.2				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		30.0		22.0		30.0		22.0				
Max Q Clear Time (g_c+I1), s		11.4		4.6		11.9		3.4				
Green Ext Time (p_c), s		6.2		0.3		2.1		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			6.0									
HCM 6th LOS			A									

Notes

User approved pedestrian interval to be less than phase max green.



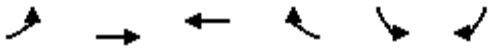
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	12	26	12	5	14	93	508	88	7	279	4
Future Volume (vph)	18	12	26	12	5	14	93	508	88	7	279	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	100			100			60			60		
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		237			740			933			680	
Travel Time (s)		5.4			16.8			18.2			13.2	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)												
Sign Control		Yield			Yield			Yield			Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	75	42	918	386
Demand Flow Rate, veh/h	76	42	936	393
Vehicles Circulating, veh/h	404	841	49	149
Vehicles Exiting, veh/h	138	144	431	734
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.8	7.0	13.0	6.3
Approach LOS	A	A	B	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	76	42	936	393
Cap Entry Lane, veh/h	914	585	1313	1185
Entry HV Adj Factor	0.983	0.997	0.981	0.981
Flow Entry, veh/h	75	42	918	386
Cap Entry, veh/h	898	583	1288	1163
V/C Ratio	0.083	0.072	0.713	0.332
Control Delay, s/veh	4.8	7.0	13.0	6.3
LOS	A	A	B	A
95th %tile Queue, veh	0	0	7	1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	1	301	586	7	12	22
Future Volume (vph)	1	301	586	7	12	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	60				100	
Link Speed (mph)		35	35		30	
Link Distance (ft)		1212	796		251	
Travel Time (s)		23.6	15.5		5.7	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

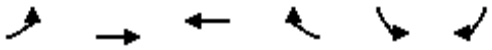
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	301	586	7	12	22
Future Vol, veh/h	1	301	586	7	12	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	120	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	386	751	9	15	28

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	760	0	-	0	1144	756
Stage 1	-	-	-	-	756	-
Stage 2	-	-	-	-	388	-
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	852	-	-	-	221	408
Stage 1	-	-	-	-	464	-
Stage 2	-	-	-	-	686	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	852	-	-	-	221	408
Mov Cap-2 Maneuver	-	-	-	-	221	-
Stage 1	-	-	-	-	464	-
Stage 2	-	-	-	-	686	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	852	-	-	-	314
HCM Lane V/C Ratio	0.002	-	-	-	0.139
HCM Control Delay (s)	9.2	-	-	-	18.3
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.5



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	1	301	586	7	12	22
Future Volume (vph)	1	301	586	7	12	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	60				100	
Link Speed (mph)		35	35		30	
Link Distance (ft)		1212	796		251	
Travel Time (s)		23.6	15.5		5.7	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Shared Lane Traffic (%)						
Sign Control		Yield	Yield		Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

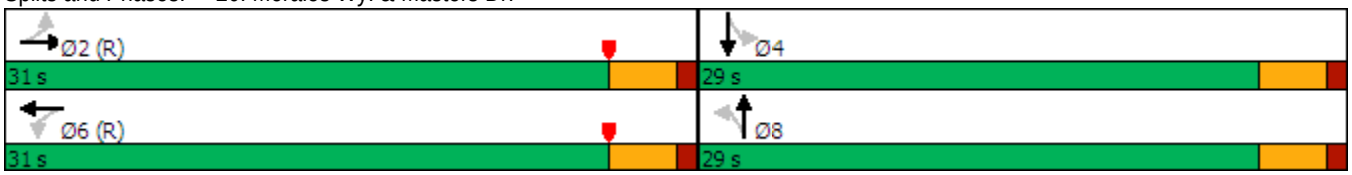
Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	387	760	43
Demand Flow Rate, veh/h	395	775	44
Vehicles Circulating, veh/h	15	1	766
Vehicles Exiting, veh/h	795	409	10
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.3	8.8	6.6
Approach LOS	A	A	A

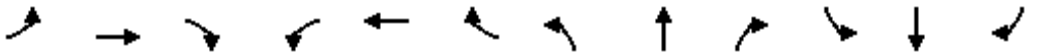
Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	395	775	44
Cap Entry Lane, veh/h	1359	1378	632
Entry HV Adj Factor	0.980	0.981	0.977
Flow Entry, veh/h	387	760	43
Cap Entry, veh/h	1332	1352	617
V/C Ratio	0.291	0.562	0.070
Control Delay, s/veh	5.3	8.8	6.6
LOS	A	A	A
95th %tile Queue, veh	1	4	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	217	92	35	350	2	189	2	57	5	1	4
Future Volume (vph)	1	217	92	35	350	2	189	2	57	5	1	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	60			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			30			45	
Link Distance (ft)		1243			906			626			709	
Travel Time (s)		24.2			17.6			14.2			10.7	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Total Split (s)	31.0	31.0		31.0	31.0		29.0	29.0		29.0	29.0	
Total Split (%)	51.7%	51.7%		51.7%	51.7%		48.3%	48.3%		48.3%	48.3%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		Max	Max		Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: Morales Wy. & Masters Dr.

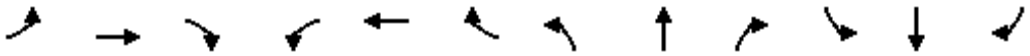




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	217	92	35	350	2	189	2	57	5	1	4
Future Volume (veh/h)	1	217	92	35	350	2	189	2	57	5	1	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		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	1	258	110	42	417	2	225	2	68	6	1	5
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	402	560	239	430	837	4	555	18	140	383	83	268
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	968	1244	531	1014	1860	9	1078	44	336	703	198	644
Grp Volume(v), veh/h	1	0	368	42	0	419	295	0	0	12	0	0
Grp Sat Flow(s),veh/h/ln	968	0	1775	1014	0	1869	1458	0	0	1545	0	0
Q Serve(g_s), s	0.0	0.0	8.6	1.8	0.0	9.5	8.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.6	0.0	8.6	10.4	0.0	9.5	8.8	0.0	0.0	0.2	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.00	0.76		0.23	0.50		0.42
Lane Grp Cap(c), veh/h	402	0	799	430	0	841	713	0	0	734	0	0
V/C Ratio(X)	0.00	0.00	0.46	0.10	0.00	0.50	0.41	0.00	0.00	0.02	0.00	0.00
Avail Cap(c_a), veh/h	402	0	799	430	0	841	713	0	0	734	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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.1	0.0	11.4	15.1	0.0	11.7	12.7	0.0	0.0	10.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.9	0.5	0.0	2.1	1.8	0.0	0.0	0.0	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	0.0	0.0	3.2	0.4	0.0	3.8	2.9	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.1	0.0	13.4	15.5	0.0	13.8	14.5	0.0	0.0	10.3	0.0	0.0
LnGrp LOS	B	A	B	B	A	B	B	A	A	B	A	A
Approach Vol, veh/h		369			461			295			12	
Approach Delay, s/veh		13.4			14.0			14.5			10.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		31.0		29.0		31.0		29.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		27.0		25.0		27.0		25.0				
Max Q Clear Time (g_c+I1), s		11.6		2.2		12.4		10.8				
Green Ext Time (p_c), s		1.9		0.0		2.3		1.5				

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	217	92	35	350	2	189	2	57	5	1	4
Future Volume (vph)	1	217	92	35	350	2	189	2	57	5	1	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	60			60			100			100		
Link Speed (mph)		35			35			30			45	
Link Distance (ft)		1243			906			626			709	
Travel Time (s)		24.2			17.6			14.2			10.7	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)												
Sign Control		Yield			Yield			Yield			Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	6.7
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	369	461	295	12
Demand Flow Rate, veh/h	376	470	301	12
Vehicles Circulating, veh/h	50	232	270	697
Vehicles Exiting, veh/h	659	338	156	5
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.4	8.1	6.4	5.5
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	376	470	301	12
Cap Entry Lane, veh/h	1311	1089	1048	678
Entry HV Adj Factor	0.981	0.980	0.980	0.998
Flow Entry, veh/h	369	461	295	12
Cap Entry, veh/h	1286	1067	1027	677
V/C Ratio	0.287	0.432	0.287	0.018
Control Delay, s/veh	5.4	8.1	6.4	5.5
LOS	A	A	A	A
95th %tile Queue, veh	1	2	1	0



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	5	70	496	24	76	149
Future Volume (vph)	5	70	496	24	76	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	200	
Storage Lanes	1	0		0	1	
Taper Length (ft)	100				60	
Link Speed (mph)	45		45			45
Link Distance (ft)	302		233			567
Travel Time (s)	4.6		3.5			8.6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	70	496	24	76	149
Future Vol, veh/h	5	70	496	24	76	149
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	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	74	522	25	80	157

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	774	274	0	0	547	0
Stage 1	535	-	-	-	-	-
Stage 2	239	-	-	-	-	-
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	335	724	-	-	1018	-
Stage 1	551	-	-	-	-	-
Stage 2	778	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	309	724	-	-	1018	-
Mov Cap-2 Maneuver	309	-	-	-	-	-
Stage 1	507	-	-	-	-	-
Stage 2	778	-	-	-	-	-

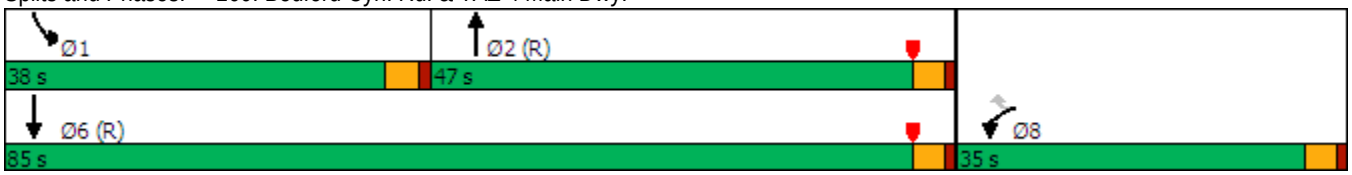
Approach	WB	NB	SB
HCM Control Delay, s	11.1	0	3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	665	1018	-
HCM Lane V/C Ratio	-	-	0.119	0.079	-
HCM Control Delay (s)	-	-	11.1	8.8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0.3	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	7	152	513	54	174	218
Future Volume (vph)	7	152	513	54	174	218
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	200	
Storage Lanes	1	1		0	1	
Taper Length (ft)	100				60	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	45		45			45
Link Distance (ft)	264		567			343
Travel Time (s)	4.0		8.6			5.2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8				
Detector Phase	8	8	2		1	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0		4.0	4.0
Minimum Split (s)	26.0	26.0	26.0		8.0	26.0
Total Split (s)	35.0	35.0	47.0		38.0	85.0
Total Split (%)	29.2%	29.2%	39.2%		31.7%	70.8%
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 160: Bedford Cyn. Rd. & TAZ 4 Main Dwy.





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	7	152	513	54	174	218
Future Volume (veh/h)	7	152	513	54	174	218
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	160	540	57	183	229
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	211	188	2143	226	215	2895
Arrive On Green	0.12	0.12	0.66	0.66	0.12	0.81
Sat Flow, veh/h	1781	1585	3338	342	1781	3647
Grp Volume(v), veh/h	7	160	295	302	183	229
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1809	1781	1777
Q Serve(g_s), s	0.4	11.9	8.1	8.2	12.1	1.5
Cycle Q Clear(g_c), s	0.4	11.9	8.1	8.2	12.1	1.5
Prop In Lane	1.00	1.00		0.19	1.00	
Lane Grp Cap(c), veh/h	211	188	1174	1195	215	2895
V/C Ratio(X)	0.03	0.85	0.25	0.25	0.85	0.08
Avail Cap(c_a), veh/h	460	409	1174	1195	505	2895
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	46.8	51.8	8.3	8.3	51.7	2.2
Incr Delay (d2), s/veh	0.1	10.2	0.5	0.5	9.1	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	0.2	5.1	2.9	3.0	5.8	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	46.9	62.0	8.8	8.8	60.8	2.3
LnGrp LOS	D	E	A	A	E	A
Approach Vol, veh/h	167		597			412
Approach Delay, s/veh	61.4		8.8			28.3
Approach LOS	E		A			C

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	18.5	83.3			101.8	18.2
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0
Max Green Setting (Gmax), s	34.0	43.0			81.0	31.0
Max Q Clear Time (g_c+I1), s	14.1	10.2			3.5	13.9
Green Ext Time (p_c), s	0.4	3.5			1.4	0.4

Intersection Summary	
HCM 6th Ctrl Delay	23.1
HCM 6th LOS	C



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	50	659	6	0	392
Future Volume (vph)	0	50	659	6	0	392
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		45			45
Link Distance (ft)	221		343			351
Travel Time (s)	3.3		5.2			5.3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	50	659	6	0	392
Future Vol, veh/h	0	50	659	6	0	392
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	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	53	694	6	0	413

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	350	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	646	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	646	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

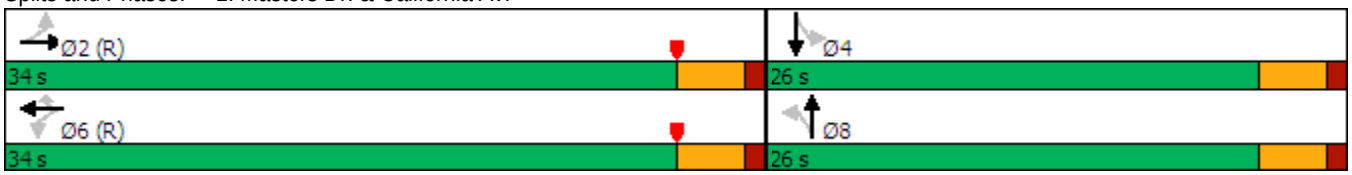
Approach	WB	NB	SB
HCM Control Delay, s	11.1	0	0
HCM LOS	B		

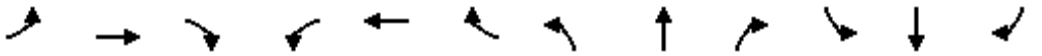
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	646	-
HCM Lane V/C Ratio	-	-	0.081	-
HCM Control Delay (s)	-	-	11.1	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.3	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	112	258	230	63	23	59	109	109	39	245	1
Future Volume (vph)	2	112	258	230	63	23	59	109	109	39	245	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	135		0	130		200	100		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	100			90			60			65		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		495			683			680			695	
Travel Time (s)		7.5			10.3			13.2			13.5	
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
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6		6	8			4		
Detector Phase	2	2		6	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0	26.0	26.0	26.0		26.0	26.0	
Total Split (s)	34.0	34.0		34.0	34.0	34.0	26.0	26.0		26.0	26.0	
Total Split (%)	56.7%	56.7%		56.7%	56.7%	56.7%	43.3%	43.3%		43.3%	43.3%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	Max	Max		Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 32 (53%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 1: Masters Dr. & California Av.





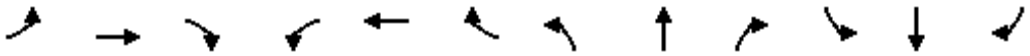
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	112	258	230	63	23	59	109	109	39	245	1
Future Volume (veh/h)	2	112	258	230	63	23	59	109	109	39	245	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		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	2	122	280	250	68	25	64	118	118	42	266	1
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	747	252	579	455	935	793	410	315	315	395	683	3
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.12	0.12	0.12	0.37	0.37	0.37
Sat Flow, veh/h	1303	504	1158	983	1870	1585	1112	858	858	1144	1862	7
Grp Volume(v), veh/h	2	0	402	250	68	25	64	0	236	42	0	267
Grp Sat Flow(s),veh/h/ln	1303	0	1662	983	1870	1585	1112	0	1716	1144	0	1869
Q Serve(g_s), s	0.0	0.0	9.6	13.5	1.1	0.5	3.2	0.0	7.6	1.7	0.0	6.3
Cycle Q Clear(g_c), s	1.2	0.0	9.6	23.1	1.1	0.5	9.5	0.0	7.6	9.3	0.0	6.3
Prop In Lane	1.00		0.70	1.00		1.00	1.00		0.50	1.00		0.00
Lane Grp Cap(c), veh/h	747	0	831	455	935	793	410	0	629	395	0	685
V/C Ratio(X)	0.00	0.00	0.48	0.55	0.07	0.03	0.16	0.00	0.38	0.11	0.00	0.39
Avail Cap(c_a), veh/h	747	0	831	455	935	793	410	0	629	395	0	685
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.98	0.00	0.98	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.1	0.0	9.9	17.5	7.8	7.6	23.8	0.0	20.0	18.0	0.0	14.0
Incr Delay (d2), s/veh	0.0	0.0	2.0	4.7	0.2	0.1	0.8	0.0	1.7	0.5	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	3.0	3.1	0.4	0.1	1.0	0.0	3.3	0.5	0.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.1	0.0	11.9	22.2	7.9	7.7	24.6	0.0	21.7	18.5	0.0	15.7
LnGrp LOS	A	A	B	C	A	A	C	A	C	B	A	B
Approach Vol, veh/h		404			343			300			309	
Approach Delay, s/veh		11.9			18.3			22.3			16.1	
Approach LOS		B			B			C			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		34.0		26.0		34.0		26.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		30.0		22.0		30.0		22.0				
Max Q Clear Time (g_c+I1), s		11.6		11.3		25.1		11.5				
Green Ext Time (p_c), s		2.3		1.2		0.7		1.1				

Intersection Summary												
HCM 6th Ctrl Delay			16.8									
HCM 6th LOS			B									

Notes

User approved pedestrian interval to be less than phase max green.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	6	21	9	23	18	24	193	13	23	497	95
Future Volume (vph)	33	6	21	9	23	18	24	193	13	23	497	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	110		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		537			564			936			637	
Travel Time (s)		10.5			11.0			18.2			12.4	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	24.9
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	33	6	21	9	23	18	24	193	13	23	497	95
Future Vol, veh/h	33	6	21	9	23	18	24	193	13	23	497	95
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	35	6	23	10	25	19	26	208	14	25	534	102
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	10	9.8	10.8	32.8
HCM LOS	A	A	B	D

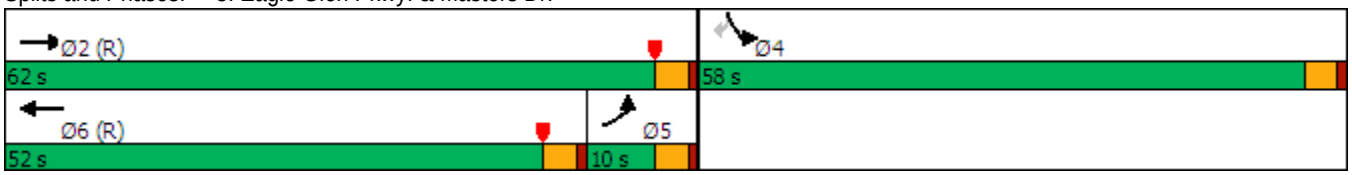
Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	55%	18%	100%	0%
Vol Thru, %	0%	94%	10%	46%	0%	84%
Vol Right, %	0%	6%	35%	36%	0%	16%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	24	206	60	50	23	592
LT Vol	24	0	33	9	23	0
Through Vol	0	193	6	23	0	497
RT Vol	0	13	21	18	0	95
Lane Flow Rate	26	222	65	54	25	637
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.044	0.34	0.111	0.092	0.039	0.884
Departure Headway (Hd)	6.073	5.523	6.18	6.131	5.614	4.998
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	593	656	582	587	632	719
Service Time	3.773	3.223	4.194	4.146	3.399	2.782
HCM Lane V/C Ratio	0.044	0.338	0.112	0.092	0.04	0.886
HCM Control Delay	9.1	11	10	9.8	8.6	33.7
HCM Lane LOS	A	B	A	A	A	D
HCM 95th-tile Q	0.1	1.5	0.4	0.3	0.1	11

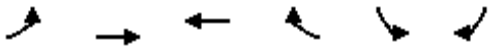
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	35	444	634	248	501	59
Future Volume (vph)	35	444	634	248	501	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	130	0
Storage Lanes	1			0	1	1
Taper Length (ft)	120				60	
Right Turn on Red				Yes		Yes
Link Speed (mph)		45	45		35	
Link Distance (ft)		1267	546		936	
Travel Time (s)		19.2	8.3		18.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases						4
Detector Phase	5	2	6		4	4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0		4.0	4.0
Minimum Split (s)	8.0	26.0	26.0		26.0	26.0
Total Split (s)	10.0	62.0	52.0		58.0	58.0
Total Split (%)	8.3%	51.7%	43.3%		48.3%	48.3%
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0		4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	None

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 92 (77%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 3: Eagle Glen Pkwy. & Masters Dr.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	35	444	634	248	501	59
Future Volume (veh/h)	35	444	634	248	501	59
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	467	667	261	527	62
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	324	2186	998	391	567	504
Arrive On Green	0.06	0.20	0.40	0.40	0.32	0.32
Sat Flow, veh/h	1781	3647	2589	976	1781	1585
Grp Volume(v), veh/h	37	467	475	453	527	62
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1695	1781	1585
Q Serve(g_s), s	2.4	13.1	26.3	26.3	34.4	3.3
Cycle Q Clear(g_c), s	2.4	13.1	26.3	26.3	34.4	3.3
Prop In Lane	1.00			0.58	1.00	1.00
Lane Grp Cap(c), veh/h	324	2186	711	678	567	504
V/C Ratio(X)	0.11	0.21	0.67	0.67	0.93	0.12
Avail Cap(c_a), veh/h	324	2186	711	678	802	713
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.3	23.6	29.5	29.5	39.6	29.0
Incr Delay (d2), s/veh	0.1	0.2	4.9	5.2	13.6	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	1.0	6.2	11.6	11.1	16.8	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	47.4	23.9	34.4	34.7	53.2	29.1
LnGrp LOS	D	C	C	C	D	C
Approach Vol, veh/h		504	928		589	
Approach Delay, s/veh		25.6	34.5		50.6	
Approach LOS		C	C		D	

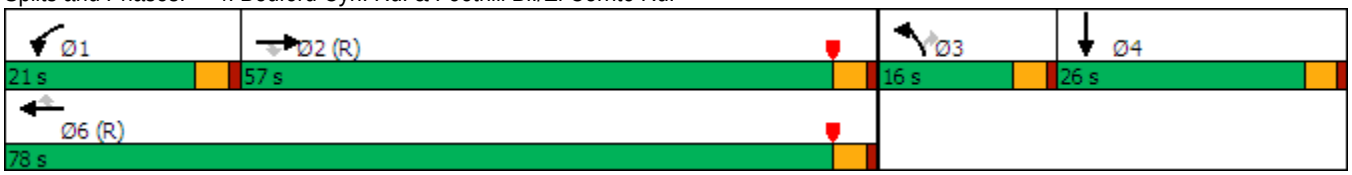
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		77.8		42.2	25.8	52.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		58.0		54.0	6.0	48.0
Max Q Clear Time (g_c+I1), s		15.1		36.4	4.4	28.3
Green Ext Time (p_c), s		3.1		1.8	0.0	5.5

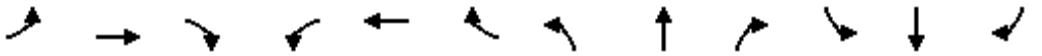
Intersection Summary						
HCM 6th Ctrl Delay			37.0			
HCM 6th LOS			D			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1405	410	200	459	10	146	0	127	0	0	20
Future Volume (vph)	0	1405	410	200	459	10	146	0	127	0	0	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	135		135	0		125	0		0
Storage Lanes	0		1	1		1	1		1	0		0
Taper Length (ft)	100			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			45			40			30	
Link Distance (ft)		351			305			404			218	
Travel Time (s)		6.0			4.6			6.9			5.0	
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
Shared Lane Traffic (%)												
Turn Type		NA	Perm	Prot	NA	Perm	Prot		Perm		NA	
Protected Phases		2		1	6		3				4	
Permitted Phases			2			6			3			
Detector Phase		2	2	1	6	6	3		3		4	
Switch Phase												
Minimum Initial (s)		4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	
Minimum Split (s)		26.0	26.0	8.0	26.0	26.0	8.0		8.0		26.0	
Total Split (s)		57.0	57.0	21.0	78.0	78.0	16.0		16.0		26.0	
Total Split (%)		47.5%	47.5%	17.5%	65.0%	65.0%	13.3%		13.3%		21.7%	
Yellow Time (s)		3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	
All-Red Time (s)		1.0	1.0	1.0	1.0	1.0	1.0		1.0		1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	
Total Lost Time (s)		4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	
Lead/Lag		Lag	Lag	Lead			Lead		Lead		Lag	
Lead-Lag Optimize?		Yes	Yes	Yes			Yes		Yes		Yes	
Recall Mode		C-Max	C-Max	None	C-Max	C-Max	None		None		None	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Bedford Cyn. Rd. & Foothill Bl./El Cerrito Rd.





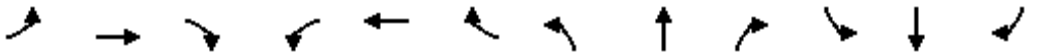
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1405	410	200	459	10	146	0	127	0	0	20
Future Volume (veh/h)	0	1405	410	200	459	10	146	0	127	0	0	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	1870	0	1870	0	1870	1870
Adj Flow Rate, veh/h	0	1434	418	204	468	0	149	0	130	0	0	0
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, %	0	2	2	2	2	2	2	0	2	0	2	2
Cap, veh/h	0	2395	1068	228	2967		175	0	0	0	2	
Arrive On Green	0.00	0.67	0.67	0.26	1.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	3647	1585	1781	3554	1585	1781	149		0	-74814	0
Grp Volume(v), veh/h	0	1434	418	204	468	0	149	83.3		0	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1777	1585	1781	F		0	1870	0
Q Serve(g_s), s	0.0	26.5	14.0	13.3	0.0	0.0	9.9			0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	26.5	14.0	13.3	0.0	0.0	9.9			0.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		1.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	2395	1068	228	2967		175			0	2	
V/C Ratio(X)	0.00	0.60	0.39	0.90	0.16		0.85			0.00	0.00	
Avail Cap(c_a), veh/h	0	2395	1068	252	2967		178			0	343	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.98	0.98	0.00	1.00			0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	10.7	8.7	43.9	0.0	0.0	53.2			0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.1	1.1	28.8	0.1	0.0	30.1			0.0	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
%ile BackOfQ(50%),veh/ln	0.0	9.4	4.6	6.7	0.0	0.0	5.8			0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	11.8	9.7	72.7	0.1	0.0	83.3			0.0	0.0	0.0
LnGrp LOS	A	B	A	E	A		F			A	A	
Approach Vol, veh/h		1852			672	A					0	A
Approach Delay, s/veh		11.4			22.1						0.0	
Approach LOS		B			C							

Timer - Assigned Phs	1	2	3	4		6
Phs Duration (G+Y+Rc), s	19.3	84.9	15.8	0.0		104.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	17.0	53.0	12.0	22.0		74.0
Max Q Clear Time (g_c+I1), s	15.3	28.5	11.9	0.0		2.0
Green Ext Time (p_c), s	0.1	13.5	0.0	0.0		3.1

Intersection Summary	
HCM 6th Ctrl Delay	18.1
HCM 6th LOS	B

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	1	32	1	1	2	42	232	8	8	437	104
Future Volume (vph)	48	1	32	1	1	2	42	232	8	8	437	104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	80		0	0		100
Storage Lanes	0		1	0		0	1		0	0		1
Taper Length (ft)	100			100			80			100		
Link Speed (mph)		45			45			30			45	
Link Distance (ft)		786			169			443			297	
Travel Time (s)		11.9			2.6			10.1			4.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	15
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	48	1	32	1	1	2	42	232	8	8	437	104
Future Vol, veh/h	48	1	32	1	1	2	42	232	8	8	437	104
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	54	1	36	1	1	2	47	261	9	9	491	117
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay	10.1	9.7	11.4	17.6
HCM LOS	B	A	B	C

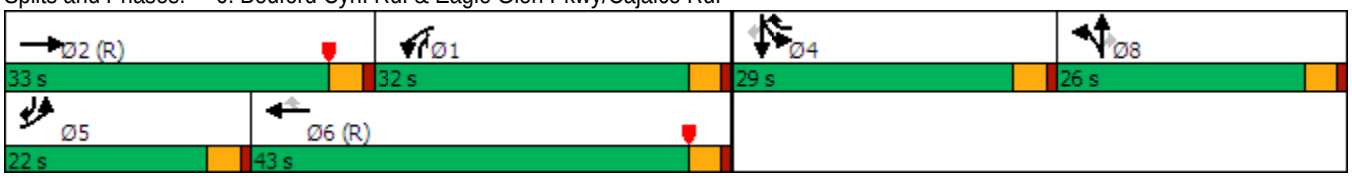
Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	98%	0%	25%	2%	0%
Vol Thru, %	0%	97%	2%	0%	25%	98%	0%
Vol Right, %	0%	3%	0%	100%	50%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	42	240	49	32	4	445	104
LT Vol	42	0	48	0	1	8	0
Through Vol	0	232	1	0	1	437	0
RT Vol	0	8	0	32	2	0	104
Lane Flow Rate	47	270	55	36	4	500	117
Geometry Grp	7	7	7	7	6	7	7
Degree of Util (X)	0.077	0.402	0.11	0.06	0.008	0.715	0.144
Departure Headway (Hd)	5.899	5.372	7.213	6.005	6.665	5.145	4.432
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	603	663	500	600	540	700	803
Service Time	3.677	3.149	4.913	3.705	4.668	2.907	2.193
HCM Lane V/C Ratio	0.078	0.407	0.11	0.06	0.007	0.714	0.146
HCM Control Delay	9.2	11.8	10.8	9.1	9.7	19.9	7.9
HCM Lane LOS	A	B	B	A	A	C	A
HCM 95th-tile Q	0.2	1.9	0.4	0.2	0	6	0.5

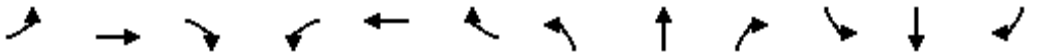
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	772	79	731	665	73	97	78	468	437	122	120
Future Volume (vph)	94	772	79	731	665	73	97	78	468	437	122	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	200		200	150		0	450		0
Storage Lanes	1		0	2		1	1		1	1		1
Taper Length (ft)	90			120			90			180		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		756			737			351			716	
Travel Time (s)		11.5			11.2			5.3			10.8	
Confl. Peds. (#/hr)						5						5
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
Shared Lane Traffic (%)										37%		
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2		1	6	4	8	8	1	4	4	5
Permitted Phases						6			8			4
Detector Phase	5	2		1	6	4	8	8	1	4	4	5
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	23.0		8.0	23.0	23.0	26.0	26.0	8.0	23.0	23.0	8.0
Total Split (s)	22.0	33.0		32.0	43.0	29.0	26.0	26.0	32.0	29.0	29.0	22.0
Total Split (%)	18.3%	27.5%		26.7%	35.8%	24.2%	21.7%	21.7%	26.7%	24.2%	24.2%	18.3%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead		Lag	Lag				Lag			Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			Yes
Recall Mode	None	C-Max		None	C-Max	Max	None	None	None	Max	Max	None

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 6: Bedford Cyn. Rd. & Eagle Glen Pkwy/Cajalco Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	772	79	731	665	73	97	78	468	437	122	120
Future Volume (veh/h)	94	772	79	731	665	73	97	78	468	437	122	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		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	99	813	83	769	700	77	102	82	493	294	360	126
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	125	787	80	1129	1771	1118	160	168	660	371	390	439
Arrive On Green	0.07	0.24	0.24	0.55	0.83	0.83	0.09	0.09	0.09	0.21	0.21	0.21
Sat Flow, veh/h	1781	3255	332	3456	3554	1580	1781	1870	1585	1781	1870	1574
Grp Volume(v), veh/h	99	444	452	769	700	77	102	82	493	294	360	126
Grp Sat Flow(s),veh/h/ln	1781	1777	1811	1728	1777	1580	1781	1870	1585	1781	1870	1574
Q Serve(g_s), s	6.6	29.0	29.0	19.3	5.9	0.6	6.6	5.0	0.0	18.8	22.6	7.5
Cycle Q Clear(g_c), s	6.6	29.0	29.0	19.3	5.9	0.6	6.6	5.0	0.0	18.8	22.6	7.5
Prop In Lane	1.00		0.18	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	125	429	438	1129	1771	1118	160	168	660	371	390	439
V/C Ratio(X)	0.79	1.03	1.03	0.68	0.40	0.07	0.64	0.49	0.75	0.79	0.92	0.29
Avail Cap(c_a), veh/h	267	429	438	1129	1771	1118	327	343	809	371	390	439
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.77	0.77	0.77	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.9	45.5	45.5	22.7	5.5	1.8	52.7	52.0	29.6	45.0	46.6	34.0
Incr Delay (d2), s/veh	10.7	52.3	52.0	1.3	0.5	0.1	4.2	2.2	3.0	15.8	29.9	1.6
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	3.2	18.5	18.8	6.0	1.8	0.4	3.1	2.4	11.9	9.7	13.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.6	97.8	97.5	24.0	6.1	1.8	56.9	54.2	32.7	60.9	76.5	35.6
LnGrp LOS	E	F	F	C	A	A	E	D	C	E	E	D
Approach Vol, veh/h		995			1546			677			780	
Approach Delay, s/veh		94.4			14.8			38.9			64.0	
Approach LOS		F			B			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	43.2	33.0		29.0	12.4	63.8		14.8				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	28.0	29.0		25.0	18.0	39.0		22.0				
Max Q Clear Time (g_c+I1), s	21.3	31.0		24.6	8.6	7.9		8.6				
Green Ext Time (p_c), s	1.7	0.0		0.2	0.2	3.6		2.1				

Intersection Summary		
HCM 6th Ctrl Delay		48.3
HCM 6th LOS		D

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

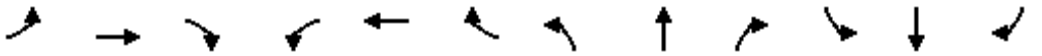
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	567	965	64	473	0	0	0	0	138	35	186
Future Volume (vph)	0	567	965	64	473	0	0	0	0	138	35	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	90		0	0		0	0		525
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	100			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		305			387			1098			1308	
Travel Time (s)		4.6			5.9			16.6			19.8	
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
Shared Lane Traffic (%)												
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Detector Phase		2		1	6					4	4	4
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0					4.0	4.0	4.0
Minimum Split (s)		50.0		30.0	26.0					35.0	35.0	35.0
Total Split (s)		54.0		30.0	84.0					36.0	36.0	36.0
Total Split (%)		45.0%		25.0%	70.0%					30.0%	30.0%	30.0%
Yellow Time (s)		3.0		3.0	3.0					3.0	3.0	3.0
All-Red Time (s)		1.0		1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0						0.0	0.0
Total Lost Time (s)		4.0		4.0	4.0						4.0	4.0
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?		Yes		Yes								
Recall Mode		C-Max		None	C-Max					Max	Max	Max

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 51 (43%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 115
Control Type: Actuated-Coordinated

Splits and Phases: 7: I-15 SB Ramps & El Cerrito Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	567	965	64	473	0	0	0	0	138	35	186
Future Volume (veh/h)	0	567	965	64	473	0	0	0	0	138	35	186
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	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	585	995	66	488	0				142	36	192
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	2	2	2	2	0				2	2	2
Cap, veh/h	0	1040	928	86	2369	0				383	97	423
Arrive On Green	0.00	0.98	0.98	0.06	0.89	0.00				0.27	0.27	0.27
Sat Flow, veh/h	0	1870	1585	1781	3647	0				1435	364	1585
Grp Volume(v), veh/h	0	585	995	66	488	0				178	0	192
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1777	0				1799	0	1585
Q Serve(g_s), s	0.0	2.0	70.2	4.4	2.3	0.0				9.7	0.0	12.1
Cycle Q Clear(g_c), s	0.0	2.0	70.2	4.4	2.3	0.0				9.7	0.0	12.1
Prop In Lane	0.00		1.00	1.00		0.00				0.80		1.00
Lane Grp Cap(c), veh/h	0	1040	928	86	2369	0				480	0	423
V/C Ratio(X)	0.00	0.56	1.07	0.77	0.21	0.00				0.37	0.00	0.45
Avail Cap(c_a), veh/h	0	1040	928	386	2369	0				480	0	423
HCM Platoon Ratio	1.00	1.67	1.67	1.33	1.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.67	0.67	0.98	0.98	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.6	1.4	55.5	2.4	0.0				35.8	0.0	36.7
Incr Delay (d2), s/veh	0.0	1.5	46.3	13.2	0.2	0.0				2.2	0.0	3.5
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	0.8	12.5	2.2	0.7	0.0				4.4	0.0	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	2.1	47.6	68.7	2.6	0.0				38.0	0.0	40.2
LnGrp LOS	A	A	F	E	A	A				D	A	D
Approach Vol, veh/h		1580			554						370	
Approach Delay, s/veh		30.8			10.5						39.2	
Approach LOS		C			B						D	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	9.8	74.2		36.0		84.0						
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0						
Max Green Setting (Gmax), s	26.0	50.0		32.0		80.0						
Max Q Clear Time (g_c+I1), s	6.4	72.2		14.1		4.3						
Green Ext Time (p_c), s	0.1	0.0		1.4		3.3						

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

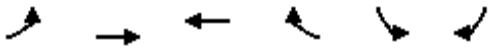
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	581	1095	916	361	328	713
Future Volume (vph)	581	1095	916	361	328	713
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290			250	0	0
Storage Lanes	2			0	2	2
Taper Length (ft)	120				25	
Right Turn on Red				Yes		Yes
Link Speed (mph)		45	45		45	
Link Distance (ft)		737	285		302	
Travel Time (s)		11.2	4.3		4.6	
Confl. Peds. (#/hr)						5
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	23.7	30.7	30.7	8.5	8.5
Total Split (s)	35.0	88.0	53.0	53.0	32.0	32.0
Total Split (%)	29.2%	73.3%	44.2%	44.2%	26.7%	26.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 92 (77%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 8: Cajalco Rd. & I-15 SB Ramps





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	581	1095	916	361	328	713
Future Volume (veh/h)	581	1095	916	361	328	713
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	599	1129	944	372	338	735
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	697	3574	1652	737	806	651
Arrive On Green	0.14	0.47	0.46	0.46	0.23	0.23
Sat Flow, veh/h	3456	5274	3647	1585	3456	2790
Grp Volume(v), veh/h	599	1129	944	372	338	735
Grp Sat Flow(s),veh/h/ln	1728	1702	1777	1585	1728	1395
Q Serve(g_s), s	20.4	16.5	23.2	19.7	10.0	28.0
Cycle Q Clear(g_c), s	20.4	16.5	23.2	19.7	10.0	28.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	697	3574	1652	737	806	651
V/C Ratio(X)	0.86	0.32	0.57	0.50	0.42	1.13
Avail Cap(c_a), veh/h	893	3574	1652	737	806	651
HCM Platoon Ratio	0.67	0.67	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.47	0.47	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.2	13.9	23.4	22.4	39.1	46.0
Incr Delay (d2), s/veh	3.4	0.1	1.4	2.5	1.6	76.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.3	6.8	9.5	7.4	4.3	26.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	53.6	14.1	24.8	24.9	40.7	122.5
LnGrp LOS	D	B	C	C	D	F
Approach Vol, veh/h		1728	1316		1073	
Approach Delay, s/veh		27.8	24.9		96.7	
Approach LOS		C	C		F	

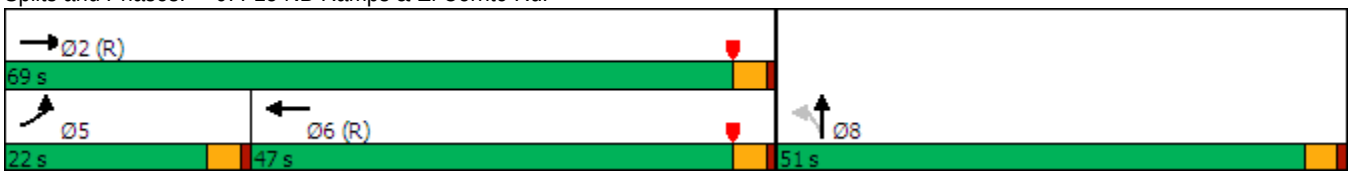
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		88.0		32.0	28.2	59.8
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		84.0		28.0	31.0	49.0
Max Q Clear Time (g_c+I1), s		18.5		30.0	22.4	25.2
Green Ext Time (p_c), s		6.2		0.0	1.9	6.6

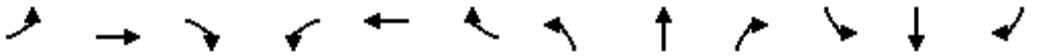
Intersection Summary	
HCM 6th Ctrl Delay	44.8
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	224	481	0	0	239	74	298	6	63	0	0	0
Future Volume (vph)	224	481	0	0	239	74	298	6	63	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	60			100			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		387			489			1198			782	
Travel Time (s)		5.9			7.4			18.2			11.8	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA			NA		Perm	NA				
Protected Phases	5	2			6			8				
Permitted Phases							8					
Detector Phase	5	2			6		8	8				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		4.0	4.0				
Minimum Split (s)	8.0	26.0			26.0		26.0	26.0				
Total Split (s)	22.0	69.0			47.0		51.0	51.0				
Total Split (%)	18.3%	57.5%			39.2%		42.5%	42.5%				
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0				
All-Red Time (s)	1.0	1.0			1.0		1.0	1.0				
Lost Time Adjust (s)	0.0	0.0			0.0			0.0				
Total Lost Time (s)	4.0	4.0			4.0			4.0				
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?	Yes				Yes							
Recall Mode	None	C-Max			C-Max		Max	Max				

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 9: I-15 NB Ramps & El Cerrito Rd.



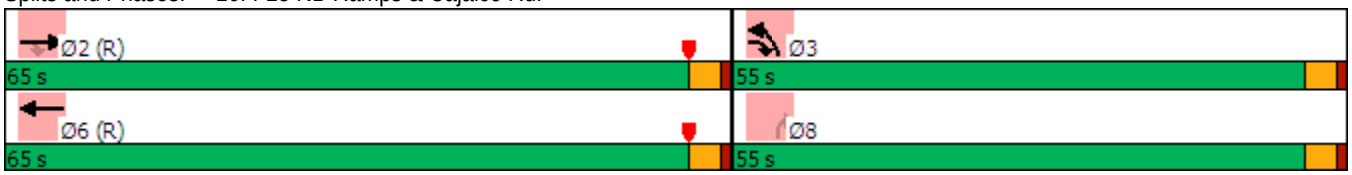


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	224	481	0	0	239	74	298	6	63	0	0	0
Future Volume (veh/h)	224	481	0	0	239	74	298	6	63	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking 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	1870	1870	0	0	1870	1870	1900	1870	1900			
Adj Flow Rate, veh/h	246	529	0	0	263	81	327	7	69			
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	314	1013	0	0	1124	339	555	12	117			
Arrive On Green	0.06	0.36	0.00	0.00	0.42	0.42	0.39	0.39	0.39			
Sat Flow, veh/h	3456	1870	0	0	2784	811	1417	30	299			
Grp Volume(v), veh/h	246	529	0	0	172	172	403	0	0			
Grp Sat Flow(s),veh/h/ln	1728	1870	0	0	1777	1724	1746	0	0			
Q Serve(g_s), s	8.4	26.7	0.0	0.0	7.5	7.8	21.9	0.0	0.0			
Cycle Q Clear(g_c), s	8.4	26.7	0.0	0.0	7.5	7.8	21.9	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.47	0.81		0.17			
Lane Grp Cap(c), veh/h	314	1013	0	0	742	720	684	0	0			
V/C Ratio(X)	0.78	0.52	0.00	0.00	0.23	0.24	0.59	0.00	0.00			
Avail Cap(c_a), veh/h	518	1013	0	0	742	720	684	0	0			
HCM Platoon Ratio	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.52	0.52	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	55.2	26.0	0.0	0.0	22.5	22.6	28.9	0.0	0.0			
Incr Delay (d2), s/veh	2.3	1.0	0.0	0.0	0.7	0.8	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	3.8	12.6	0.0	0.0	3.2	3.2	9.4	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.5	27.0	0.0	0.0	23.3	23.4	32.6	0.0	0.0			
LnGrp LOS	E	C	A	A	C	C	C	A	A			
Approach Vol, veh/h		775			344			403				
Approach Delay, s/veh		36.7			23.3			32.6				
Approach LOS		D			C			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		69.0			14.9	54.1		51.0				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		65.0			18.0	43.0		47.0				
Max Q Clear Time (g_c+I1), s		28.7			10.4	9.8		23.9				
Green Ext Time (p_c), s		3.3			0.5	1.9		2.3				
Intersection Summary												
HCM 6th Ctrl Delay			32.6									
HCM 6th LOS			C									

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	886	537	0	1415	413	268
Future Volume (vph)	886	537	0	1415	413	268
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		330	0		500	500
Storage Lanes		0	0		0	0
Taper Length (ft)			25		130	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	45	
Link Distance (ft)	293			191	332	
Travel Time (s)	4.4			2.9	5.0	
Confl. Peds. (#/hr)						5
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	0%	2%	2%	2%
Shared Lane Traffic (%)						
Turn Type	NA	pm+ov		NA	Prot	Perm
Protected Phases	2	3		6	3	
Permitted Phases		2				8
Detector Phase	2	3		6	3	8
Switch Phase						
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	23.7	8.5		30.7	8.5	8.5
Total Split (s)	65.0	55.0		65.0	55.0	55.0
Total Split (%)	54.2%	45.8%		54.2%	45.8%	45.8%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	Max		C-Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 67 (56%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	

Splits and Phases: 10: I-15 NB Ramps & Cajalco Rd.





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	886	537	0	1415	413	268
Future Volume (veh/h)	886	537	0	1415	413	268
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	923	559	0	1474	430	279
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	2596	1479	0	3271	1469	1186
Arrive On Green	0.51	0.51	0.00	0.51	0.43	0.43
Sat Flow, veh/h	5274	1585	0	6958	3456	2790
Grp Volume(v), veh/h	923	559	0	1474	430	279
Grp Sat Flow(s),veh/h/ln	1702	1585	0	1609	1728	1395
Q Serve(g_s), s	13.0	4.4	0.0	17.5	9.8	7.7
Cycle Q Clear(g_c), s	13.0	4.4	0.0	17.5	9.8	7.7
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2596	1479	0	3271	1469	1186
V/C Ratio(X)	0.36	0.38	0.00	0.45	0.29	0.24
Avail Cap(c_a), veh/h	2596	1479	0	3271	1469	1186
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.7	0.4	0.0	18.8	22.7	22.0
Incr Delay (d2), s/veh	0.4	0.7	0.0	0.5	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	0.3	0.0	6.2	3.9	2.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.1	1.1	0.0	19.3	23.2	22.5
LnGrp LOS	B	A	A	B	C	C
Approach Vol, veh/h	1482			1474	709	
Approach Delay, s/veh	11.7			19.3	22.9	
Approach LOS	B			B	C	

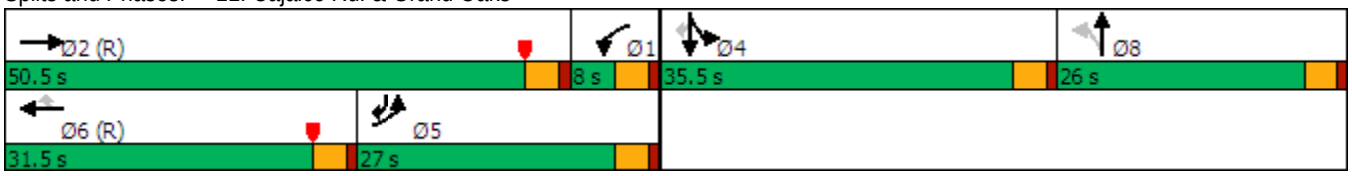
Timer - Assigned Phs	2				6	8
Phs Duration (G+Y+Rc), s	65.0				65.0	55.0
Change Period (Y+Rc), s	4.0				4.0	4.0
Max Green Setting (Gmax), s	61.0				61.0	51.0
Max Q Clear Time (g_c+I1), s	15.0				19.5	11.8
Green Ext Time (p_c), s	8.8				9.0	3.5

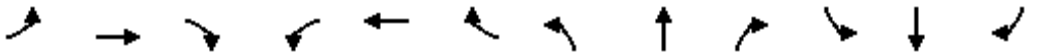
Intersection Summary	
HCM 6th Ctrl Delay	16.9
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	527	627	1	1	850	209	1	1	1	158	1	517
Future Volume (vph)	527	627	1	1	850	209	1	1	1	158	1	517
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	130		130	0		0	200		0
Storage Lanes	2		0	1		1	0		0	1		2
Taper Length (ft)	180			110			100			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		602			570			544			904	
Travel Time (s)		9.1			8.6			8.2			13.7	
Confl. Peds. (#/hr)						5				5		
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Split	NA	pm+ov
Protected Phases	5	2		1	6			8		4	4	5
Permitted Phases						6	8					4
Detector Phase	5	2		1	6	6	8	8		4	4	5
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	23.2		8.0	30.7	30.7	26.0	26.0		35.5	35.5	8.5
Total Split (s)	27.0	50.5		8.0	31.5	31.5	26.0	26.0		35.5	35.5	27.0
Total Split (%)	22.5%	42.1%		6.7%	26.3%	26.3%	21.7%	21.7%		29.6%	29.6%	22.5%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag	Lag	Lead		Lag	Lead	Lead						Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		Max	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 63 (53%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	

Splits and Phases: 11: Cajalco Rd. & Grand Oaks





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	527	627	1	1	850	209	1	1	1	158	1	517
Future Volume (veh/h)	527	627	1	1	850	209	1	1	1	158	1	517
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		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	538	640	1	1	867	213	1	1	1	161	1	528
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1285	2040	3	380	1170	361	2	2	2	465	3	1765
Arrive On Green	0.37	0.39	0.39	0.21	0.23	0.23	0.00	0.00	0.00	0.26	0.26	0.26
Sat Flow, veh/h	3456	5265	8	1781	5106	1575	579	579	579	1771	11	2774
Grp Volume(v), veh/h	538	414	227	1	867	213	3	0	0	162	0	528
Grp Sat Flow(s),veh/h/ln	1728	1702	1869	1781	1702	1575	1737	0	0	1782	0	1387
Q Serve(g_s), s	13.9	10.2	10.2	0.1	18.9	14.5	0.2	0.0	0.0	8.9	0.0	0.0
Cycle Q Clear(g_c), s	13.9	10.2	10.2	0.1	18.9	14.5	0.2	0.0	0.0	8.9	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.33		0.33	0.99		1.00
Lane Grp Cap(c), veh/h	1285	1319	724	380	1170	361	6	0	0	468	0	1765
V/C Ratio(X)	0.42	0.31	0.31	0.00	0.74	0.59	0.54	0.00	0.00	0.35	0.00	0.30
Avail Cap(c_a), veh/h	1285	1319	724	380	1170	361	318	0	0	468	0	1765
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	1.00
Uniform Delay (d), s/veh	28.0	25.6	25.6	37.1	42.9	41.2	59.7	0.0	0.0	35.9	0.0	9.9
Incr Delay (d2), s/veh	0.2	0.6	1.1	0.0	4.2	6.9	64.2	0.0	0.0	2.0	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	4.1	4.6	0.0	8.2	6.1	0.2	0.0	0.0	4.0	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.3	26.2	26.8	37.1	47.2	48.2	123.9	0.0	0.0	37.9	0.0	10.3
LnGrp LOS	C	C	C	D	D	D	F	A	A	D	A	B
Approach Vol, veh/h		1179			1081			3			690	
Approach Delay, s/veh		27.3			47.4			123.9			16.8	
Approach LOS		C			D			F			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	29.6	50.5		35.5	48.6	31.5		4.4				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	4.0	46.5		31.5	23.0	27.5		22.0				
Max Q Clear Time (g_c+I1), s	2.1	12.2		10.9	15.9	20.9		2.2				
Green Ext Time (p_c), s	0.0	2.7		3.5	1.5	2.8		0.0				

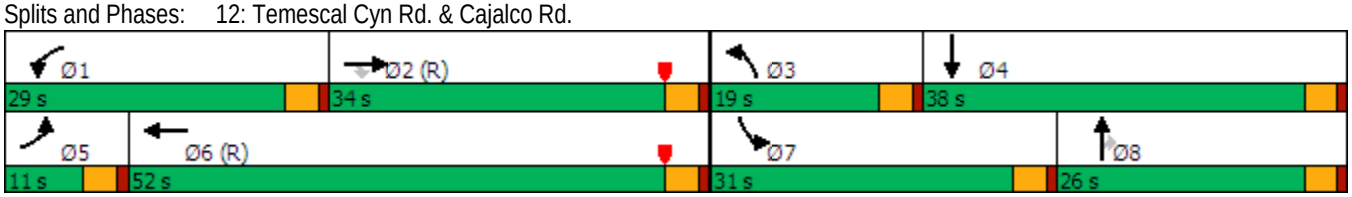
Intersection Summary			
HCM 6th Ctrl Delay		32.3	
HCM 6th LOS		C	

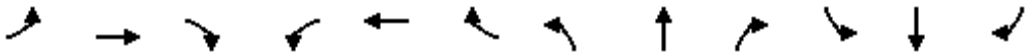
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	386	355	298	632	148	338	215	155	329	616	89
Future Volume (vph)	43	386	355	298	632	148	338	215	155	329	616	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	16	12	12	16	12	12	12
Storage Length (ft)	300		200	105		200	300		325	200		200
Storage Lanes	1		0	1		0	2		1	1		0
Taper Length (ft)	180			180			180			180		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		464			943			1167			1000	
Travel Time (s)		7.0			14.3			17.7			15.2	
Confl. Peds. (#/hr)			5			5						5
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	10.0	26.0	26.0	10.0	40.0		10.0	26.0	26.0	25.0	26.0	
Total Split (s)	11.0	34.0	34.0	29.0	52.0		19.0	26.0	26.0	31.0	38.0	
Total Split (%)	9.2%	28.3%	28.3%	24.2%	43.3%		15.8%	21.7%	21.7%	25.8%	31.7%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	Max	Max	None	Max	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 92 (77%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 105
Control Type: Actuated-Coordinated

Splits and Phases: 12: Temescal Cyn Rd. & Cajalco Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	386	355	298	632	148	338	215	155	329	616	89
Future Volume (veh/h)	43	386	355	298	632	148	338	215	155	329	616	89
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		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1945	1870	1870	1945	1870	1870	1870
Adj Flow Rate, veh/h	44	394	362	304	645	151	345	219	158	336	629	91
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	57	524	442	333	1804	416	402	693	322	364	882	127
Arrive On Green	0.03	0.28	0.28	0.19	0.44	0.44	0.12	0.20	0.20	0.20	0.28	0.28
Sat Flow, veh/h	1781	1870	1577	1781	4144	955	3456	3554	1648	1781	3114	450
Grp Volume(v), veh/h	44	394	362	304	528	268	345	219	158	336	358	362
Grp Sat Flow(s),veh/h/ln	1781	1870	1577	1781	1702	1695	1728	1777	1648	1781	1777	1787
Q Serve(g_s), s	2.9	23.0	25.7	20.1	12.4	12.7	11.8	6.3	10.2	22.2	21.7	21.8
Cycle Q Clear(g_c), s	2.9	23.0	25.7	20.1	12.4	12.7	11.8	6.3	10.2	22.2	21.7	21.8
Prop In Lane	1.00		1.00	1.00		0.56	1.00		1.00	1.00		0.25
Lane Grp Cap(c), veh/h	57	524	442	333	1482	738	402	693	322	364	503	506
V/C Ratio(X)	0.78	0.75	0.82	0.91	0.36	0.36	0.86	0.32	0.49	0.92	0.71	0.71
Avail Cap(c_a), veh/h	104	524	442	371	1482	738	432	693	322	401	503	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	57.7	39.4	40.3	47.8	22.7	22.7	52.0	41.4	43.0	46.8	38.6	38.6
Incr Delay (d2), s/veh	20.0	9.6	15.5	25.0	0.7	1.4	15.0	1.2	5.3	25.3	8.3	8.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	11.6	11.5	10.9	4.9	5.1	5.8	2.8	4.5	12.1	10.3	10.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.7	49.0	55.9	72.8	23.3	24.1	67.1	42.6	48.3	72.1	46.9	47.0
LnGrp LOS	E	D	E	E	C	C	E	D	D	E	D	D
Approach Vol, veh/h		800			1100			722			1056	
Approach Delay, s/veh		53.7			37.2			55.5			54.9	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.4	37.6	18.0	38.0	7.8	56.2	28.6	27.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	25.0	30.0	15.0	34.0	7.0	48.0	27.0	22.0
Max Q Clear Time (g_c+I1), s	22.1	27.7	13.8	23.8	4.9	14.7	24.2	12.2
Green Ext Time (p_c), s	0.3	0.8	0.2	2.1	0.0	3.6	0.4	1.1

Intersection Summary	
HCM 6th Ctrl Delay	49.5
HCM 6th LOS	D

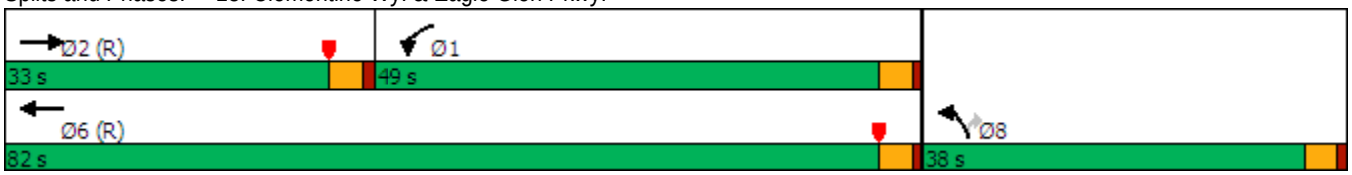
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	243	10	359	334	10	236
Future Volume (vph)	243	10	359	334	10	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	300		150	0
Storage Lanes		0	1		1	1
Taper Length (ft)			60		90	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	45	
Link Distance (ft)	366			1267	734	
Travel Time (s)	5.5			19.2	11.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	NA		Prot	NA	Prot	Perm
Protected Phases	2		1	6	8	
Permitted Phases						8
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	26.0		8.0	26.0	26.0	26.0
Total Split (s)	33.0		49.0	82.0	38.0	38.0
Total Split (%)	27.5%		40.8%	68.3%	31.7%	31.7%
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	C-Max		None	C-Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 30 (25%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 13: Clementine Wy. & Eagle Glen Pkwy.

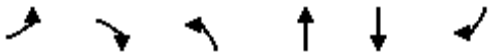




Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	243	10	359	334	10	236
Future Volume (veh/h)	243	10	359	334	10	236
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	256	11	378	352	11	248
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	839	36	668	2310	505	449
Arrive On Green	0.24	0.24	0.38	0.65	0.28	0.28
Sat Flow, veh/h	3565	149	1781	3647	1781	1585
Grp Volume(v), veh/h	131	136	378	352	11	248
Grp Sat Flow(s),veh/h/ln	1777	1844	1781	1777	1781	1585
Q Serve(g_s), s	7.2	7.3	20.2	4.6	0.5	16.0
Cycle Q Clear(g_c), s	7.2	7.3	20.2	4.6	0.5	16.0
Prop In Lane		0.08	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	429	446	668	2310	505	449
V/C Ratio(X)	0.30	0.31	0.57	0.15	0.02	0.55
Avail Cap(c_a), veh/h	429	446	668	2310	505	449
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.87	0.87	1.00	1.00
Uniform Delay (d), s/veh	37.2	37.3	29.8	8.2	31.0	36.5
Incr Delay (d2), s/veh	1.8	1.8	1.0	0.1	0.1	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	3.3	3.4	8.5	1.6	0.2	6.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	39.1	39.0	30.7	8.3	31.1	41.4
LnGrp LOS	D	D	C	A	C	D
Approach Vol, veh/h	267			730	259	
Approach Delay, s/veh	39.0			19.9	40.9	
Approach LOS	D			B	D	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	49.0	33.0				82.0	38.0
Change Period (Y+Rc), s	4.0	4.0				4.0	4.0
Max Green Setting (Gmax), s	45.0	29.0				78.0	34.0
Max Q Clear Time (g_c+I1), s	22.2	9.3				6.6	18.0
Green Ext Time (p_c), s	1.1	1.2				2.3	0.7

Intersection Summary			
HCM 6th Ctrl Delay		28.3	
HCM 6th LOS		C	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	263	1	1	54	95	471
Future Volume (vph)	263	1	1	54	95	471
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			100
Storage Lanes	1	0	0			0
Taper Length (ft)	100		100			
Link Speed (mph)	45			45	45	
Link Distance (ft)	1253			542	608	
Travel Time (s)	19.0			8.2	9.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	6.2
Intersection LOS	A

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	278	58	596
Demand Flow Rate, veh/h	284	59	608
Vehicles Circulating, veh/h	102	283	1
Vehicles Exiting, veh/h	507	103	341
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.0	4.1	7.0
Approach LOS	A	A	A

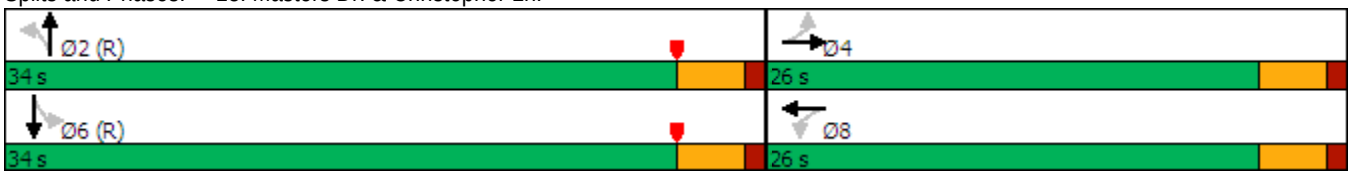
Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	284	59	608
Cap Entry Lane, veh/h	1244	1034	1378
Entry HV Adj Factor	0.979	0.981	0.980
Flow Entry, veh/h	278	58	596
Cap Entry, veh/h	1217	1014	1351
V/C Ratio	0.228	0.057	0.441
Control Delay, s/veh	5.0	4.1	7.0
LOS	A	A	A
95th %tile Queue, veh	1	0	2

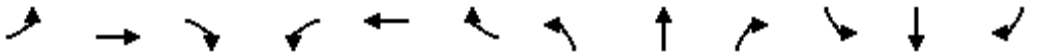
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	2	115	29	1	4	13	269	14	11	712	10
Future Volume (vph)	5	2	115	29	1	4	13	269	14	11	712	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		237			740			933			680	
Travel Time (s)		5.4			16.8			18.2			13.2	
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
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Total Split (s)	26.0	26.0		26.0	26.0		34.0	34.0		34.0	34.0	
Total Split (%)	43.3%	43.3%		43.3%	43.3%		56.7%	56.7%		56.7%	56.7%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 32 (53%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 18: Masters Dr. & Christopher Ln.

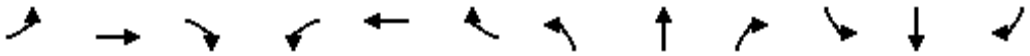




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	2	115	29	1	4	13	269	14	11	712	10
Future Volume (veh/h)	5	2	115	29	1	4	13	269	14	11	712	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	2	124	31	1	4	14	289	15	12	766	11
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	65	7	173	251	13	19	443	1325	69	876	1383	20
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.75	0.75	0.75	0.50	0.50	0.50
Sat Flow, veh/h	27	58	1505	1216	115	166	694	1762	91	1075	1839	26
Grp Volume(v), veh/h	131	0	0	36	0	0	14	0	304	12	0	777
Grp Sat Flow(s),veh/h/ln	1590	0	0	1498	0	0	694	0	1854	1075	0	1866
Q Serve(g_s), s	1.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	2.9	0.4	0.0	17.2
Cycle Q Clear(g_c), s	4.8	0.0	0.0	1.2	0.0	0.0	17.9	0.0	2.9	3.3	0.0	17.2
Prop In Lane	0.04		0.95	0.86		0.11	1.00		0.05	1.00		0.01
Lane Grp Cap(c), veh/h	245	0	0	284	0	0	443	0	1394	876	0	1403
V/C Ratio(X)	0.54	0.00	0.00	0.13	0.00	0.00	0.03	0.00	0.22	0.01	0.00	0.55
Avail Cap(c_a), veh/h	643	0	0	613	0	0	443	0	1394	876	0	1403
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.86	0.00	0.86
Uniform Delay (d), s/veh	25.6	0.0	0.0	24.0	0.0	0.0	8.8	0.0	2.2	5.3	0.0	8.0
Incr Delay (d2), s/veh	1.8	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.4	0.0	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	1.8	0.0	0.0	0.5	0.0	0.0	0.1	0.0	0.5	0.1	0.0	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.4	0.0	0.0	24.2	0.0	0.0	8.9	0.0	2.6	5.3	0.0	9.3
LnGrp LOS	C	A	A	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		131			36			318			789	
Approach Delay, s/veh		27.4			24.2			2.8			9.3	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		49.1		10.9		49.1		10.9				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		30.0		22.0		30.0		22.0				
Max Q Clear Time (g_c+I1), s		19.9		6.8		19.2		3.2				
Green Ext Time (p_c), s		1.3		0.6		4.0		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			10.0									
HCM 6th LOS			A									



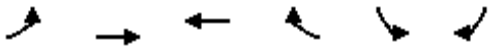
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	2	115	29	1	4	13	269	14	11	712	10
Future Volume (vph)	5	2	115	29	1	4	13	269	14	11	712	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	100			100			60			60		
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		237			740			933			680	
Travel Time (s)		5.4			16.8			18.2			13.2	
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
Shared Lane Traffic (%)												
Sign Control		Yield			Yield			Yield			Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	131	36	318	789
Demand Flow Rate, veh/h	133	37	324	804
Vehicles Circulating, veh/h	825	314	19	47
Vehicles Exiting, veh/h	26	29	939	304
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	9.0	4.0	4.8	10.1
Approach LOS	A	A	A	B

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	133	37	324	804
Cap Entry Lane, veh/h	595	1002	1353	1315
Entry HV Adj Factor	0.985	0.972	0.982	0.981
Flow Entry, veh/h	131	36	318	789
Cap Entry, veh/h	586	974	1329	1290
V/C Ratio	0.224	0.037	0.239	0.611
Control Delay, s/veh	9.0	4.0	4.8	10.1
LOS	A	A	A	B
95th %tile Queue, veh	1	0	1	4



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	3	763	261	17	21	5
Future Volume (vph)	3	763	261	17	21	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	60				100	
Link Speed (mph)		35	35		30	
Link Distance (ft)		1212	796		251	
Travel Time (s)		23.6	15.5		5.7	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

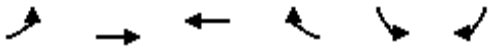
Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	763	261	17	21	5
Future Vol, veh/h	3	763	261	17	21	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	120	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	898	307	20	25	6

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	327	0	-	0	1223	317
Stage 1	-	-	-	-	317	-
Stage 2	-	-	-	-	906	-
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	1233	-	-	-	198	724
Stage 1	-	-	-	-	738	-
Stage 2	-	-	-	-	394	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1233	-	-	-	197	724
Mov Cap-2 Maneuver	-	-	-	-	197	-
Stage 1	-	-	-	-	736	-
Stage 2	-	-	-	-	394	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	23.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1233	-	-	-	229
HCM Lane V/C Ratio	0.003	-	-	-	0.134
HCM Control Delay (s)	7.9	-	-	-	23.1
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.5



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	3	763	261	17	21	5
Future Volume (vph)	3	763	261	17	21	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	60				100	
Link Speed (mph)		35	35		30	
Link Distance (ft)		1212	796		251	
Travel Time (s)		23.6	15.5		5.7	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Sign Control		Yield	Yield		Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	9.8
Intersection LOS	A

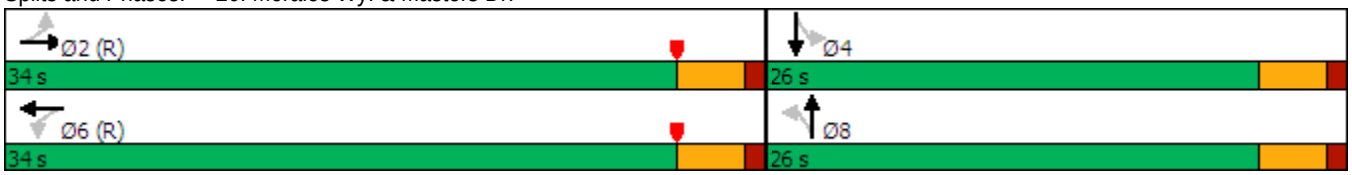
Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	902	327	31
Demand Flow Rate, veh/h	920	333	32
Vehicles Circulating, veh/h	25	4	313
Vehicles Exiting, veh/h	319	941	24
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	11.8	4.7	4.0
Approach LOS	B	A	A

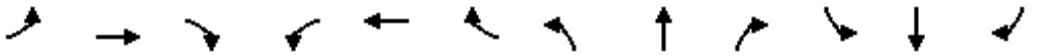
Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	920	333	32
Cap Entry Lane, veh/h	1345	1374	1003
Entry HV Adj Factor	0.980	0.982	0.969
Flow Entry, veh/h	902	327	31
Cap Entry, veh/h	1319	1349	971
V/C Ratio	0.684	0.242	0.032
Control Delay, s/veh	11.8	4.7	4.0
LOS	B	A	A
95th %tile Queue, veh	6	1	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	599	169	48	201	4	60	2	42	2	1	3
Future Volume (vph)	1	599	169	48	201	4	60	2	42	2	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	60			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			30			45	
Link Distance (ft)		1243			906			626			709	
Travel Time (s)		24.2			17.6			14.2			10.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Total Split (s)	34.0	34.0		34.0	34.0		26.0	26.0		26.0	26.0	
Total Split (%)	56.7%	56.7%		56.7%	56.7%		43.3%	43.3%		43.3%	43.3%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		Max	Max		Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 32 (53%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: Morales Wy. & Masters Dr.

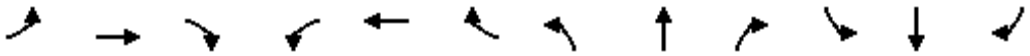




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	599	169	48	201	4	60	2	42	2	1	3
Future Volume (veh/h)	1	599	169	48	201	4	60	2	42	2	1	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		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	1	666	188	53	223	4	67	2	47	2	1	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	617	702	198	151	916	16	388	34	223	234	134	288
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.37	0.37	0.37	0.37	0.37	0.37
Sat Flow, veh/h	1154	1403	396	646	1832	33	800	93	608	420	364	785
Grp Volume(v), veh/h	1	0	854	53	0	227	116	0	0	6	0	0
Grp Sat Flow(s),veh/h/ln	1154	0	1799	646	0	1864	1501	0	0	1570	0	0
Q Serve(g_s), s	0.0	0.0	27.1	2.9	0.0	4.2	1.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.2	0.0	27.1	30.0	0.0	4.2	2.9	0.0	0.0	0.1	0.0	0.0
Prop In Lane	1.00		0.22	1.00		0.02	0.58		0.41	0.33		0.50
Lane Grp Cap(c), veh/h	617	0	900	151	0	932	645	0	0	656	0	0
V/C Ratio(X)	0.00	0.00	0.95	0.35	0.00	0.24	0.18	0.00	0.00	0.01	0.00	0.00
Avail Cap(c_a), veh/h	617	0	900	151	0	932	645	0	0	656	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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.7	0.0	14.3	29.2	0.0	8.5	12.9	0.0	0.0	12.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	20.0	6.3	0.0	0.6	0.6	0.0	0.0	0.0	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	0.0	0.0	13.5	1.0	0.0	1.5	1.1	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.7	0.0	34.3	35.4	0.0	9.2	13.5	0.0	0.0	12.1	0.0	0.0
LnGrp LOS	A	A	C	D	A	A	B	A	A	B	A	A
Approach Vol, veh/h		855			280			116			6	
Approach Delay, s/veh		34.2			14.1			13.5			12.1	
Approach LOS		C			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		34.0		26.0		34.0		26.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		30.0		22.0		30.0		22.0				
Max Q Clear Time (g_c+I1), s		29.1		2.1		32.0		4.9				
Green Ext Time (p_c), s		0.5		0.0		0.0		0.5				

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	599	169	48	201	4	60	2	42	2	1	3
Future Volume (vph)	1	599	169	48	201	4	60	2	42	2	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	60			60			100			100		
Link Speed (mph)		35			35			30			45	
Link Distance (ft)		1243			906			626			709	
Travel Time (s)		24.2			17.6			14.2			10.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Sign Control		Yield			Yield			Yield			Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	855	280	116	6
Demand Flow Rate, veh/h	872	285	118	6
Vehicles Circulating, veh/h	57	71	682	349
Vehicles Exiting, veh/h	298	729	247	7
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	11.7	4.8	7.3	3.8
Approach LOS	B	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	872	285	118	6
Cap Entry Lane, veh/h	1302	1283	688	967
Entry HV Adj Factor	0.980	0.981	0.983	0.997
Flow Entry, veh/h	855	280	116	6
Cap Entry, veh/h	1276	1259	676	963
V/C Ratio	0.670	0.222	0.171	0.006
Control Delay, s/veh	11.7	4.8	7.3	3.8
LOS	B	A	A	A
95th %tile Queue, veh	6	1	1	0



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	34	87	301	17	184	533
Future Volume (vph)	34	87	301	17	184	533
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	200	
Storage Lanes	1	0		0	1	
Taper Length (ft)	100				60	
Link Speed (mph)	45		45			45
Link Distance (ft)	302		233			567
Travel Time (s)	4.6		3.5			8.6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	87	301	17	184	533
Future Vol, veh/h	34	87	301	17	184	533
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	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	92	317	18	194	561

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	995	168	0	0	335	0
Stage 1	326	-	-	-	-	-
Stage 2	669	-	-	-	-	-
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	242	847	-	-	1221	-
Stage 1	704	-	-	-	-	-
Stage 2	471	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	204	847	-	-	1221	-
Mov Cap-2 Maneuver	204	-	-	-	-	-
Stage 1	592	-	-	-	-	-
Stage 2	471	-	-	-	-	-

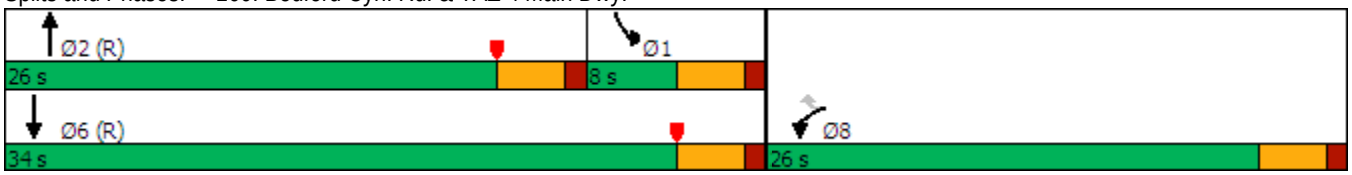
Approach	WB	NB	SB
HCM Control Delay, s	16.2	0	2.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	449	1221	-
HCM Lane V/C Ratio	-	-	0.284	0.159	-
HCM Control Delay (s)	-	-	16.2	8.5	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.2	0.6	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	64	212	360	28	281	652
Future Volume (vph)	64	212	360	28	281	652
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	200	
Storage Lanes	1	1		0	1	
Taper Length (ft)	100				60	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	45		45			45
Link Distance (ft)	264		567			343
Travel Time (s)	4.0		8.6			5.2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8				
Detector Phase	8	8	2		1	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0		4.0	4.0
Minimum Split (s)	26.0	26.0	26.0		8.0	26.0
Total Split (s)	26.0	26.0	26.0		8.0	34.0
Total Split (%)	43.3%	43.3%	43.3%		13.3%	56.7%
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 160: Bedford Cyn. Rd. & TAZ 4 Main Dwy.





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	64	212	360	28	281	652
Future Volume (veh/h)	64	212	360	28	281	652
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	67	223	379	29	296	686
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	317	282	1227	93	455	2447
Arrive On Green	0.18	0.18	0.37	0.37	0.26	0.69
Sat Flow, veh/h	1781	1585	3440	255	1781	3647
Grp Volume(v), veh/h	67	223	200	208	296	686
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1824	1781	1777
Q Serve(g_s), s	1.9	8.1	4.8	4.9	8.9	4.5
Cycle Q Clear(g_c), s	1.9	8.1	4.8	4.9	8.9	4.5
Prop In Lane	1.00	1.00		0.14	1.00	
Lane Grp Cap(c), veh/h	317	282	652	669	455	2447
V/C Ratio(X)	0.21	0.79	0.31	0.31	0.65	0.28
Avail Cap(c_a), veh/h	653	581	652	669	455	2447
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	21.1	23.6	13.6	13.6	20.0	3.6
Incr Delay (d2), s/veh	0.3	4.9	1.2	1.2	3.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	3.0	1.8	1.9	3.6	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.4	28.5	14.8	14.8	23.2	3.9
LnGrp LOS	C	C	B	B	C	A
Approach Vol, veh/h	290		408			982
Approach Delay, s/veh	26.9		14.8			9.7
Approach LOS	C		B			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	19.3	26.0			45.3	14.7
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0
Max Green Setting (Gmax), s	4.0	22.0			30.0	22.0
Max Q Clear Time (g_c+I1), s	10.9	6.9			6.5	10.1
Green Ext Time (p_c), s	0.0	1.8			4.4	0.7

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



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	73	569	3	0	934
Future Volume (vph)	0	73	569	3	0	934
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		45			45
Link Distance (ft)	221		343			351
Travel Time (s)	3.3		5.2			5.3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	73	569	3	0	934
Future Vol, veh/h	0	73	569	3	0	934
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	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	77	599	3	0	983

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	301	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	695	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	695	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	695	-
HCM Lane V/C Ratio	-	-	0.111	-
HCM Control Delay (s)	-	-	10.8	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.4	-

Intersection: 4: Bedford Cyn. Rd. & Foothill Bl./El Cerrito Rd.

Movement	EB	EB	EB	B53	B53	WB	WB	WB	NB	NB	B56
Directions Served	T	T	R	T	T	L	T	T	L	R	T
Maximum Queue (ft)	376	388	51	131	164	147	166	146	399	185	626
Average Queue (ft)	328	349	44	91	117	105	119	111	392	184	511
95th Queue (ft)	426	469	70	261	291	165	184	160	398	190	826
Link Distance (ft)	256	256	256	239	239		234	234	319		606
Upstream Blk Time (%)	32	41		4	2		2		60		48
Queuing Penalty (veh)	0	0		0	0		8		0		0
Storage Bay Dist (ft)						135				125	
Storage Blk Time (%)						11	2	4	45	39	
Queuing Penalty (veh)						53	3	1	181	207	

Intersection: 6: Bedford Cyn. Rd. & Eagle Glen Pkwy/Cajalco Rd.

Movement	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	TR	L	L	T	T	R	L	T	R	L
Maximum Queue (ft)	125	164	201	150	71	69	79	51	56	83	210	86
Average Queue (ft)	103	121	170	140	59	48	56	25	44	61	195	68
95th Queue (ft)	155	209	248	185	123	86	108	46	75	114	291	113
Link Distance (ft)		684	684			629	629			249	249	
Upstream Blk Time (%)											3	
Queuing Penalty (veh)											10	
Storage Bay Dist (ft)	200			200	200			200	150			450
Storage Blk Time (%)		0										
Queuing Penalty (veh)		0										

Intersection: 6: Bedford Cyn. Rd. & Eagle Glen Pkwy/Cajalco Rd.

Movement	SB	SB
Directions Served	LT	R
Maximum Queue (ft)	115	29
Average Queue (ft)	85	19
95th Queue (ft)	152	43
Link Distance (ft)	626	626
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Cajalco Rd. & I-15 SB Ramps

Movement	EB	EB	EB	EB	EB	WB	WB	WB	SB	SB	SB	SB
Directions Served	L	L	T	T	T	T	T	R	L	L	R	R
Maximum Queue (ft)	146	150	58	55	151	93	133	31	99	190	87	110
Average Queue (ft)	112	122	35	32	113	70	94	18	85	168	68	71
95th Queue (ft)	182	176	77	72	193	123	160	44	140	223	124	138
Link Distance (ft)			629	629	629	191	191	191	191	191	191	191
Upstream Blk Time (%)							0			3		
Queuing Penalty (veh)							0			6		
Storage Bay Dist (ft)	290	290										
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 10: I-15 NB Ramps & Cajalco Rd.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	B208	B208	B208	B208
Directions Served	T	T	T	R	T	T	T	T	T	T	T	T
Maximum Queue (ft)	213	150	44	46	40	43	30	182	65	65	202	382
Average Queue (ft)	167	104	15	21	18	33	20	179	0	0	32	178
95th Queue (ft)	274	213	59	61	49	75	40	198	0	0	151	409
Link Distance (ft)	229	229	229	229	111	111	111	111	520	520	520	520
Upstream Blk Time (%)	2	0						58				0
Queuing Penalty (veh)	9	0						258				2
Storage Bay Dist (ft)												
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 10: I-15 NB Ramps & Cajalco Rd.

Movement	NB	NB	NB	NB
Directions Served	L	L	R	R
Maximum Queue (ft)	69	55	22	6
Average Queue (ft)	50	40	12	0
95th Queue (ft)	91	73	36	0
Link Distance (ft)	208	208	208	208
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 103: Bedford Cyn. Rd. & TAZ 4 N. Dwy. (RIRO)

Movement	WB	NB
Directions Served	R	TR
Maximum Queue (ft)	28	30
Average Queue (ft)	19	16
95th Queue (ft)	40	57
Link Distance (ft)	173	278
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 160: Bedford Cyn. Rd. & TAZ 4 Main Dwy.

Movement	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	R	T	TR	L	T	T
Maximum Queue (ft)	9	63	48	110	144	29	5
Average Queue (ft)	7	47	26	71	124	5	3
95th Queue (ft)	24	82	71	152	172	24	16
Link Distance (ft)	213	213	495	495		278	278
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)					200		
Storage Blk Time (%)					0		
Queuing Penalty (veh)					0		

Intersection: 170: Bedford Cyn. Rd. & TAZ 4 S. Dwy.

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	38	41
Average Queue (ft)	33	23
95th Queue (ft)	46	55
Link Distance (ft)	256	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		200
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 739

Intersection: 4: Bedford Cyn. Rd. & Foothill Bl./El Cerrito Rd.

Movement	EB	EB	EB	B53	B53	B53	WB	WB	WB	NB	NB
Directions Served	T	T	R	T	T	T	L	T	T	L	R
Maximum Queue (ft)	159	403	77	258	262	256	155	86	72	140	95
Average Queue (ft)	84	399	56	255	256	228	109	64	50	82	64
95th Queue (ft)	233	414	108	265	264	354	176	129	88	113	110
Link Distance (ft)	255	255	255	239	239	239		234	234	319	
Upstream Blk Time (%)	0	69		36	82	21					
Queuing Penalty (veh)	0	0		0	0	0					
Storage Bay Dist (ft)							135				125
Storage Blk Time (%)							3	0		1	3
Queuing Penalty (veh)							7	0		1	5

Intersection: 6: Bedford Cyn. Rd. & Eagle Glen Pkwy/Cajalco Rd.

Movement	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	TR	L	L	T	T	R	L	T	R	L
Maximum Queue (ft)	216	405	346	259	319	552	334	26	82	86	205	181
Average Queue (ft)	118	282	260	259	318	483	199	19	66	70	156	157
95th Queue (ft)	270	423	402	263	318	692	351	37	128	107	240	205
Link Distance (ft)		684	684			629	629			249	249	
Upstream Blk Time (%)						5					0	
Queuing Penalty (veh)						42					0	
Storage Bay Dist (ft)	200			200	200			200	150			450
Storage Blk Time (%)		30		71	14	7	4		1			
Queuing Penalty (veh)		29		250	49	52	3		1			

Intersection: 6: Bedford Cyn. Rd. & Eagle Glen Pkwy/Cajalco Rd.

Movement	SB	SB
Directions Served	LT	R
Maximum Queue (ft)	222	42
Average Queue (ft)	188	33
95th Queue (ft)	281	59
Link Distance (ft)	626	626
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Cajalco Rd. & I-15 SB Ramps

Movement	EB	EB	EB	EB	EB	WB	WB	WB	B75	SB	SB	SB
Directions Served	L	L	T	T	T	T	T	R	T	L	L	R
Maximum Queue (ft)	190	203	121	98	147	246	169	78	22	115	131	206
Average Queue (ft)	164	180	95	80	103	212	157	60	6	85	102	168
95th Queue (ft)	211	238	165	121	166	265	203	105	29	136	156	238
Link Distance (ft)			629	629	629	191	191	191	981	191	191	191
Upstream Blk Time (%)						10	0					8
Queuing Penalty (veh)						47	1					22
Storage Bay Dist (ft)	290	290										
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 8: Cajalco Rd. & I-15 SB Ramps

Movement	SB
Directions Served	R
Maximum Queue (ft)	110
Average Queue (ft)	88
95th Queue (ft)	145
Link Distance (ft)	191
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: I-15 NB Ramps & Cajalco Rd.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	B208	NB	NB	NB
Directions Served	T	T	T	R	T	T	T	T	T	L	L	R
Maximum Queue (ft)	175	90	29	32	114	103	98	168	28	145	116	92
Average Queue (ft)	145	71	14	13	92	81	74	129	14	108	94	62
95th Queue (ft)	205	120	45	36	140	124	114	188	66	159	134	107
Link Distance (ft)	229	229	229	229	111	111	111	111	520	208	208	208
Upstream Blk Time (%)					5	2	1	24		0		
Queuing Penalty (veh)					18	7	4	83		1		
Storage Bay Dist (ft)												
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 10: I-15 NB Ramps & Cajalco Rd.

Movement	NB
Directions Served	R
Maximum Queue (ft)	18
Average Queue (ft)	9
95th Queue (ft)	28
Link Distance (ft)	208
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 103: Bedford Cyn. Rd. & TAZ 4 N. Dwy. (RIRO)

Movement	WB	SB
Directions Served	R	T
Maximum Queue (ft)	48	6
Average Queue (ft)	40	3
95th Queue (ft)	61	18
Link Distance (ft)	173	249
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 160: Bedford Cyn. Rd. & TAZ 4 Main Dwy.

Movement	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	R	T	TR	L	T	T
Maximum Queue (ft)	70	78	23	77	149	54	10
Average Queue (ft)	56	64	11	57	138	29	5
95th Queue (ft)	101	114	40	111	175	90	31
Link Distance (ft)	213	213	495	495		278	278
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)					200		
Storage Blk Time (%)					0		
Queuing Penalty (veh)					1		

Intersection: 170: Bedford Cyn. Rd. & TAZ 4 S. Dwy.

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	70	66
Average Queue (ft)	45	44
95th Queue (ft)	73	91
Link Distance (ft)	256	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		200
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 623

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APPENDIX 5.3:

INTERIM YEAR (2021) CONDITIONS
TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

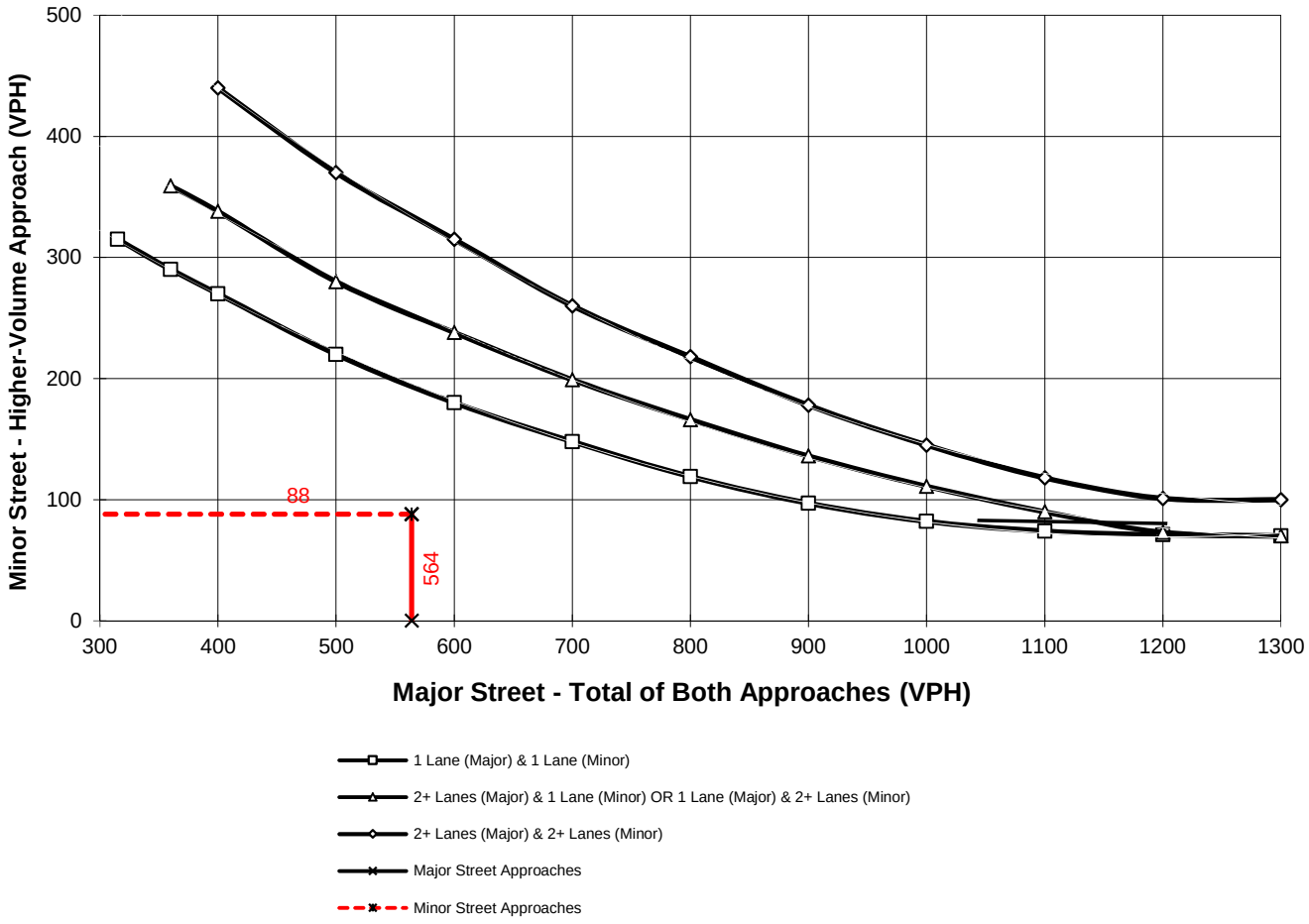
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Interim Year Without Project (2021) AM Peak Hour Warrants**

Major Street Name = **Masters Dr.**
Total of Both Approaches (VPH) = **564**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Bennett Av.**
High Volume Approach (VPH) = **88**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #2

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

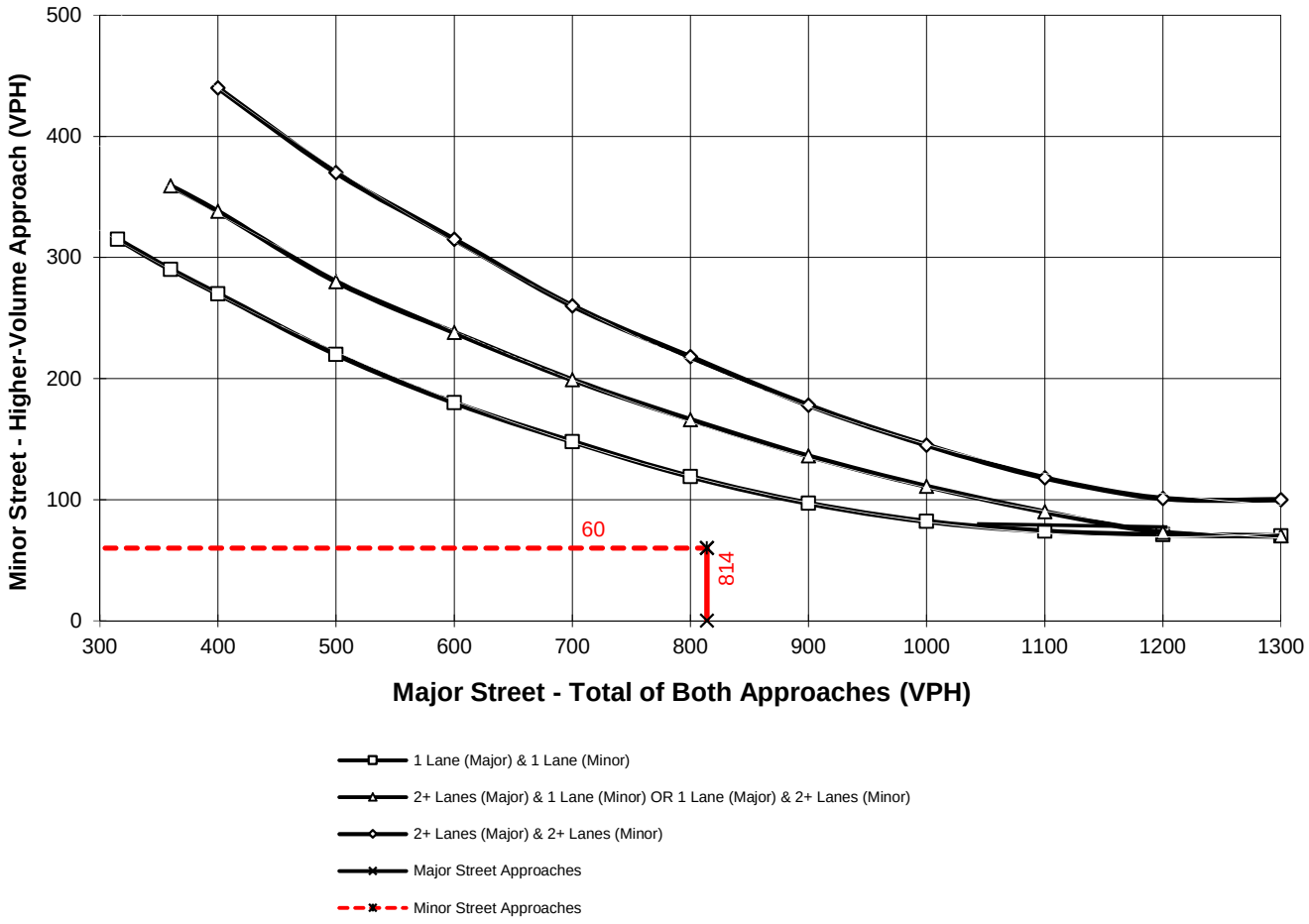
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Interim Year Without Project (2021) PM Peak Hour Warrants**

Major Street Name = **Masters Dr.**
Total of Both Approaches (VPH) = **814**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Bennett Av.**
High Volume Approach (VPH) = **60**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #2

URBAN CROSSROADS

R:\UXRjobs_12100-12500\12554\Warrants\02 IYNP\02R_PM.xls\Fig 4C-4 (Rural Peak)

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

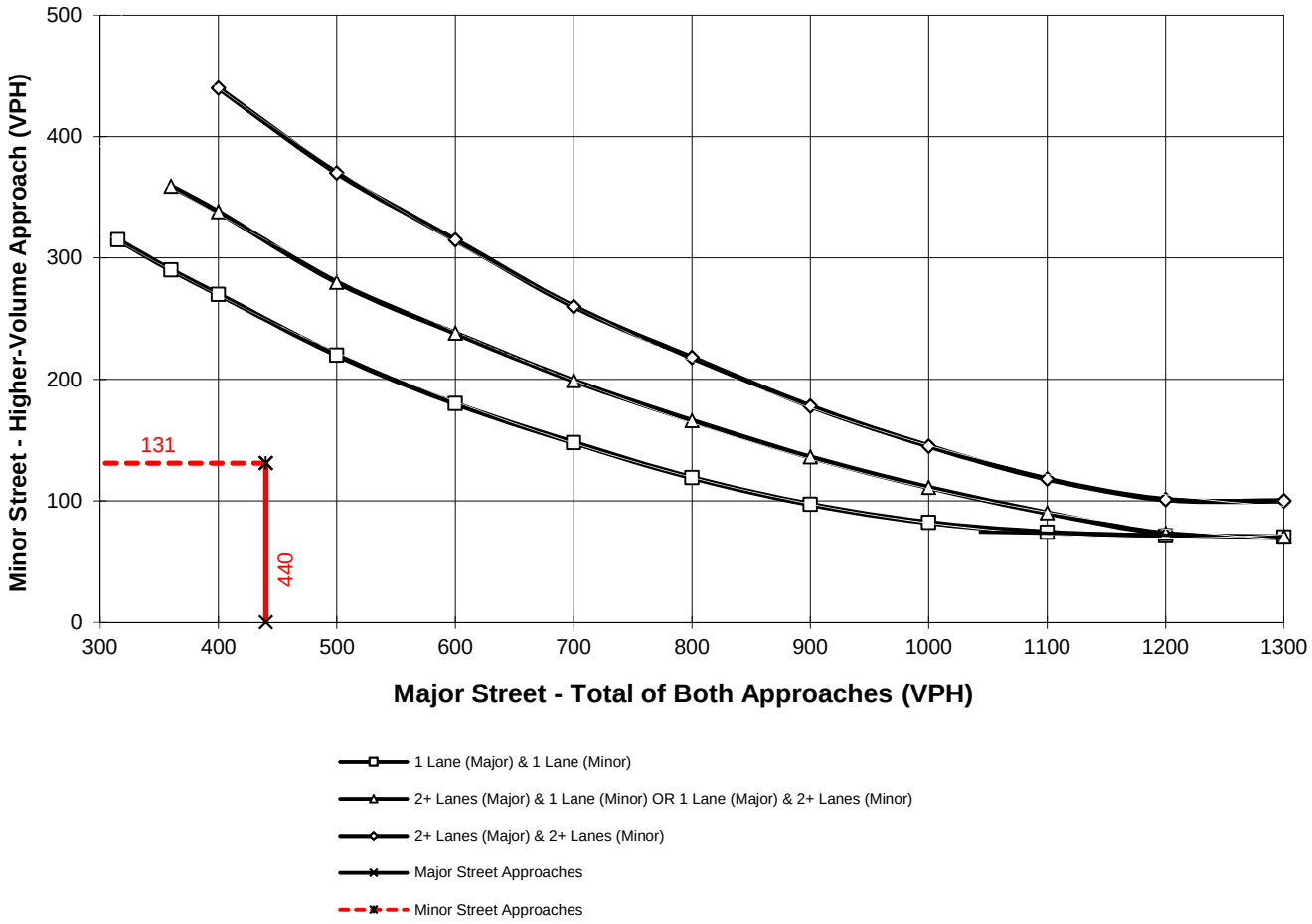
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Interim Year Without Project (2021) AM Peak Hour Warrants**

Major Street Name = **Bedford Cyn. Rd.** Total of Both Approaches (VPH) = **440**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Georgetown Dr.** High Volume Approach (VPH) = **131**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #5

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

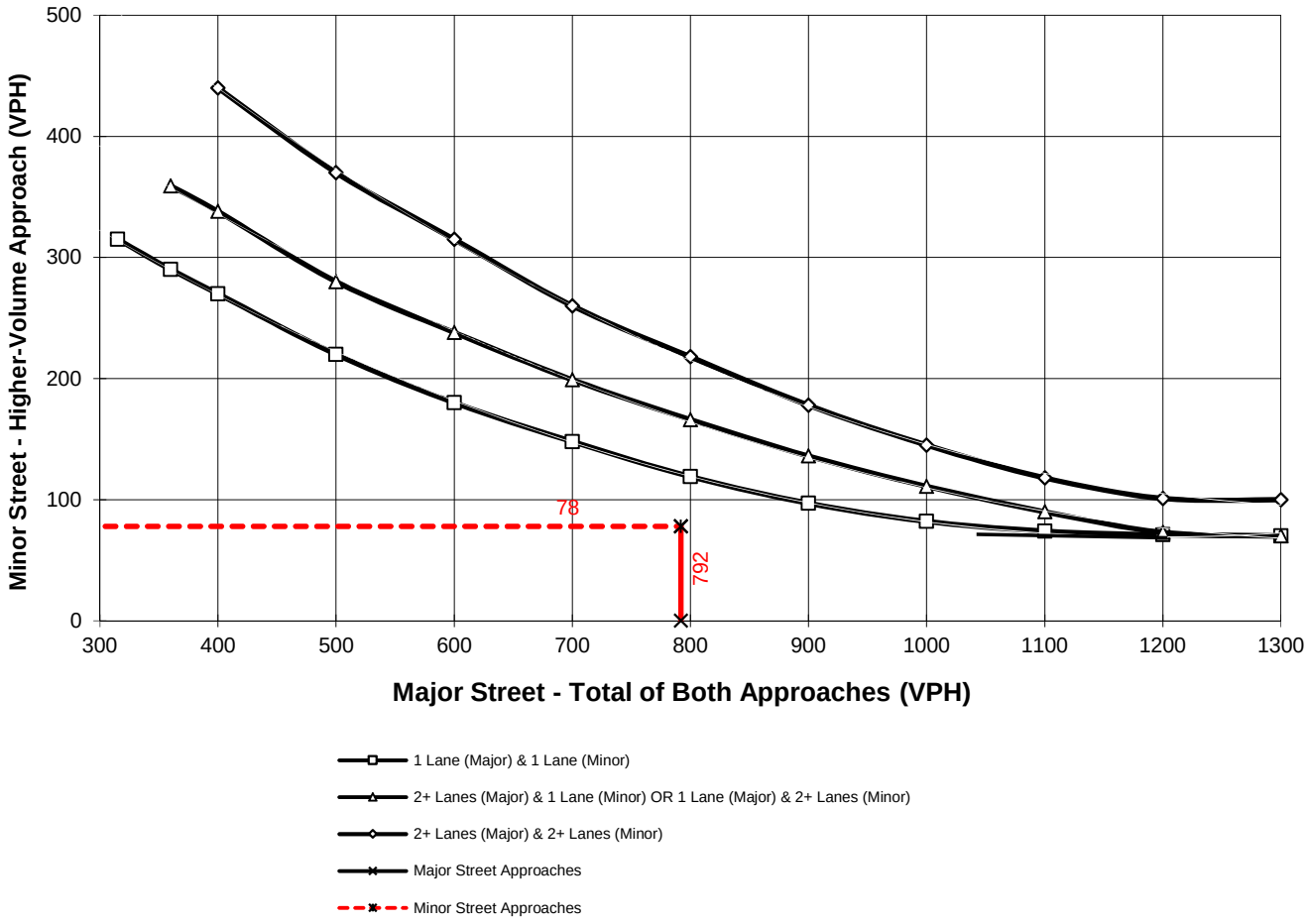
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Interim Year Without Project (2021) PM Peak Hour Warrants**

Major Street Name = **Bedford Cyn. Rd.** Total of Both Approaches (VPH) = **792**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Georgetown Dr.** High Volume Approach (VPH) = **78**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #5

URBAN CROSSROADS

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

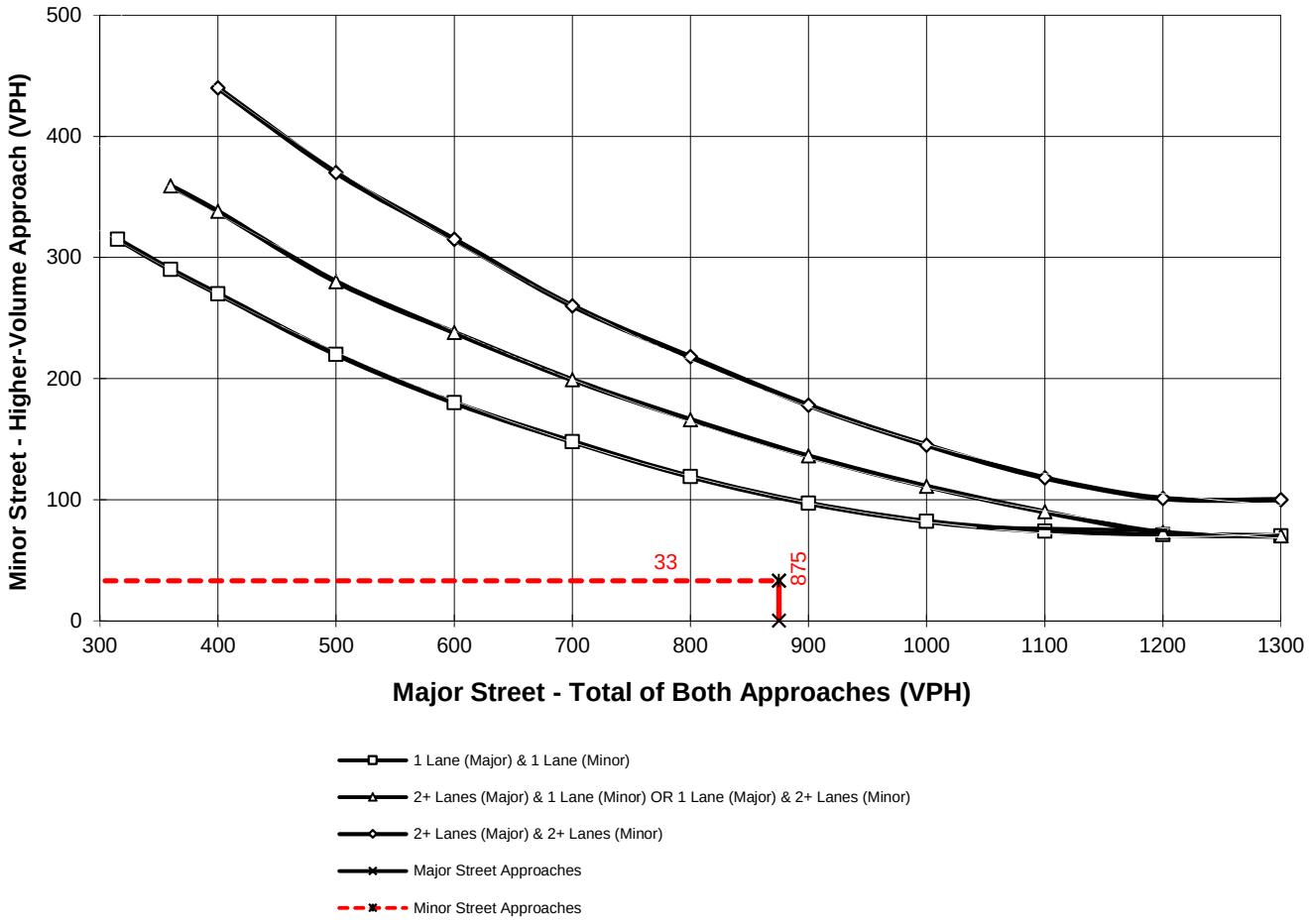
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Interim Year Without Project (2021) AM Peak Hour Warrants**

Major Street Name = **Masters Dr.**
Total of Both Approaches (VPH) = **875**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Via Castilla St.**
High Volume Approach (VPH) = **33**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #19

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

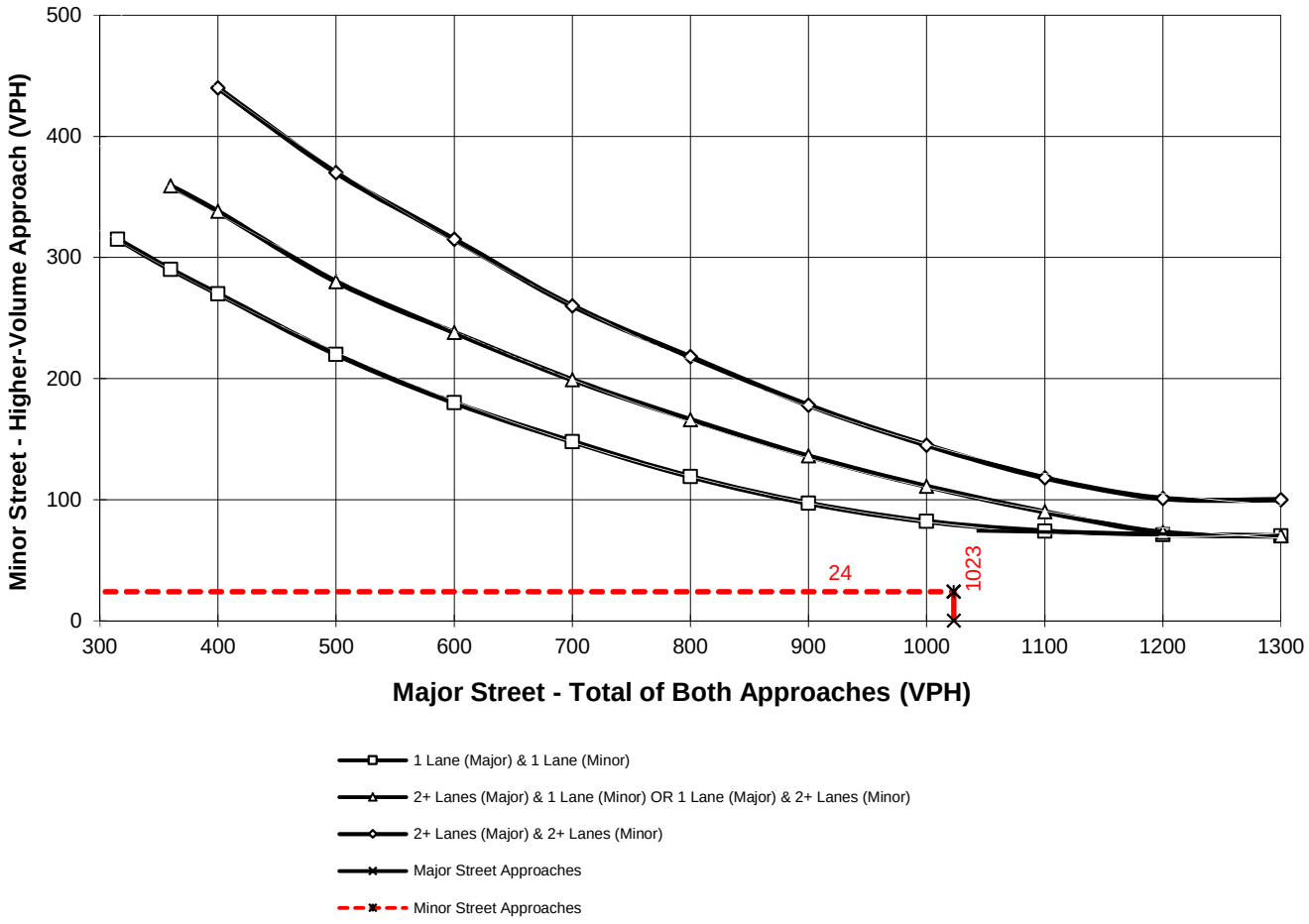
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Interim Year Without Project (2021) PM Peak Hour Warrants**

Major Street Name = **Masters Dr.** Total of Both Approaches (VPH) = **1,023**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Via Castilla St.** High Volume Approach (VPH) = **24**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #19

URBAN CROSSROADS

R:\UXRjobs_12100-12500\12554\Warrants\02 IYNP\19R_PM.xls\Fig 4C-4 (Rural Peak)

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

DIST	CO	RTE	PM		TRAFFIC CONDITIONS		2021 NP
				CALC	JC	DATE	08/19/19
Jurisdiction:	City of Corona			CHK		DATE	
Major Street:	Bedford Cyn. Rd.				Critical Approach Speed (Major)		40 mph
Minor Street:	Commercial S. Dwy.				Critical Approach Speed (Minor)		30 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **8,569** vpd Minor Street Future ADT = **721** vpd

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

or

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

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements ADT			
	XX				
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	1	8,000	5,600	2,400	1,680
2 + **8,569**	1 **721**	9,600	6,720 *	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	1	12,000	8,400	1,200	850
2 + **8,569**	1 **721**	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	A 43% B 85%				

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

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

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

DIST	CO	RTE	PM		TRAFFIC CONDITIONS		2021 NP
				CALC	JC	DATE	08/19/19
Jurisdiction:	City of Corona			CHK		DATE	
Major Street:	Bedford Cyn. Rd.				Critical Approach Speed (Major)		40 mph
Minor Street:	Commercial Main Dwy.				Critical Approach Speed (Minor)		30 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **10,350** vpd Minor Street Future ADT = **1,959** vpd

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

or

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

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements ADT			
	XX				
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
XX					
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	8,000	5,600	2,400	1,680
2 + **10,350**	*1* **1,959**	9,600	6,720 *	2,400	1,680 *
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
XX					
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	12,000	8,400	1,200	850
2 + **10,350**	*1* **1,959**	14,400	10,080 *	1,200	850 *
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
XX		2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 100% **B** 100%				

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

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

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

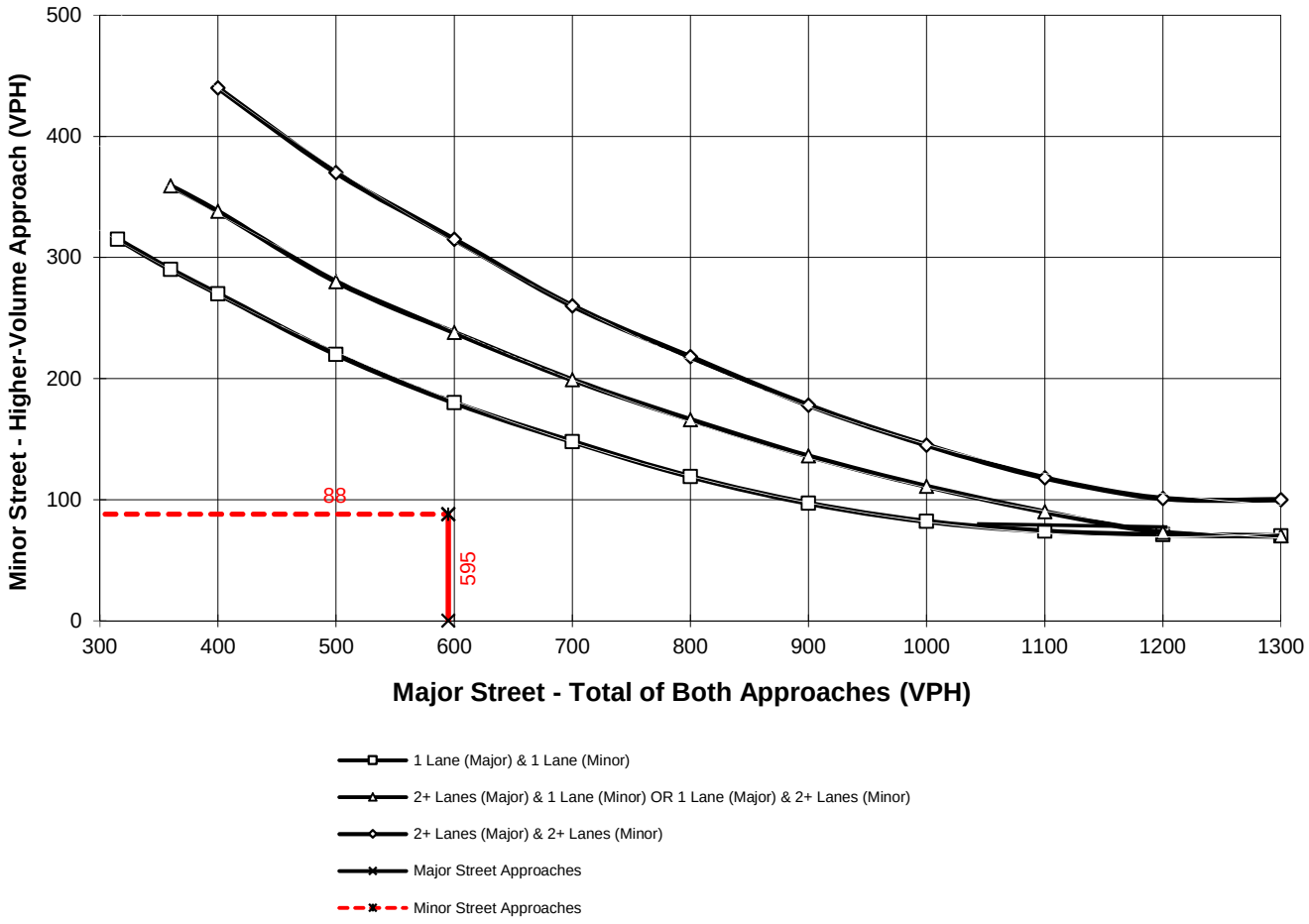
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Interim Year With Project (2021) AM Peak Hour Warrants**

Major Street Name = **Masters Dr.**
Total of Both Approaches (VPH) = **595**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Bennett Av.**
High Volume Approach (VPH) = **88**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #2

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

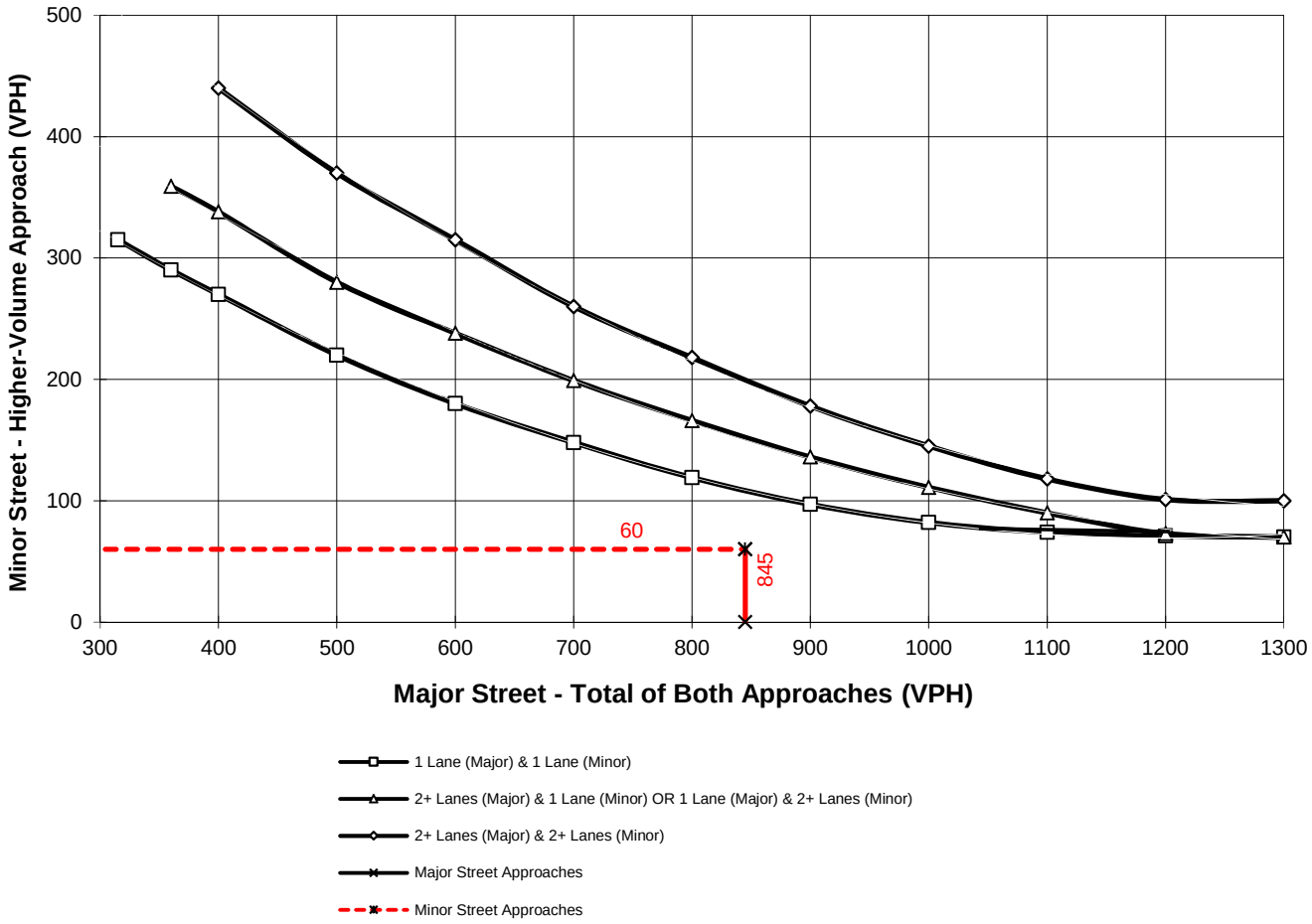
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Interim Year With Project (2021) PM Peak Hour Warrants**

Major Street Name = **Masters Dr.** Total of Both Approaches (VPH) = **845**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Bennett Av.** High Volume Approach (VPH) = **60**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #2

URBAN CROSSROADS

R:\UXRjobs_12100-12500\12554\Warrants\03 IYWP\02R_PM.xls\Fig 4C-4 (Rural Peak)

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

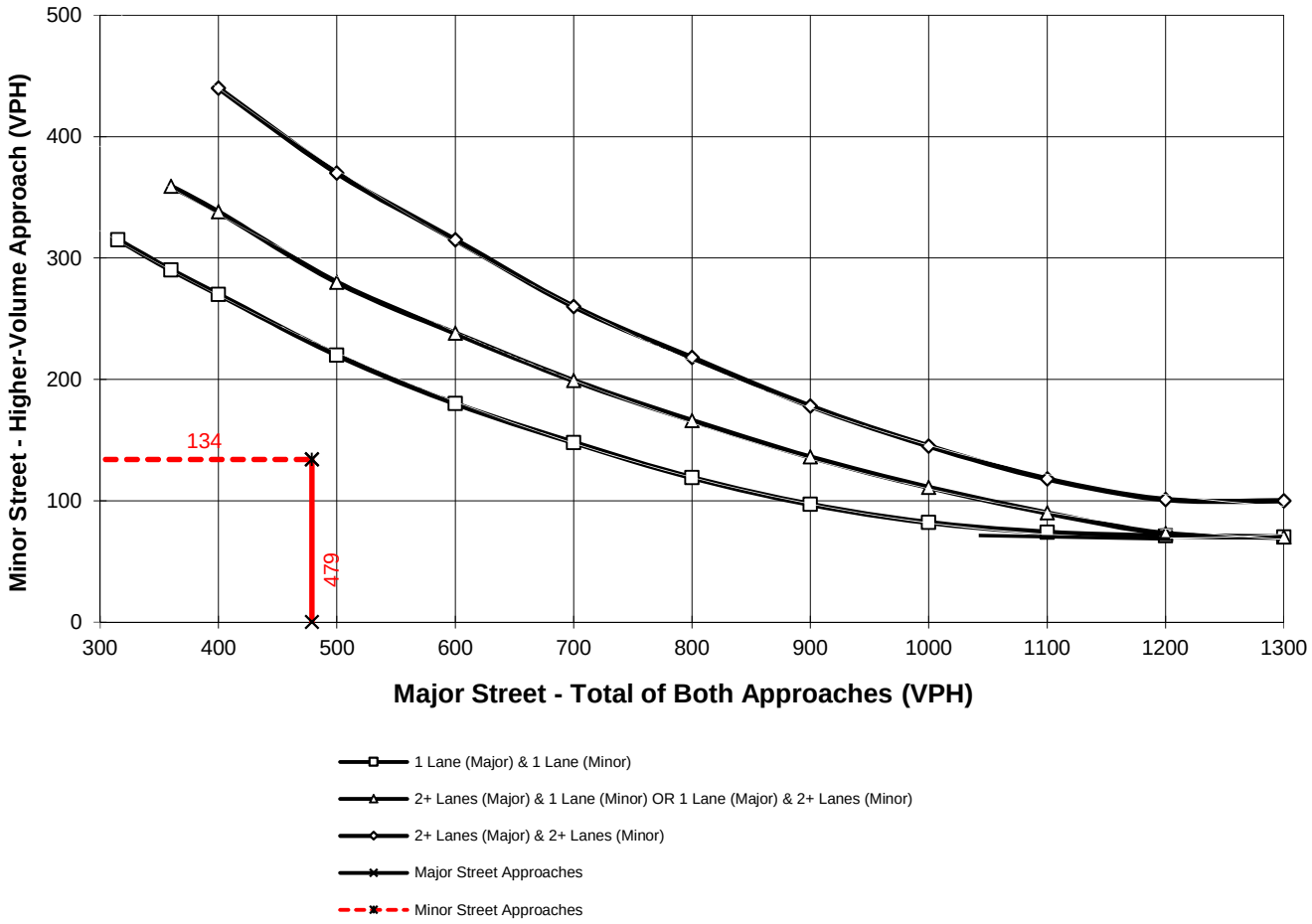
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Interim Year With Project (2021) AM Peak Hour Warrants**

Major Street Name = **Bedford Cyn. Rd.** Total of Both Approaches (VPH) = **479**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Georgetown Dr.** High Volume Approach (VPH) = **134**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #5

R:\UXRjobs_12100-12500\12554\Warrants\03 IYWP\05R_AM.xls\Fig 4C-4 (Rural Peak)

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

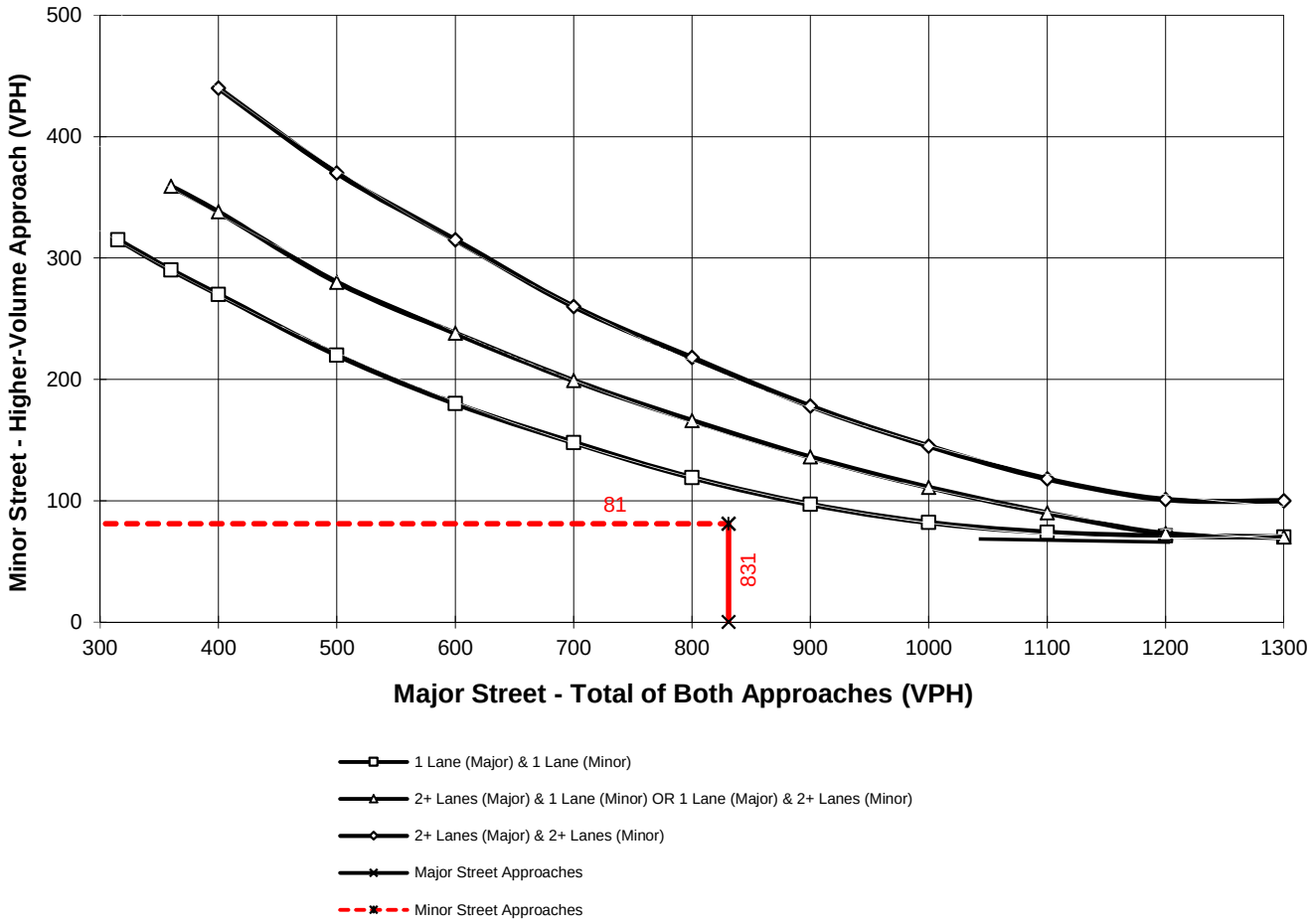
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Interim Year With Project (2021) PM Peak Hour Warrants**

Major Street Name = **Bedford Cyn. Rd.** Total of Both Approaches (VPH) = **831**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Georgetown Dr.** High Volume Approach (VPH) = **81**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #5

URBAN CROSSROADS

R:\UXRjobs_12100-12500\12554\Warrants\03 IYWP\05R_PM.xls\Fig 4C-4 (Rural Peak)

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

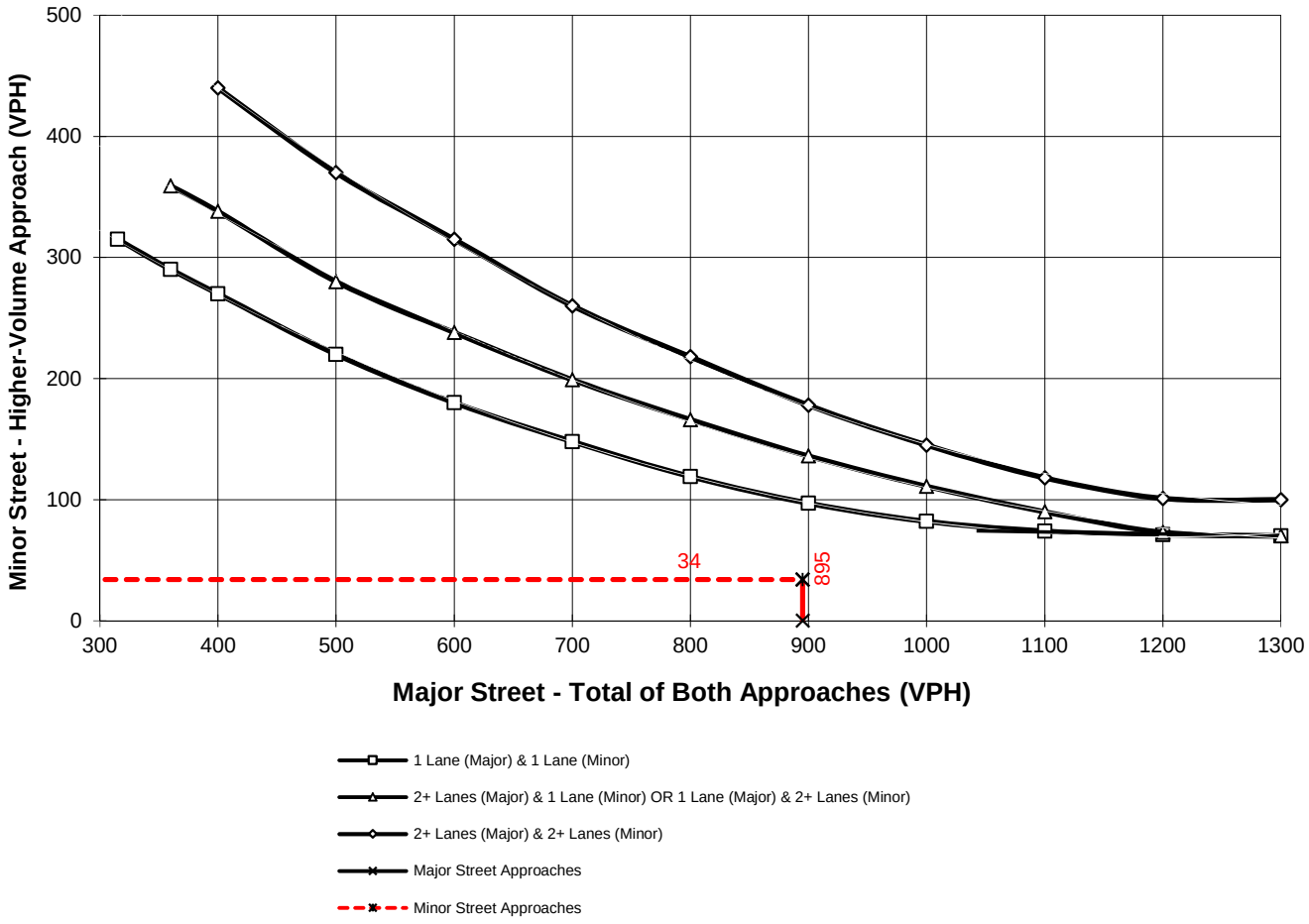
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Interim Year With Project (2021) AM Peak Hour Warrants**

Major Street Name = **Masters Dr.**
Total of Both Approaches (VPH) = **895**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Via Castilla St.**
High Volume Approach (VPH) = **34**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #19

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

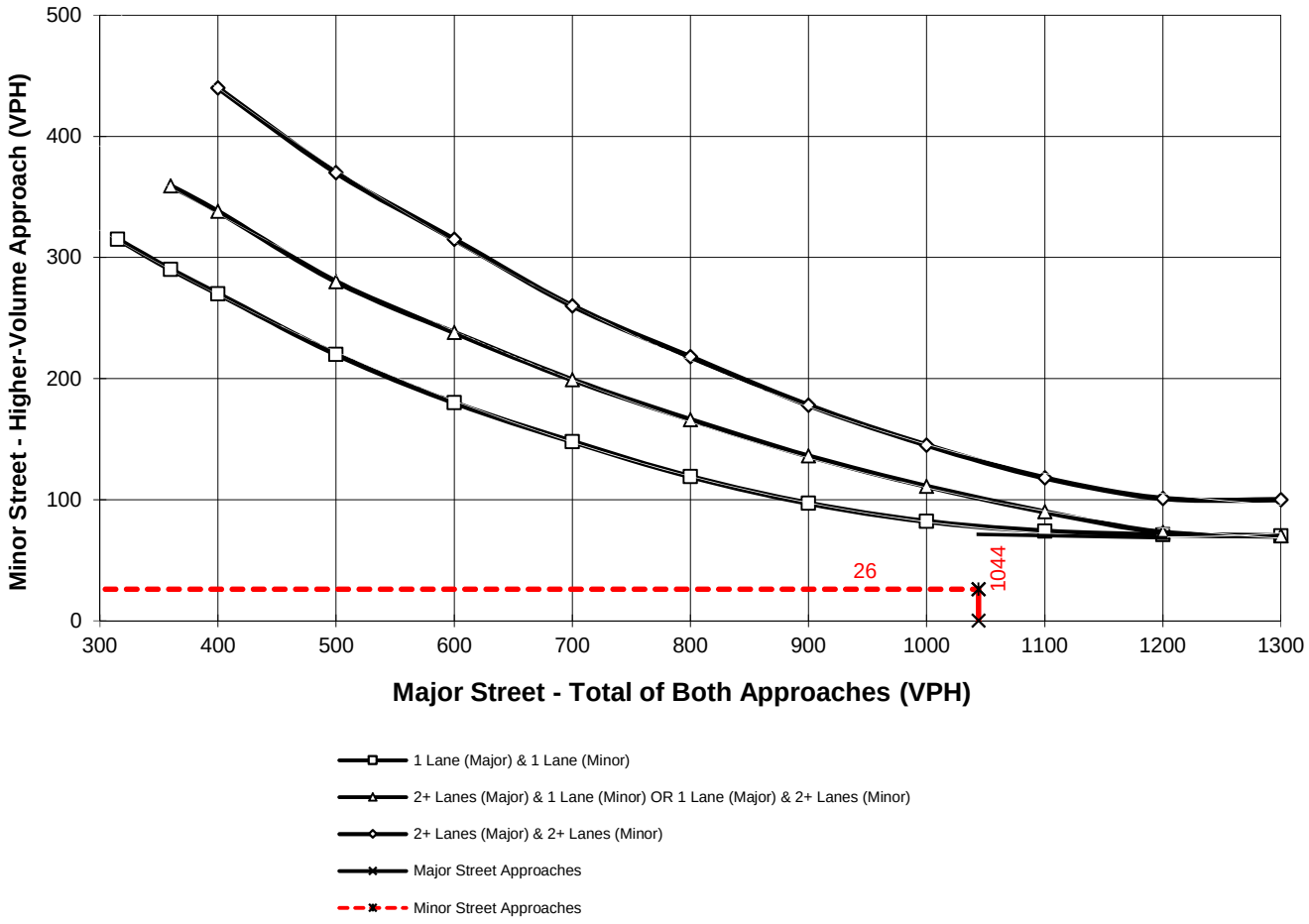
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Interim Year With Project (2021) PM Peak Hour Warrants**

Major Street Name = **Masters Dr.** Total of Both Approaches (VPH) = **1,044**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Via Castilla St.** High Volume Approach (VPH) = **26**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #19

URBAN CROSSROADS

R:\UXRjobs_12100-12500\12554\Warrants\03 IYWP\19R_PM.xls\Fig 4C-4 (Rural Peak)

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

DIST	CO	RTE	PM		TRAFFIC CONDITIONS		2021 NP
				CALC	JC	DATE	08/19/19
Jurisdiction:	City of Corona			CHK		DATE	
Major Street:	Bedford Cyn. Rd.				Critical Approach Speed (Major)		40 mph
Minor Street:	Commercial S. Dwy.				Critical Approach Speed (Minor)		30 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **9,453** vpd Minor Street Future ADT = **1,242** vpd

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

or

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

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements ADT			
	XX				
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	8,000	5,600	2,400	1,680
2 + **9,453**	*1* **1,242**	9,600	6,720 *	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	12,000	8,400	1,200	850
2 + **9,453**	*1* **1,242**	14,400	10,080	1,200	850 *
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX				
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 74% **B** 94%	2 CONDITIONS 80%		2 CONDITIONS 80%	

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

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

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APPENDIX 6.1:

HORIZON YEAR 2035 WITHOUT PROJECT INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

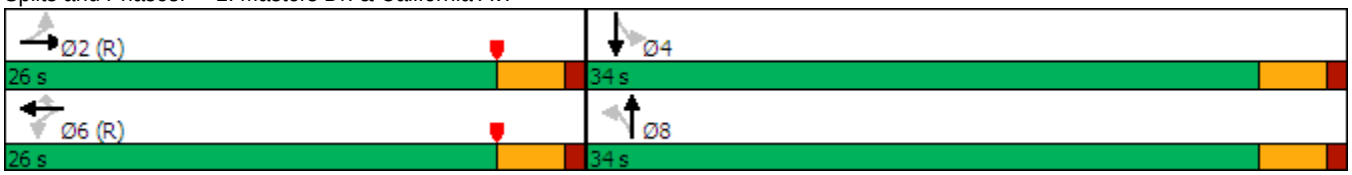
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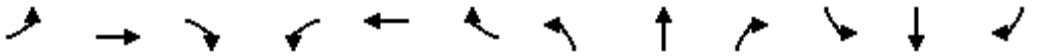
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	190	75	123	104	165	125	262	261	191	132	6
Future Volume (vph)	8	190	75	123	104	165	125	262	261	191	132	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	135		0	130		200	100		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	100			90			60			65		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		495			683			680			695	
Travel Time (s)		7.5			10.3			13.2			13.5	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6		6	8			4		
Detector Phase	2	2		6	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0	26.0	26.0	26.0		26.0	26.0	
Total Split (s)	26.0	26.0		26.0	26.0	26.0	34.0	34.0		34.0	34.0	
Total Split (%)	43.3%	43.3%		43.3%	43.3%	43.3%	56.7%	56.7%		56.7%	56.7%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	Max	Max		Max	Max	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 1: Masters Dr. & California Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	190	75	123	104	165	125	262	261	191	132	6
Future Volume (veh/h)	8	190	75	123	104	165	125	262	261	191	132	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	253	100	164	139	220	167	349	348	255	176	8
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	443	468	185	336	686	581	654	430	428	216	888	40
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.34	0.34	0.34	0.50	0.50	0.50
Sat Flow, veh/h	1022	1275	504	1028	1870	1585	1200	859	857	748	1775	81
Grp Volume(v), veh/h	11	0	353	164	139	220	167	0	697	255	0	184
Grp Sat Flow(s),veh/h/ln	1022	0	1780	1028	1870	1585	1200	0	1716	748	0	1856
Q Serve(g_s), s	0.4	0.0	9.4	9.0	3.1	6.1	6.5	0.0	22.3	7.7	0.0	3.3
Cycle Q Clear(g_c), s	3.5	0.0	9.4	18.4	3.1	6.1	9.8	0.0	22.3	30.0	0.0	3.3
Prop In Lane	1.00		0.28	1.00		1.00	1.00		0.50	1.00		0.04
Lane Grp Cap(c), veh/h	443	0	653	336	686	581	654	0	858	216	0	928
V/C Ratio(X)	0.02	0.00	0.54	0.49	0.20	0.38	0.26	0.00	0.81	1.18	0.00	0.20
Avail Cap(c_a), veh/h	443	0	653	336	686	581	654	0	858	216	0	928
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.86	0.00	0.86	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.2	0.0	15.0	22.3	13.0	14.0	14.5	0.0	17.4	28.3	0.0	8.3
Incr Delay (d2), s/veh	0.1	0.0	3.2	5.0	0.7	1.9	0.8	0.0	7.2	117.6	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	3.7	2.3	1.2	2.1	1.8	0.0	10.3	10.0	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.3	0.0	18.2	27.3	13.7	15.8	15.3	0.0	24.6	145.8	0.0	8.8
LnGrp LOS	B	A	B	C	B	B	B	A	C	F	A	A
Approach Vol, veh/h		364			523			864			439	
Approach Delay, s/veh		18.1			18.9			22.8			88.4	
Approach LOS		B			B			C			F	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		26.0		34.0		26.0		34.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		22.0		30.0		22.0		30.0				
Max Q Clear Time (g_c+I1), s		11.4		32.0		20.4		24.3				
Green Ext Time (p_c), s		1.4		0.0		0.4		2.7				

Intersection Summary												
HCM 6th Ctrl Delay			34.2									
HCM 6th LOS			C									

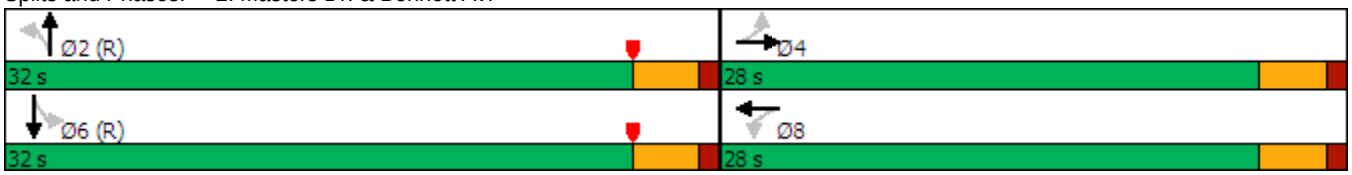
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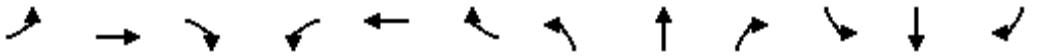
User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	21	33	18	12	38	9	258	15	52	192	24
Future Volume (vph)	44	21	33	18	12	38	9	258	15	52	192	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	110		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		537			564			936			637	
Travel Time (s)		10.5			11.0			18.2			12.4	
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
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Total Split (s)	28.0	28.0		28.0	28.0		32.0	32.0		32.0	32.0	
Total Split (%)	46.7%	46.7%		46.7%	46.7%		53.3%	53.3%		53.3%	53.3%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Masters Dr. & Bennett Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	21	33	18	12	38	9	258	15	52	192	24
Future Volume (veh/h)	44	21	33	18	12	38	9	258	15	52	192	24
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	46	22	35	19	13	40	9	272	16	55	202	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	146	42	52	105	41	88	975	1353	80	919	1262	156
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.77	0.77	0.77	0.77	0.77	0.77
Sat Flow, veh/h	634	449	557	312	441	940	1154	1749	103	1091	1632	202
Grp Volume(v), veh/h	103	0	0	72	0	0	9	0	288	55	0	227
Grp Sat Flow(s),veh/h/ln	1640	0	0	1692	0	0	1154	0	1852	1091	0	1834
Q Serve(g_s), s	1.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	2.5	0.9	0.0	1.9
Cycle Q Clear(g_c), s	3.5	0.0	0.0	2.3	0.0	0.0	2.0	0.0	2.5	3.4	0.0	1.9
Prop In Lane	0.45		0.34	0.26		0.56	1.00		0.06	1.00		0.11
Lane Grp Cap(c), veh/h	240	0	0	233	0	0	975	0	1432	919	0	1419
V/C Ratio(X)	0.43	0.00	0.00	0.31	0.00	0.00	0.01	0.00	0.20	0.06	0.00	0.16
Avail Cap(c_a), veh/h	705	0	0	711	0	0	975	0	1432	919	0	1419
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	0.85	0.00	0.85	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.2	0.0	0.0	25.8	0.0	0.0	2.0	0.0	1.8	2.3	0.0	1.8
Incr Delay (d2), s/veh	1.2	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.3	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.3	0.1	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.4	0.0	0.0	26.5	0.0	0.0	2.0	0.0	2.1	2.4	0.0	2.0
LnGrp LOS	C	A	A	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		103			72			297			282	
Approach Delay, s/veh		27.4			26.5			2.1			2.1	
Approach LOS		C			C			A			A	

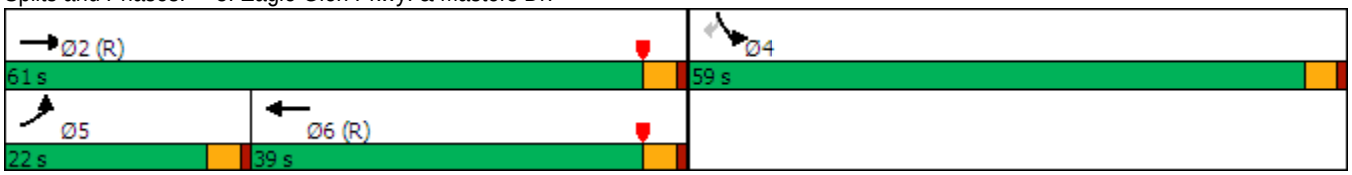
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.4		9.6		50.4		9.6				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		28.0		24.0		28.0		24.0				
Max Q Clear Time (g_c+I1), s		4.5		5.5		5.4		4.3				
Green Ext Time (p_c), s		1.6		0.4		1.4		0.3				

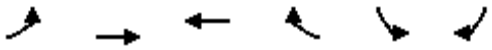
Intersection Summary												
HCM 6th Ctrl Delay			7.9									
HCM 6th LOS			A									

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	78	882	541	240	214	29
Future Volume (vph)	78	882	541	240	214	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	130	0
Storage Lanes	1			0	1	1
Taper Length (ft)	120				60	
Right Turn on Red				Yes		Yes
Link Speed (mph)		45	45		35	
Link Distance (ft)		1267	546		936	
Travel Time (s)		19.2	8.3		18.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases						4
Detector Phase	5	2	6		4	4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0		4.0	4.0
Minimum Split (s)	8.0	26.0	26.0		26.0	26.0
Total Split (s)	22.0	61.0	39.0		59.0	59.0
Total Split (%)	18.3%	50.8%	32.5%		49.2%	49.2%
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0		4.0	4.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: Eagle Glen Pkwy. & Masters Dr.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	78	882	541	240	214	29
Future Volume (veh/h)	78	882	541	240	214	29
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	928	569	253	225	31
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	105	2797	1662	738	261	232
Arrive On Green	0.04	0.53	0.69	0.69	0.15	0.15
Sat Flow, veh/h	1781	3647	2487	1062	1781	1585
Grp Volume(v), veh/h	82	928	422	400	225	31
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1679	1781	1585
Q Serve(g_s), s	5.5	18.0	11.4	11.5	14.8	2.0
Cycle Q Clear(g_c), s	5.5	18.0	11.4	11.5	14.8	2.0
Prop In Lane	1.00			0.63	1.00	1.00
Lane Grp Cap(c), veh/h	105	2797	1234	1166	261	232
V/C Ratio(X)	0.78	0.33	0.34	0.34	0.86	0.13
Avail Cap(c_a), veh/h	267	2797	1234	1166	816	726
HCM Platoon Ratio	0.67	0.67	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	1.00	1.00	0.99	0.99
Uniform Delay (d), s/veh	56.9	10.3	7.3	7.3	50.0	44.6
Incr Delay (d2), s/veh	10.4	0.3	0.8	0.8	8.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	7.6	3.9	3.7	7.1	1.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	67.3	10.6	8.1	8.2	58.2	44.8
LnGrp LOS	E	B	A	A	E	D
Approach Vol, veh/h		1010	822		256	
Approach Delay, s/veh		15.2	8.1		56.6	
Approach LOS		B	A		E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		98.4		21.6	11.1	87.3
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		57.0		55.0	18.0	35.0
Max Q Clear Time (g_c+I1), s		20.0		16.8	7.5	13.5
Green Ext Time (p_c), s		7.0		0.8	0.1	4.9

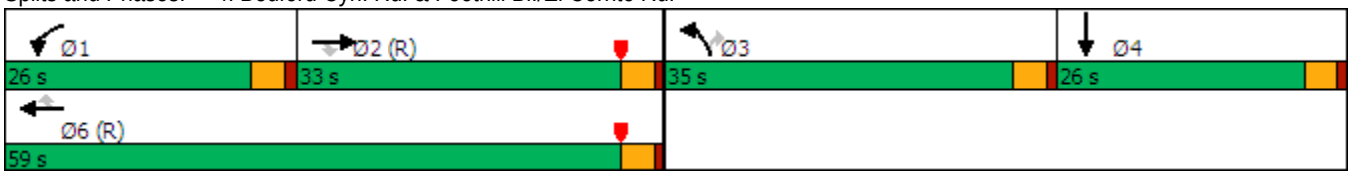
Intersection Summary		
HCM 6th Ctrl Delay	17.5	
HCM 6th LOS	B	

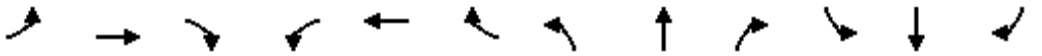
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1275	270	300	1179	20	411	0	313	0	0	10
Future Volume (vph)	0	1275	270	300	1179	20	411	0	313	0	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	135		135	0		125	0		0
Storage Lanes	0		1	1		1	1		1	0		0
Taper Length (ft)	100			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			45			40			30	
Link Distance (ft)		351			305			404			350	
Travel Time (s)		6.0			4.6			6.9			8.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Turn Type		NA	Perm	Prot	NA	Perm	Prot		Perm		NA	
Protected Phases		2		1	6		3				4	
Permitted Phases			2			6			3			
Detector Phase		2	2	1	6	6	3		3		4	
Switch Phase												
Minimum Initial (s)		4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	
Minimum Split (s)		26.0	26.0	26.0	26.0	26.0	35.0		35.0		26.0	
Total Split (s)		33.0	33.0	26.0	59.0	59.0	35.0		35.0		26.0	
Total Split (%)		27.5%	27.5%	21.7%	49.2%	49.2%	29.2%		29.2%		21.7%	
Yellow Time (s)		3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	
All-Red Time (s)		1.0	1.0	1.0	1.0	1.0	1.0		1.0		1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	
Total Lost Time (s)		4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	
Lead/Lag		Lag	Lag	Lead			Lead		Lead		Lag	
Lead-Lag Optimize?		Yes	Yes	Yes			Yes		Yes		Yes	
Recall Mode		C-Max	C-Max	None	C-Max	C-Max	None		None		None	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 115
Control Type: Actuated-Coordinated

Splits and Phases: 4: Bedford Cyn. Rd. & Foothill Bl./El Cerrito Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1275	270	300	1179	20	411	0	313	0	0	10
Future Volume (veh/h)	0	1275	270	300	1179	20	411	0	313	0	0	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	0	1870	1870	1870	1870	1870	1870	0	1870	0	1870	1870
Adj Flow Rate, veh/h	0	1342	284	316	1241	0	433	0	329	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	2	2	0	2	0	2	2
Cap, veh/h	0	1637	730	327	2407		456	0	0	0	2	
Arrive On Green	0.00	0.46	0.46	0.37	1.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	3647	1585	1781	3554	1585	1781	433		0	-74814	0
Grp Volume(v), veh/h	0	1342	284	316	1241	0	433	73.2		0	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1777	1585	1781	E		0	1870	0
Q Serve(g_s), s	0.0	39.3	14.1	20.9	0.0	0.0	28.7			0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	39.3	14.1	20.9	0.0	0.0	28.7			0.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		1.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	1637	730	327	2407		456			0	2	
V/C Ratio(X)	0.00	0.82	0.39	0.97	0.52		0.95			0.00	0.00	
Avail Cap(c_a), veh/h	0	1637	730	327	2407		460			0	343	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.70	0.70	0.00	1.00			0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	28.0	21.3	37.7	0.0	0.0	43.9			0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.7	1.6	33.3	0.6	0.0	29.3			0.0	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
%ile BackOfQ(50%),veh/ln	0.0	16.9	5.4	9.9	0.2	0.0	16.0			0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	32.8	22.8	71.0	0.6	0.0	73.2			0.0	0.0	0.0
LnGrp LOS	A	C	C	E	A		E			A	A	
Approach Vol, veh/h		1626			1557	A					0	A
Approach Delay, s/veh		31.0			14.8						0.0	
Approach LOS		C			B							

Timer - Assigned Phs	1	2	3	4		6
Phs Duration (G+Y+Rc), s	26.0	59.3	34.7	0.0		85.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	22.0	29.0	31.0	22.0		55.0
Max Q Clear Time (g_c+I1), s	22.9	41.3	30.7	0.0		2.0
Green Ext Time (p_c), s	0.0	0.0	0.1	0.0		11.3

Intersection Summary	
HCM 6th Ctrl Delay	29.1
HCM 6th LOS	C

Notes

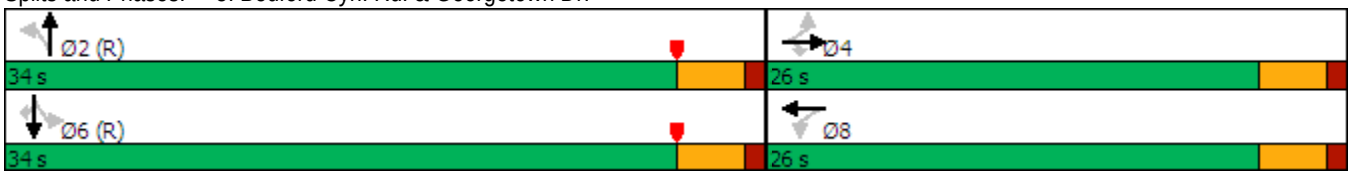
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

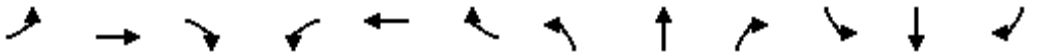
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	89	5	42	2	2	2	19	328	10	35	502	53
Future Volume (vph)	89	5	42	2	2	2	19	328	10	35	502	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	80		0	0		100
Storage Lanes	0		1	0		0	1		0	0		1
Taper Length (ft)	100			100			80			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			45	
Link Distance (ft)		786			169			443			297	
Travel Time (s)		11.9			2.6			10.1			4.5	
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
Shared Lane Traffic (%)												
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	4	8	8		2	2		6	6	6
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	26.0	26.0	26.0	26.0	26.0		26.0	26.0		26.0	26.0	26.0
Total Split (s)	26.0	26.0	26.0	26.0	26.0		34.0	34.0		34.0	34.0	34.0
Total Split (%)	43.3%	43.3%	43.3%	43.3%	43.3%		56.7%	56.7%		56.7%	56.7%	56.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0		4.0	4.0			4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None		C-Max	C-Max		C-Max	C-Max	C-Max

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 5: Bedford Cyn. Rd. & Georgetown Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	5	42	2	2	2	19	328	10	35	502	53
Future Volume (veh/h)	89	5	42	2	2	2	19	328	10	35	502	53
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	94	5	0	2	2	2	20	345	11	37	528	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	237	6		105	77	51	833	1405	45	111	1372	
Arrive On Green	0.09	0.09	0.00	0.09	0.09	0.09	0.78	0.78	0.78	0.78	0.78	0.00
Sat Flow, veh/h	1370	73	1585	288	876	582	875	1803	57	60	1761	1585
Grp Volume(v), veh/h	99	0	0	6	0	0	20	0	356	565	0	0
Grp Sat Flow(s),veh/h/ln	1443	0	1585	1746	0	0	875	0	1860	1821	0	1585
Q Serve(g_s), s	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.0	0.0	0.0	0.2	0.0	0.0	0.2	0.0	3.1	5.7	0.0	0.0
Prop In Lane	0.95		1.00	0.33		0.33	1.00		0.03	0.07		1.00
Lane Grp Cap(c), veh/h	243	0		233	0	0	833	0	1449	1483	0	
V/C Ratio(X)	0.41	0.00		0.03	0.00	0.00	0.02	0.00	0.25	0.38	0.00	
Avail Cap(c_a), veh/h	642	0		680	0	0	833	0	1449	1483	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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	26.8	0.0	0.0	25.1	0.0	0.0	1.5	0.0	1.8	2.1	0.0	0.0
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.4	0.7	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.5	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.9	0.0	0.0	25.1	0.0	0.0	1.5	0.0	2.2	2.8	0.0	0.0
LnGrp LOS	C	A		C	A	A	A	A	A	A	A	
Approach Vol, veh/h		99	A		6			376			565	A
Approach Delay, s/veh		27.9			25.1			2.2			2.8	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.8		9.2		50.8		9.2				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		30.0		22.0		30.0		22.0				
Max Q Clear Time (g_c+I1), s		5.1		6.0		7.7		2.2				
Green Ext Time (p_c), s		2.3		0.3		3.4		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		5.1
HCM 6th LOS		A

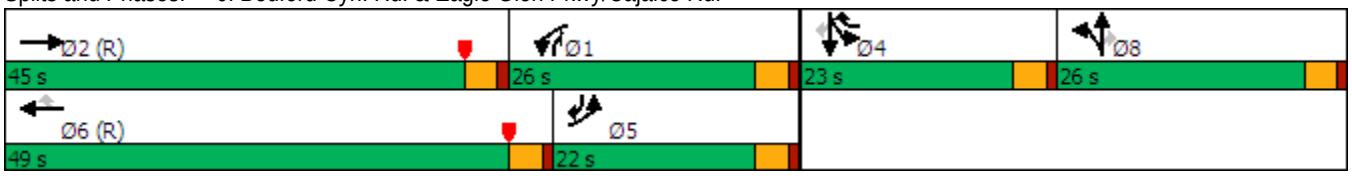
Notes

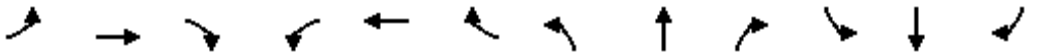
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	143	938	15	170	510	422	11	61	415	161	28	259
Future Volume (vph)	143	938	15	170	510	422	11	61	415	161	28	259
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	200		200	150		0	450		0
Storage Lanes	1		0	2		1	1		1	1		1
Taper Length (ft)	90			120			90			180		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		756			737			351			716	
Travel Time (s)		11.5			11.2			5.3			10.8	
Confl. Peds. (#/hr)						5						5
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
Shared Lane Traffic (%)										42%		
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2		1	6	4	8	8	1	4	4	5
Permitted Phases						6			8			4
Detector Phase	5	2		1	6	4	8	8	1	4	4	5
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	23.0		8.0	23.0	23.0	26.0	26.0	8.0	23.0	23.0	8.0
Total Split (s)	22.0	45.0		26.0	49.0	23.0	26.0	26.0	26.0	23.0	23.0	22.0
Total Split (%)	18.3%	37.5%		21.7%	40.8%	19.2%	21.7%	21.7%	21.7%	19.2%	19.2%	18.3%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lead		Lag	Lead				Lag			Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			Yes
Recall Mode	None	C-Max		None	C-Max	Max	None	None	None	Max	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 6: Bedford Cyn. Rd. & Eagle Glen Pkwy/Cajalco Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	938	15	170	510	422	11	61	415	161	28	259
Future Volume (veh/h)	143	938	15	170	510	422	11	61	415	161	28	259
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		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	151	987	16	179	537	444	12	64	437	190	0	273
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	478	1223	20	1043	1333	843	115	121	581	564	0	674
Arrive On Green	0.27	0.34	0.34	0.10	0.12	0.12	0.02	0.02	0.02	0.16	0.00	0.16
Sat Flow, veh/h	1781	3579	58	3456	3554	1579	1781	1870	1585	3563	0	1570
Grp Volume(v), veh/h	151	490	513	179	537	444	12	64	437	190	0	273
Grp Sat Flow(s),veh/h/ln	1781	1777	1860	1728	1777	1579	1781	1870	1585	1781	0	1570
Q Serve(g_s), s	8.1	30.1	30.1	5.7	16.7	24.3	0.8	4.1	0.0	5.7	0.0	0.0
Cycle Q Clear(g_c), s	8.1	30.1	30.1	5.7	16.7	24.3	0.8	4.1	0.0	5.7	0.0	0.0
Prop In Lane	1.00		0.03	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	478	607	635	1043	1333	843	115	121	581	564	0	674
V/C Ratio(X)	0.32	0.81	0.81	0.17	0.40	0.53	0.10	0.53	0.75	0.34	0.00	0.40
Avail Cap(c_a), veh/h	478	607	635	1043	1333	843	327	343	769	564	0	674
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.89	0.89	0.89	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.1	35.9	35.9	40.3	40.2	26.3	55.3	56.9	35.4	44.9	0.0	23.8
Incr Delay (d2), s/veh	0.4	11.0	10.6	0.1	0.8	2.1	0.4	3.5	3.0	1.6	0.0	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	3.5	14.3	14.9	2.4	8.1	14.2	0.4	2.0	11.8	2.6	0.0	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.4	46.9	46.5	40.3	41.0	28.4	55.7	60.4	38.3	46.5	0.0	25.6
LnGrp LOS	D	D	D	D	D	C	E	E	D	D	A	C
Approach Vol, veh/h		1154			1160			513			463	
Approach Delay, s/veh		45.2			36.1			41.5			34.2	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	40.2	45.0		23.0	36.2	49.0		11.8				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	22.0	41.0		19.0	18.0	45.0		22.0				
Max Q Clear Time (g_c+I1), s	7.7	32.1		7.7	10.1	26.3		6.1				
Green Ext Time (p_c), s	0.4	2.9		1.5	0.3	4.3		1.7				

Intersection Summary			
HCM 6th Ctrl Delay		39.9	
HCM 6th LOS		D	

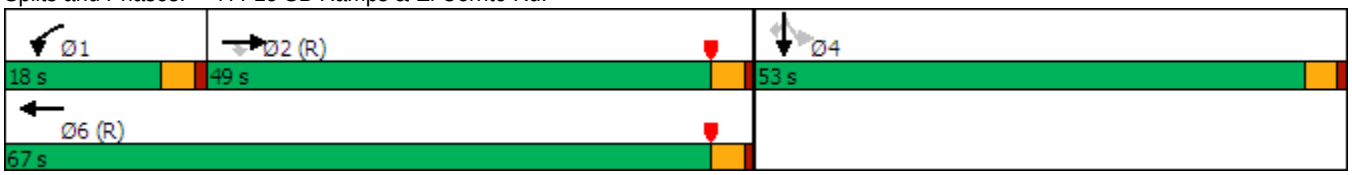
Notes

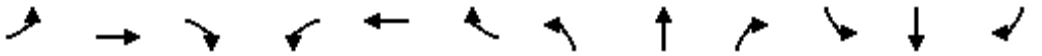
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1012	576	151	864	0	0	0	0	235	5	615
Future Volume (vph)	0	1012	576	151	864	0	0	0	0	235	5	615
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	90		0	0		0	0		525
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	100			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		305			387			1098			1308	
Travel Time (s)		4.6			5.9			16.6			19.8	
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
Shared Lane Traffic (%)												
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Detector Phase		2	2	1	6					4	4	4
Switch Phase												
Minimum Initial (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Minimum Split (s)		26.0	26.0	8.0	26.0					26.0	26.0	26.0
Total Split (s)		49.0	49.0	18.0	67.0					53.0	53.0	53.0
Total Split (%)		40.8%	40.8%	15.0%	55.8%					44.2%	44.2%	44.2%
Yellow Time (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
All-Red Time (s)		1.0	1.0	1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0						0.0	0.0
Total Lost Time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Recall Mode		C-Max	C-Max	None	C-Max					Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 18 (15%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: I-15 SB Ramps & El Cerrito Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1012	576	151	864	0	0	0	0	235	5	615
Future Volume (veh/h)	0	1012	576	151	864	0	0	0	0	235	5	615
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	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1065	606	159	909	0				247	5	647
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	2	2	2	2	0				2	2	2
Cap, veh/h	0	1381	616	183	1866	0				714	14	647
Arrive On Green	0.00	0.26	0.26	0.21	1.00	0.00				0.41	0.41	0.41
Sat Flow, veh/h	0	3647	1585	1781	3647	0				1748	35	1585
Grp Volume(v), veh/h	0	1065	606	159	909	0				252	0	647
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1777	0				1783	0	1585
Q Serve(g_s), s	0.0	33.3	45.6	10.4	0.0	0.0				11.7	0.0	49.0
Cycle Q Clear(g_c), s	0.0	33.3	45.6	10.4	0.0	0.0				11.7	0.0	49.0
Prop In Lane	0.00		1.00	1.00		0.00				0.98		1.00
Lane Grp Cap(c), veh/h	0	1381	616	183	1866	0				728	0	647
V/C Ratio(X)	0.00	0.77	0.98	0.87	0.49	0.00				0.35	0.00	1.00
Avail Cap(c_a), veh/h	0	1381	616	208	1866	0				728	0	647
HCM Platoon Ratio	1.00	0.67	0.67	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.18	0.18	0.43	0.43	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	39.4	44.0	46.9	0.0	0.0				24.5	0.0	35.5
Incr Delay (d2), s/veh	0.0	0.8	12.0	14.1	0.4	0.0				1.3	0.0	35.3
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	15.0	20.2	4.7	0.1	0.0				5.0	0.0	24.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	40.2	56.0	60.9	0.4	0.0				25.8	0.0	70.8
LnGrp LOS	A	D	E	E	A	A				C	A	E
Approach Vol, veh/h		1671			1068						899	
Approach Delay, s/veh		45.9			9.4						58.2	
Approach LOS		D			A						E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	16.4	50.6		53.0		67.0
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s	14.0	45.0		49.0		63.0
Max Q Clear Time (g_c+I1), s	12.4	47.6		51.0		2.0
Green Ext Time (p_c), s	0.1	0.0		0.0		7.1

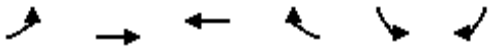
Intersection Summary	
HCM 6th Ctrl Delay	38.2
HCM 6th LOS	D

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	386	1129	805	190	381	387
Future Volume (vph)	386	1129	805	190	381	387
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290			250	0	0
Storage Lanes	2			0	2	2
Taper Length (ft)	120				25	
Right Turn on Red				Yes		Yes
Link Speed (mph)		45	45		45	
Link Distance (ft)		737	285		302	
Travel Time (s)		11.2	4.3		4.6	
Confl. Peds. (#/hr)						5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	23.7	30.7	30.7	8.5	8.5
Total Split (s)	31.0	88.0	57.0	57.0	32.0	32.0
Total Split (%)	25.8%	73.3%	47.5%	47.5%	26.7%	26.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 8: Cajalco Rd. & I-15 SB Ramps





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	386	1129	805	190	381	387
Future Volume (veh/h)	386	1129	805	190	381	387
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	406	1188	847	200	401	407
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	480	3574	1875	836	806	651
Arrive On Green	0.28	1.00	0.53	0.53	0.23	0.23
Sat Flow, veh/h	3456	5274	3647	1585	3456	2790
Grp Volume(v), veh/h	406	1188	847	200	401	407
Grp Sat Flow(s),veh/h/ln	1728	1702	1777	1585	1728	1395
Q Serve(g_s), s	13.3	0.0	17.7	8.2	12.1	15.7
Cycle Q Clear(g_c), s	13.3	0.0	17.7	8.2	12.1	15.7
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	480	3574	1875	836	806	651
V/C Ratio(X)	0.85	0.33	0.45	0.24	0.50	0.63
Avail Cap(c_a), veh/h	778	3574	1875	836	806	651
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.1	0.0	17.6	15.3	39.9	41.3
Incr Delay (d2), s/veh	3.2	0.2	0.8	0.7	2.2	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	0.1	7.0	2.9	5.2	12.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	45.3	0.2	18.4	16.0	42.1	45.8
LnGrp LOS	D	A	B	B	D	D
Approach Vol, veh/h		1594	1047		808	
Approach Delay, s/veh		11.7	17.9		43.9	
Approach LOS		B	B		D	

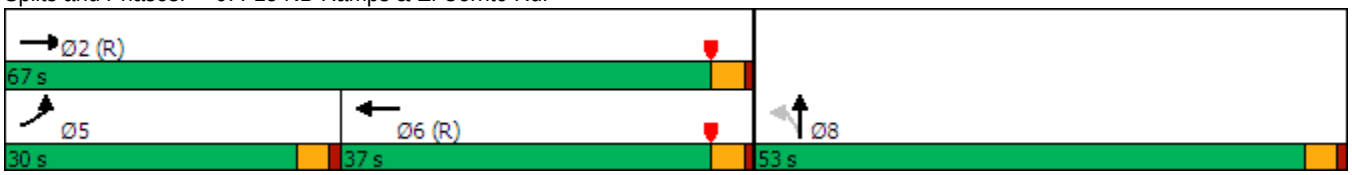
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		88.0		32.0	20.7	67.3
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		84.0		28.0	27.0	53.0
Max Q Clear Time (g_c+I1), s		2.0		17.7	15.3	19.7
Green Ext Time (p_c), s		6.7		2.9	1.4	5.2

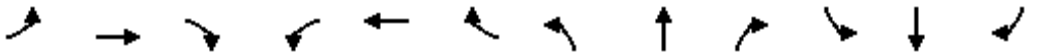
Intersection Summary		
HCM 6th Ctrl Delay	21.1	
HCM 6th LOS	C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	643	602	0	0	558	364	457	2	206	0	0	0
Future Volume (vph)	643	602	0	0	558	364	457	2	206	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	60			100			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		387			489			1198			782	
Travel Time (s)		5.9			7.4			18.2			11.8	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA			NA		Perm	NA				
Protected Phases	5	2			6			8				
Permitted Phases							8					
Detector Phase	5	2			6		8	8				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		4.0	4.0				
Minimum Split (s)	8.0	26.0			26.0		26.0	26.0				
Total Split (s)	30.0	67.0			37.0		53.0	53.0				
Total Split (%)	25.0%	55.8%			30.8%		44.2%	44.2%				
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0				
All-Red Time (s)	1.0	1.0			1.0		1.0	1.0				
Lost Time Adjust (s)	0.0	0.0			0.0			0.0				
Total Lost Time (s)	4.0	4.0			4.0			4.0				
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?	Yes				Yes							
Recall Mode	None	C-Max			C-Max		Max	Max				

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 9: I-15 NB Ramps & El Cerrito Rd.



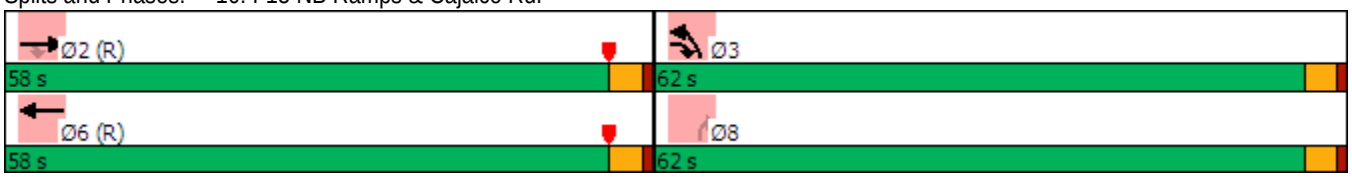


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	643	602	0	0	558	364	457	2	206	0	0	0
Future Volume (veh/h)	643	602	0	0	558	364	457	2	206	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
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	1870	1870	0	0	1870	1870	1900	1870	1900			
Adj Flow Rate, veh/h	677	634	0	0	587	383	481	2	217			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	730	982	0	0	606	396	481	2	217			
Arrive On Green	0.34	0.88	0.00	0.00	0.29	0.29	0.41	0.41	0.41			
Sat Flow, veh/h	3563	1870	0	0	2114	1379	1179	5	532			
Grp Volume(v), veh/h	677	634	0	0	519	451	700	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1870	1622	1716	0	0			
Q Serve(g_s), s	22.0	11.6	0.0	0.0	32.9	32.9	48.9	0.0	0.0			
Cycle Q Clear(g_c), s	22.0	11.6	0.0	0.0	32.9	32.9	48.9	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.85	0.69		0.31			
Lane Grp Cap(c), veh/h	730	982	0	0	536	465	701	0	0			
V/C Ratio(X)	0.93	0.65	0.00	0.00	0.97	0.97	1.00	0.00	0.00			
Avail Cap(c_a), veh/h	772	982	0	0	536	465	701	0	0			
HCM Platoon Ratio	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.51	0.51	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	38.6	4.2	0.0	0.0	42.3	42.3	35.5	0.0	0.0			
Incr Delay (d2), s/veh	10.0	1.7	0.0	0.0	31.8	34.5	33.8	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	8.9	2.7	0.0	0.0	19.3	17.1	25.7	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.6	5.9	0.0	0.0	74.0	76.8	69.3	0.0	0.0			
LnGrp LOS	D	A	A	A	E	E	E	A	A			
Approach Vol, veh/h		1311			970			700				
Approach Delay, s/veh		28.0			75.3			69.3				
Approach LOS		C			E			E				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		67.0			28.6	38.4		53.0				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		63.0			26.0	33.0		49.0				
Max Q Clear Time (g_c+I1), s		13.6			24.0	34.9		50.9				
Green Ext Time (p_c), s		4.4			0.6	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			53.1									
HCM 6th LOS			D									

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	636	874	0	1855	273	132
Future Volume (vph)	636	874	0	1855	273	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		330	0		500	500
Storage Lanes		0	0		0	0
Taper Length (ft)			25		130	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	45	
Link Distance (ft)	293			191	332	
Travel Time (s)	4.4			2.9	5.0	
Confl. Peds. (#/hr)						5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	0%	2%	2%	2%
Shared Lane Traffic (%)						
Turn Type	NA	pm+ov		NA	Prot	Perm
Protected Phases	2	3		6	3	
Permitted Phases		2				8
Detector Phase	2	3		6	3	8
Switch Phase						
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	23.7	8.5		30.7	8.5	8.5
Total Split (s)	58.0	62.0		58.0	62.0	62.0
Total Split (%)	48.3%	51.7%		48.3%	51.7%	51.7%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	Max		C-Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 95 (79%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	

Splits and Phases: 10: I-15 NB Ramps & Cajalco Rd.





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	636	874	0	1855	273	132
Future Volume (veh/h)	636	874	0	1855	273	132
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	669	920	0	1953	287	139
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	2298	1479	0	2895	1670	1348
Arrive On Green	0.45	0.45	0.00	0.45	0.48	0.48
Sat Flow, veh/h	5274	1585	0	6958	3456	2790
Grp Volume(v), veh/h	669	920	0	1953	287	139
Grp Sat Flow(s),veh/h/ln	1702	1585	0	1609	1728	1395
Q Serve(g_s), s	10.0	11.1	0.0	28.8	5.6	3.3
Cycle Q Clear(g_c), s	10.0	11.1	0.0	28.8	5.6	3.3
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2298	1479	0	2895	1670	1348
V/C Ratio(X)	0.29	0.62	0.00	0.67	0.17	0.10
Avail Cap(c_a), veh/h	2298	1479	0	2895	1670	1348
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.9	0.6	0.0	26.1	17.5	16.9
Incr Delay (d2), s/veh	0.3	2.0	0.0	1.3	0.2	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	3.9	0.8	0.0	10.6	2.2	1.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.2	2.6	0.0	27.3	17.7	17.0
LnGrp LOS	C	A	A	C	B	B
Approach Vol, veh/h	1589			1953	426	
Approach Delay, s/veh	10.4			27.3	17.5	
Approach LOS	B			C	B	

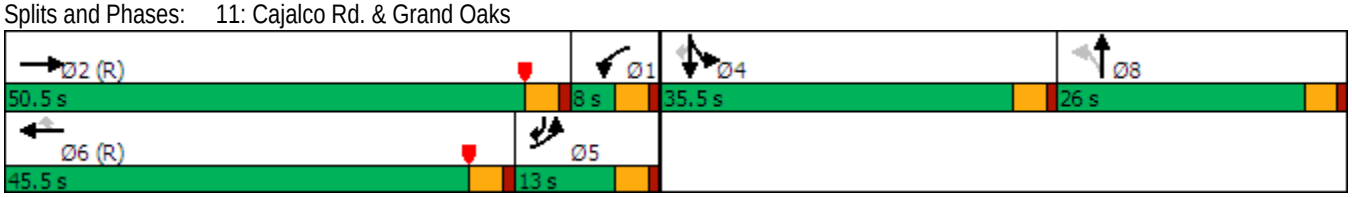
Timer - Assigned Phs	2	6	8
Phs Duration (G+Y+Rc), s	58.0	58.0	62.0
Change Period (Y+Rc), s	4.0	4.0	4.0
Max Green Setting (Gmax), s	54.0	54.0	58.0
Max Q Clear Time (g_c+I1), s	13.1	30.8	7.6
Green Ext Time (p_c), s	11.0	11.5	2.0

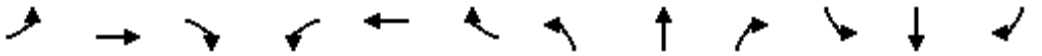
Intersection Summary	
HCM 6th Ctrl Delay	19.5
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	213	555	1	1	1527	111	1	1	1	68	1	137
Future Volume (vph)	213	555	1	1	1527	111	1	1	1	68	1	137
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	130		130	0		0	200		0
Storage Lanes	2		0	1		1	0		0	1		2
Taper Length (ft)	180			110			100			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		602			570			544			904	
Travel Time (s)		9.1			8.6			8.2			13.7	
Confl. Peds. (#/hr)						5				5		
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Split	NA	pm+ov
Protected Phases	5	2		1	6			8		4	4	5
Permitted Phases						6	8					4
Detector Phase	5	2		1	6	6	8	8		4	4	5
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	23.2		8.0	30.7	30.7	26.0	26.0		35.5	35.5	8.5
Total Split (s)	13.0	50.5		8.0	45.5	45.5	26.0	26.0		35.5	35.5	13.0
Total Split (%)	10.8%	42.1%		6.7%	37.9%	37.9%	21.7%	21.7%		29.6%	29.6%	10.8%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag	Lag	Lead		Lag	Lead	Lead						Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		Max	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 91 (76%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	

Splits and Phases: 11: Cajalco Rd. & Grand Oaks





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	213	555	1	1	1527	111	1	1	1	68	1	137
Future Volume (veh/h)	213	555	1	1	1527	111	1	1	1	68	1	137
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		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	224	584	1	1	1607	117	1	1	1	72	1	144
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	882	2040	3	380	1766	546	2	2	2	461	6	1440
Arrive On Green	0.26	0.39	0.39	0.21	0.35	0.35	0.00	0.00	0.00	0.26	0.26	0.26
Sat Flow, veh/h	3456	5264	9	1781	5106	1578	579	579	579	1758	24	2774
Grp Volume(v), veh/h	224	378	207	1	1607	117	3	0	0	73	0	144
Grp Sat Flow(s),veh/h/ln	1728	1702	1869	1781	1702	1578	1737	0	0	1782	0	1387
Q Serve(g_s), s	6.2	9.2	9.2	0.1	36.1	6.3	0.2	0.0	0.0	3.8	0.0	0.0
Cycle Q Clear(g_c), s	6.2	9.2	9.2	0.1	36.1	6.3	0.2	0.0	0.0	3.8	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.33		0.33	0.99		1.00
Lane Grp Cap(c), veh/h	882	1319	724	380	1766	546	6	0	0	468	0	1440
V/C Ratio(X)	0.25	0.29	0.29	0.00	0.91	0.21	0.54	0.00	0.00	0.16	0.00	0.10
Avail Cap(c_a), veh/h	882	1319	724	380	1766	546	318	0	0	468	0	1440
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	1.00
Uniform Delay (d), s/veh	35.6	25.3	25.3	37.1	37.5	27.7	59.7	0.0	0.0	34.0	0.0	14.7
Incr Delay (d2), s/veh	0.2	0.5	1.0	0.0	8.5	0.9	64.2	0.0	0.0	0.7	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	3.7	4.1	0.0	15.6	2.4	0.2	0.0	0.0	1.7	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.7	25.9	26.3	37.1	46.0	28.6	123.9	0.0	0.0	34.7	0.0	14.9
LnGrp LOS	D	C	C	D	D	C	F	A	A	C	A	B
Approach Vol, veh/h		809			1725			3			217	
Approach Delay, s/veh		28.7			44.8			123.9			21.5	
Approach LOS		C			D			F			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	29.6	50.5		35.5	34.6	45.5		4.4				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	4.0	46.5		31.5	9.0	41.5		22.0				
Max Q Clear Time (g_c+I1), s	2.1	11.2		5.8	8.2	38.1		2.2				
Green Ext Time (p_c), s	0.0	2.4		1.0	0.1	2.5		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		38.3	
HCM 6th LOS		D	

Notes

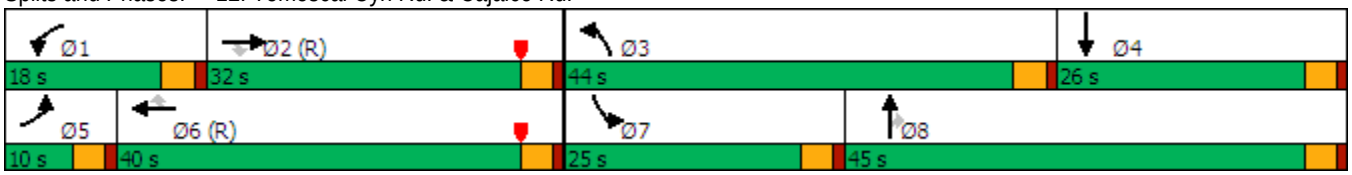
User approved pedestrian interval to be less than phase max green.

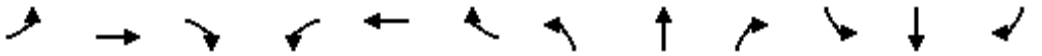
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	375	211	104	583	621	980	858	379	233	138	75
Future Volume (vph)	37	375	211	104	583	621	980	858	379	233	138	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	16	12	12	16	12	12	12
Storage Length (ft)	300		200	450		200	300		325	200		200
Storage Lanes	1		0	1		1	2		1	2		0
Taper Length (ft)	180			180			180			180		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		464			943			1167			1000	
Travel Time (s)		7.0			14.3			17.7			15.2	
Confl. Peds. (#/hr)			5			5						5
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	10.0	26.0	26.0	10.0	40.0	40.0	10.0	26.0	26.0	25.0	26.0	
Total Split (s)	10.0	32.0	32.0	18.0	40.0	40.0	44.0	45.0	45.0	25.0	26.0	
Total Split (%)	8.3%	26.7%	26.7%	15.0%	33.3%	33.3%	36.7%	37.5%	37.5%	20.8%	21.7%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	Max	None	Max	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 104 (87%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 105
Control Type: Actuated-Coordinated

Splits and Phases: 12: Temescal Cyn Rd. & Cajalco Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	375	211	104	583	621	980	858	379	233	138	75
Future Volume (veh/h)	37	375	211	104	583	621	980	858	379	233	138	75
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		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1945	1870	1870	1945	1870	1870	1870
Adj Flow Rate, veh/h	38	387	218	107	601	640	1010	885	391	240	142	77
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	49	1042	463	133	1739	559	1090	1451	673	312	415	213
Arrive On Green	0.03	0.29	0.29	0.07	0.34	0.34	0.32	0.41	0.41	0.09	0.18	0.18
Sat Flow, veh/h	1781	3554	1577	1781	5106	1641	3456	3554	1648	3456	2266	1161
Grp Volume(v), veh/h	38	387	218	107	601	640	1010	885	391	240	110	109
Grp Sat Flow(s),veh/h/ln	1781	1777	1577	1781	1702	1641	1728	1777	1648	1728	1777	1650
Q Serve(g_s), s	2.5	10.4	13.6	7.1	10.6	40.9	33.9	23.5	22.1	8.1	6.4	7.0
Cycle Q Clear(g_c), s	2.5	10.4	13.6	7.1	10.6	40.9	33.9	23.5	22.1	8.1	6.4	7.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.70
Lane Grp Cap(c), veh/h	49	1042	463	133	1739	559	1090	1451	673	312	326	303
V/C Ratio(X)	0.78	0.37	0.47	0.81	0.35	1.14	0.93	0.61	0.58	0.77	0.34	0.36
Avail Cap(c_a), veh/h	89	1042	463	208	1739	559	1152	1451	673	605	326	303
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	58.0	33.6	34.8	54.7	29.6	39.6	39.7	28.0	27.5	53.4	42.6	42.9
Incr Delay (d2), s/veh	23.4	1.0	3.4	11.8	0.5	84.7	12.3	1.9	3.6	4.0	2.8	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	4.5	5.5	3.5	4.3	28.8	15.6	9.9	9.0	3.6	3.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	81.4	34.6	38.2	66.5	30.1	124.3	52.0	29.9	31.2	57.3	45.4	46.2
LnGrp LOS	F	C	D	E	C	F	D	C	C	E	D	D
Approach Vol, veh/h		643			1348			2286			459	
Approach Delay, s/veh		38.6			77.7			39.9			51.8	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	39.2	41.9	26.0	7.3	44.9	14.8	53.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	28.0	40.0	22.0	6.0	36.0	21.0	41.0
Max Q Clear Time (g_c+I1), s	9.1	15.6	35.9	9.0	4.5	42.9	10.1	25.5
Green Ext Time (p_c), s	0.1	2.1	1.9	0.6	0.0	0.0	0.7	5.4

Intersection Summary	
HCM 6th Ctrl Delay	51.6
HCM 6th LOS	D

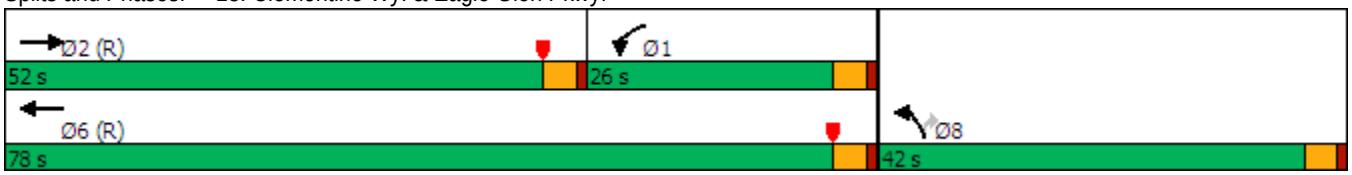
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	567	10	120	450	10	393
Future Volume (vph)	567	10	120	450	10	393
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	300		150	0
Storage Lanes		0	1		1	1
Taper Length (ft)			60		90	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	45	
Link Distance (ft)	366			1267	734	
Travel Time (s)	5.5			19.2	11.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	NA		Prot	NA	Prot	Perm
Protected Phases	2		1	6	8	
Permitted Phases						8
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	26.0		8.0	26.0	26.0	26.0
Total Split (s)	52.0		26.0	78.0	42.0	42.0
Total Split (%)	43.3%		21.7%	65.0%	35.0%	35.0%
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	C-Max		None	C-Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 58 (48%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 13: Clementine Wy. & Eagle Glen Pkwy.

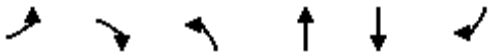




Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	567	10	120	450	10	393
Future Volume (veh/h)	567	10	120	450	10	393
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	597	11	126	474	11	414
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1428	26	327	2191	564	502
Arrive On Green	0.40	0.40	0.18	0.62	0.32	0.32
Sat Flow, veh/h	3663	66	1781	3647	1781	1585
Grp Volume(v), veh/h	297	311	126	474	11	414
Grp Sat Flow(s),veh/h/ln	1777	1859	1781	1777	1781	1585
Q Serve(g_s), s	14.5	14.5	7.5	7.1	0.5	29.0
Cycle Q Clear(g_c), s	14.5	14.5	7.5	7.1	0.5	29.0
Prop In Lane		0.04	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	711	743	327	2191	564	502
V/C Ratio(X)	0.42	0.42	0.39	0.22	0.02	0.82
Avail Cap(c_a), veh/h	711	743	327	2191	564	502
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.94	0.94	1.00	1.00
Uniform Delay (d), s/veh	25.9	25.9	43.1	10.2	28.2	37.9
Incr Delay (d2), s/veh	1.8	1.7	0.7	0.2	0.1	14.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	6.5	3.3	2.6	0.2	12.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	27.7	27.7	43.8	10.4	28.3	52.2
LnGrp LOS	C	C	D	B	C	D
Approach Vol, veh/h	608			600	425	
Approach Delay, s/veh	27.7			17.4	51.6	
Approach LOS	C			B	D	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	26.0	52.0				78.0	42.0
Change Period (Y+Rc), s	4.0	4.0				4.0	4.0
Max Green Setting (Gmax), s	22.0	48.0				74.0	38.0
Max Q Clear Time (g_c+I1), s	9.5	16.5				9.1	31.0
Green Ext Time (p_c), s	0.2	3.5				3.1	0.9

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



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	375	1	1	83	28	124
Future Volume (vph)	375	1	1	83	28	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			100
Storage Lanes	1	0	0			0
Taper Length (ft)	100		100			
Link Speed (mph)	45			45	45	
Link Distance (ft)	1253			542	608	
Travel Time (s)	19.0			8.2	9.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	4.9
Intersection LOS	A

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	396	88	160
Demand Flow Rate, veh/h	404	90	164
Vehicles Circulating, veh/h	30	403	1
Vehicles Exiting, veh/h	135	31	492
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.4	4.9	3.6
Approach LOS	A	A	A

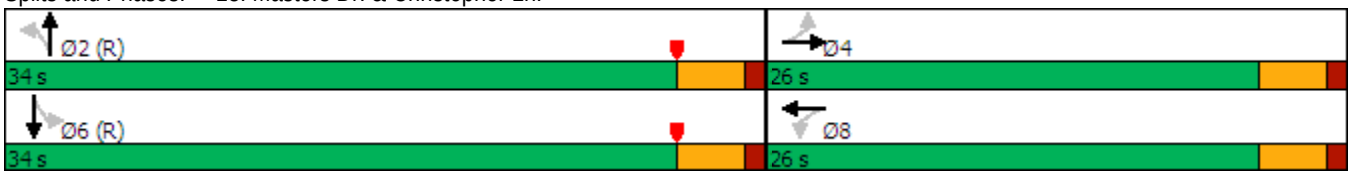
Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	404	90	164
Cap Entry Lane, veh/h	1338	915	1378
Entry HV Adj Factor	0.980	0.981	0.978
Flow Entry, veh/h	396	88	160
Cap Entry, veh/h	1312	897	1348
V/C Ratio	0.302	0.098	0.119
Control Delay, s/veh	5.4	4.9	3.6
LOS	A	A	A
95th %tile Queue, veh	1	0	0

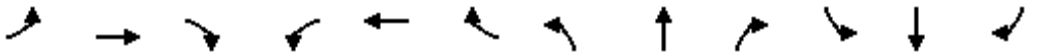
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	11	24	10	6	19	89	612	84	11	310	9
Future Volume (vph)	17	11	24	10	6	19	89	612	84	11	310	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		237			740			933			680	
Travel Time (s)		5.4			16.8			18.2			13.2	
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
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Total Split (s)	26.0	26.0		26.0	26.0		34.0	34.0		34.0	34.0	
Total Split (%)	43.3%	43.3%		43.3%	43.3%		56.7%	56.7%		56.7%	56.7%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 18: Masters Dr. & Christopher Ln.

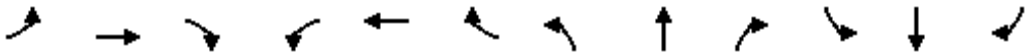




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	11	24	10	6	19	89	612	84	11	310	9
Future Volume (veh/h)	17	11	24	10	6	19	89	612	84	11	310	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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	18	12	25	11	6	20	94	644	88	12	326	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	20	40	102	18	49	873	1311	179	619	1474	41
Arrive On Green	0.05	0.05	0.05	0.05	0.05	0.05	0.81	0.81	0.81	0.55	0.55	0.55
Sat Flow, veh/h	523	384	756	450	335	922	1045	1611	220	724	1811	50
Grp Volume(v), veh/h	55	0	0	37	0	0	94	0	732	12	0	335
Grp Sat Flow(s),veh/h/ln	1663	0	0	1707	0	0	1045	0	1831	724	0	1861
Q Serve(g_s), s	0.7	0.0	0.0	0.0	0.0	0.0	1.7	0.0	7.4	0.5	0.0	5.6
Cycle Q Clear(g_c), s	1.9	0.0	0.0	1.2	0.0	0.0	7.2	0.0	7.4	8.0	0.0	5.6
Prop In Lane	0.33		0.45	0.30		0.54	1.00		0.12	1.00		0.03
Lane Grp Cap(c), veh/h	168	0	0	168	0	0	873	0	1490	619	0	1515
V/C Ratio(X)	0.33	0.00	0.00	0.22	0.00	0.00	0.11	0.00	0.49	0.02	0.00	0.22
Avail Cap(c_a), veh/h	658	0	0	655	0	0	873	0	1490	619	0	1515
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.93	0.00	0.93
Uniform Delay (d), s/veh	27.8	0.0	0.0	27.5	0.0	0.0	2.6	0.0	1.7	6.4	0.0	3.8
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.7	0.0	0.0	0.2	0.0	1.2	0.1	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	0.5	0.0	0.0	0.2	0.0	0.5	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.9	0.0	0.0	28.1	0.0	0.0	2.8	0.0	2.9	6.4	0.0	4.1
LnGrp LOS	C	A	A	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		55			37			826			347	
Approach Delay, s/veh		28.9			28.1			2.9			4.2	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		52.8		7.2		52.8		7.2				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		30.0		22.0		30.0		22.0				
Max Q Clear Time (g_c+I1), s		9.4		3.9		10.0		3.2				
Green Ext Time (p_c), s		5.6		0.2		1.9		0.1				

Intersection Summary		
HCM 6th Ctrl Delay		5.1
HCM 6th LOS		A



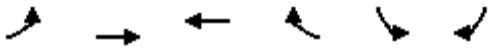
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	11	24	10	6	19	89	612	84	11	310	9
Future Volume (vph)	17	11	24	10	6	19	89	612	84	11	310	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	100			100			60			60		
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		237			740			933			680	
Travel Time (s)		5.4			16.8			18.2			13.2	
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
Shared Lane Traffic (%)												
Sign Control		Yield			Yield			Yield			Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	55	37	826	347
Demand Flow Rate, veh/h	56	37	843	354
Vehicles Circulating, veh/h	356	771	42	113
Vehicles Exiting, veh/h	111	114	369	695
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.4	6.4	10.7	5.6
Approach LOS	A	A	B	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	56	37	843	354
Cap Entry Lane, veh/h	960	629	1322	1230
Entry HV Adj Factor	0.978	0.997	0.980	0.982
Flow Entry, veh/h	55	37	826	347
Cap Entry, veh/h	939	627	1296	1207
V/C Ratio	0.058	0.059	0.638	0.288
Control Delay, s/veh	4.4	6.4	10.7	5.6
LOS	A	A	B	A
95th %tile Queue, veh	0	0	5	1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	7	281	556	6	14	24
Future Volume (vph)	7	281	556	6	14	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	60				100	
Link Speed (mph)		35	35		30	
Link Distance (ft)		1212	796		251	
Travel Time (s)		23.6	15.5		5.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

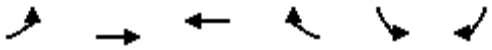
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	281	556	6	14	24
Future Vol, veh/h	7	281	556	6	14	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	120	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	296	585	6	15	25

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	591	0	-	0	898	588
Stage 1	-	-	-	-	588	-
Stage 2	-	-	-	-	310	-
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	985	-	-	-	310	509
Stage 1	-	-	-	-	555	-
Stage 2	-	-	-	-	744	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	985	-	-	-	308	509
Mov Cap-2 Maneuver	-	-	-	-	308	-
Stage 1	-	-	-	-	551	-
Stage 2	-	-	-	-	744	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	14.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	985	-	-	-	410
HCM Lane V/C Ratio	0.007	-	-	-	0.098
HCM Control Delay (s)	8.7	-	-	-	14.7
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	7	281	556	6	14	24
Future Volume (vph)	7	281	556	6	14	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	60				100	
Link Speed (mph)		35	35		30	
Link Distance (ft)		1212	796		251	
Travel Time (s)		23.6	15.5		5.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control		Yield	Yield		Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	6.1
Intersection LOS	A

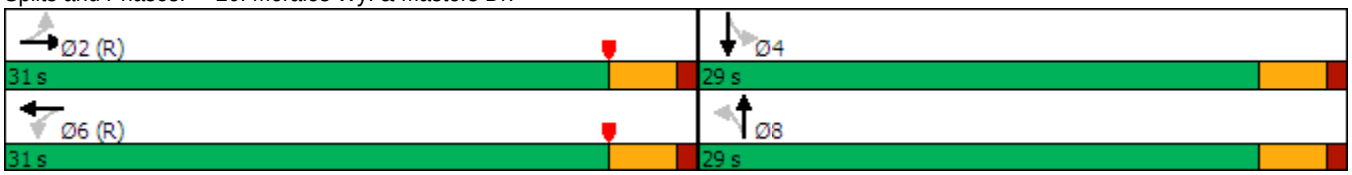
Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	303	591	40
Demand Flow Rate, veh/h	309	603	41
Vehicles Circulating, veh/h	15	7	597
Vehicles Exiting, veh/h	622	317	13
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.6	7.0	5.5
Approach LOS	A	A	A

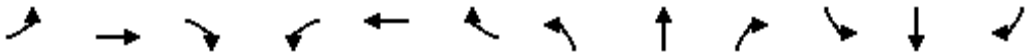
Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	309	603	41
Cap Entry Lane, veh/h	1359	1370	751
Entry HV Adj Factor	0.981	0.981	0.976
Flow Entry, veh/h	303	591	40
Cap Entry, veh/h	1333	1343	732
V/C Ratio	0.227	0.440	0.055
Control Delay, s/veh	4.6	7.0	5.5
LOS	A	A	A
95th %tile Queue, veh	1	2	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	199	89	36	327	4	182	2	76	5	1	5
Future Volume (vph)	3	199	89	36	327	4	182	2	76	5	1	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	60			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			30			45	
Link Distance (ft)		1243			906			626			709	
Travel Time (s)		24.2			17.6			14.2			10.7	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Total Split (s)	31.0	31.0		31.0	31.0		29.0	29.0		29.0	29.0	
Total Split (%)	51.7%	51.7%		51.7%	51.7%		48.3%	48.3%		48.3%	48.3%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		Max	Max		Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: Morales Wy. & Masters Dr.

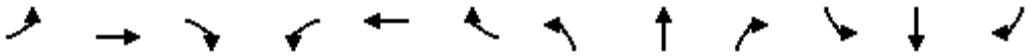




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	199	89	36	327	4	182	2	76	5	1	5
Future Volume (veh/h)	3	199	89	36	327	4	182	2	76	5	1	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		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	4	237	106	43	389	5	217	2	90	6	1	6
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	420	551	246	450	829	11	514	22	178	352	80	296
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	990	1224	548	1038	1842	24	989	52	428	635	193	709
Grp Volume(v), veh/h	4	0	343	43	0	394	309	0	0	13	0	0
Grp Sat Flow(s),veh/h/ln	990	0	1772	1038	0	1866	1469	0	0	1537	0	0
Q Serve(g_s), s	0.2	0.0	7.9	1.8	0.0	8.8	8.3	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.0	0.0	7.9	9.7	0.0	8.8	9.2	0.0	0.0	0.3	0.0	0.0
Prop In Lane	1.00		0.31	1.00		0.01	0.70		0.29	0.46		0.46
Lane Grp Cap(c), veh/h	420	0	797	450	0	840	714	0	0	728	0	0
V/C Ratio(X)	0.01	0.00	0.43	0.10	0.00	0.47	0.43	0.00	0.00	0.02	0.00	0.00
Avail Cap(c_a), veh/h	420	0	797	450	0	840	714	0	0	728	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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.6	0.0	11.3	14.6	0.0	11.5	12.8	0.0	0.0	10.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.7	0.4	0.0	1.9	1.9	0.0	0.0	0.0	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	0.0	0.0	2.9	0.4	0.0	3.5	3.0	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.7	0.0	12.9	15.0	0.0	13.4	14.7	0.0	0.0	10.3	0.0	0.0
LnGrp LOS	B	A	B	B	A	B	B	A	A	B	A	A
Approach Vol, veh/h		347			437			309			13	
Approach Delay, s/veh		13.0			13.5			14.7			10.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		31.0		29.0		31.0		29.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		27.0		25.0		27.0		25.0				
Max Q Clear Time (g_c+I1), s		11.0		2.3		11.7		11.2				
Green Ext Time (p_c), s		1.8		0.0		2.2		1.5				

Intersection Summary												
HCM 6th Ctrl Delay			13.7									
HCM 6th LOS			B									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	199	89	36	327	4	182	2	76	5	1	5
Future Volume (vph)	3	199	89	36	327	4	182	2	76	5	1	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	60			60			100			100		
Link Speed (mph)		35			35			30			45	
Link Distance (ft)		1243			906			626			709	
Travel Time (s)		24.2			17.6			14.2			10.7	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)												
Sign Control		Yield			Yield			Yield			Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	6.5
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	347	437	309	13
Demand Flow Rate, veh/h	354	446	315	13
Vehicles Circulating, veh/h	51	227	252	662
Vehicles Exiting, veh/h	624	340	153	11
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.2	7.7	6.3	5.3
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	354	446	315	13
Cap Entry Lane, veh/h	1310	1095	1067	702
Entry HV Adj Factor	0.981	0.980	0.981	0.998
Flow Entry, veh/h	347	437	309	13
Cap Entry, veh/h	1285	1073	1047	701
V/C Ratio	0.270	0.407	0.295	0.019
Control Delay, s/veh	5.2	7.7	6.3	5.3
LOS	A	A	A	A
95th %tile Queue, veh	1	2	1	0



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	3	9	453	5	17	149
Future Volume (vph)	3	9	453	5	17	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	200	
Storage Lanes	1	0		0	1	
Taper Length (ft)	100				60	
Link Speed (mph)	45		45			45
Link Distance (ft)	302		233			567
Travel Time (s)	4.6		3.5			8.6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	9	453	5	17	149
Future Vol, veh/h	3	9	453	5	17	149
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	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	9	477	5	18	157

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	595	241	0	0	482	0
Stage 1	480	-	-	-	-	-
Stage 2	115	-	-	-	-	-
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	436	760	-	-	1077	-
Stage 1	588	-	-	-	-	-
Stage 2	897	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	429	760	-	-	1077	-
Mov Cap-2 Maneuver	429	-	-	-	-	-
Stage 1	578	-	-	-	-	-
Stage 2	897	-	-	-	-	-

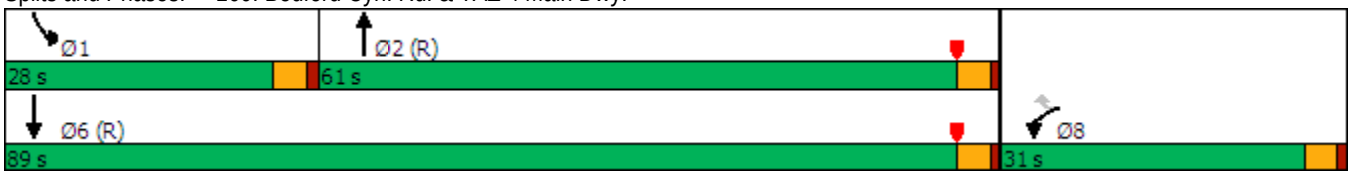
Approach	WB	NB	SB
HCM Control Delay, s	10.8	0	0.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	637	1077	-
HCM Lane V/C Ratio	-	-	0.02	0.017	-
HCM Control Delay (s)	-	-	10.8	8.4	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	5	26	453	9	52	161
Future Volume (vph)	5	26	453	9	52	161
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	200	
Storage Lanes	1	1		0	1	
Taper Length (ft)	100				60	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	45		45			45
Link Distance (ft)	264		567			343
Travel Time (s)	4.0		8.6			5.2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8				
Detector Phase	8	8	2		1	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0		4.0	4.0
Minimum Split (s)	26.0	26.0	26.0		8.0	26.0
Total Split (s)	31.0	31.0	61.0		28.0	89.0
Total Split (%)	25.8%	25.8%	50.8%		23.3%	74.2%
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 160: Bedford Cyn. Rd. & TAZ 4 Main Dwy.





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	5	26	453	9	52	161
Future Volume (veh/h)	5	26	453	9	52	161
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	27	477	9	55	169
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	40	35	2988	56	72	3237
Arrive On Green	0.02	0.02	0.84	0.84	0.04	0.91
Sat Flow, veh/h	1781	1585	3661	67	1781	3647
Grp Volume(v), veh/h	5	27	237	249	55	169
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1858	1781	1777
Q Serve(g_s), s	0.3	2.0	3.0	3.0	3.7	0.5
Cycle Q Clear(g_c), s	0.3	2.0	3.0	3.0	3.7	0.5
Prop In Lane	1.00	1.00		0.04	1.00	
Lane Grp Cap(c), veh/h	40	35	1488	1556	72	3237
V/C Ratio(X)	0.13	0.76	0.16	0.16	0.77	0.05
Avail Cap(c_a), veh/h	401	357	1488	1556	356	3237
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	57.5	58.3	1.8	1.8	57.0	0.5
Incr Delay (d2), s/veh	1.4	28.1	0.2	0.2	15.5	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	0.2	1.1	0.6	0.6	1.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	58.9	86.4	2.1	2.1	72.5	0.5
LnGrp LOS	E	F	A	A	E	A
Approach Vol, veh/h	32		486			224
Approach Delay, s/veh	82.1		2.1			18.2
Approach LOS	F		A			B

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	8.8	104.5			113.3	6.7
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0
Max Green Setting (Gmax), s	24.0	57.0			85.0	27.0
Max Q Clear Time (g_c+I1), s	5.7	5.0			2.5	4.0
Green Ext Time (p_c), s	0.1	2.8			1.0	0.1

Intersection Summary		
HCM 6th Ctrl Delay		10.4
HCM 6th LOS		B



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	9	479	1	0	213
Future Volume (vph)	0	9	479	1	0	213
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		45			45
Link Distance (ft)	221		343			351
Travel Time (s)	3.3		5.2			5.3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	9	479	1	0	213
Future Vol, veh/h	0	9	479	1	0	213
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	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	9	504	1	0	224

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	253	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	746	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	746	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

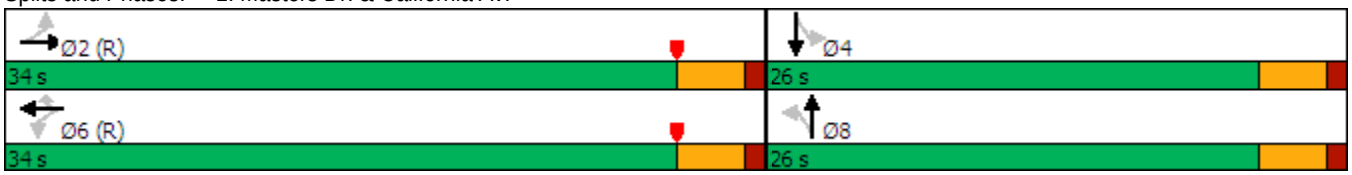
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	746	-
HCM Lane V/C Ratio	-	-	0.013	-
HCM Control Delay (s)	-	-	9.9	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0	-

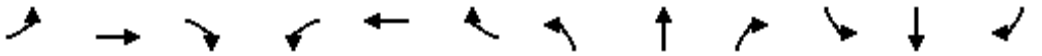
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	108	330	237	135	28	103	150	145	38	234	2
Future Volume (vph)	4	108	330	237	135	28	103	150	145	38	234	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	135		0	130		200	100		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	100			90			60			65		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		495			683			680			695	
Travel Time (s)		7.5			10.3			13.2			13.5	
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
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6		6	8			4		
Detector Phase	2	2		6	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0	26.0	26.0	26.0		26.0	26.0	
Total Split (s)	34.0	34.0		34.0	34.0	34.0	26.0	26.0		26.0	26.0	
Total Split (%)	56.7%	56.7%		56.7%	56.7%	56.7%	43.3%	43.3%		43.3%	43.3%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	Max	Max		Max	Max	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 1: Masters Dr. & California Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	108	330	237	135	28	103	150	145	38	234	2
Future Volume (veh/h)	4	108	330	237	135	28	103	150	145	38	234	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		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	4	114	347	249	142	29	108	158	153	40	246	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	677	204	620	405	935	793	425	320	310	331	679	6
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.12	0.12	0.12	0.37	0.37	0.37
Sat Flow, veh/h	1214	407	1240	931	1870	1585	1132	873	845	1068	1853	15
Grp Volume(v), veh/h	4	0	461	249	142	29	108	0	311	40	0	248
Grp Sat Flow(s),veh/h/ln	1214	0	1647	931	1870	1585	1132	0	1718	1068	0	1868
Q Serve(g_s), s	0.1	0.0	11.7	15.2	2.5	0.6	5.4	0.0	10.2	1.9	0.0	5.8
Cycle Q Clear(g_c), s	2.6	0.0	11.7	26.9	2.5	0.6	11.2	0.0	10.2	12.0	0.0	5.8
Prop In Lane	1.00		0.75	1.00		1.00	1.00		0.49	1.00		0.01
Lane Grp Cap(c), veh/h	677	0	824	405	935	793	425	0	630	331	0	685
V/C Ratio(X)	0.01	0.00	0.56	0.62	0.15	0.04	0.25	0.00	0.49	0.12	0.00	0.36
Avail Cap(c_a), veh/h	677	0	824	405	935	793	425	0	630	331	0	685
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.97	0.00	0.97	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.8	0.0	10.4	19.7	8.1	7.6	24.4	0.0	21.2	20.1	0.0	13.9
Incr Delay (d2), s/veh	0.0	0.0	2.7	6.8	0.3	0.1	1.4	0.0	2.7	0.7	0.0	1.5
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	0.0	0.0	3.7	3.5	0.8	0.2	1.7	0.0	4.7	0.5	0.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.8	0.0	13.2	26.6	8.5	7.7	25.8	0.0	23.8	20.8	0.0	15.4
LnGrp LOS	A	A	B	C	A	A	C	A	C	C	A	B
Approach Vol, veh/h		465			420			419			288	
Approach Delay, s/veh		13.1			19.2			24.3			16.1	
Approach LOS		B			B			C			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		34.0		26.0		34.0		26.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		30.0		22.0		30.0		22.0				
Max Q Clear Time (g_c+I1), s		13.7		14.0		28.9		13.2				
Green Ext Time (p_c), s		2.6		0.9		0.3		1.5				

Intersection Summary												
HCM 6th Ctrl Delay			18.2									
HCM 6th LOS			B									

Notes

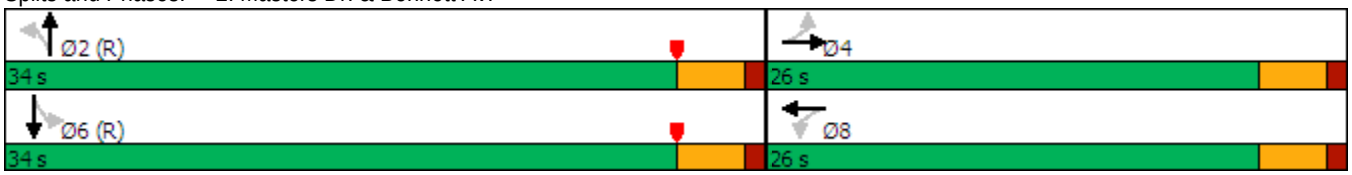
User approved pedestrian interval to be less than phase max green.

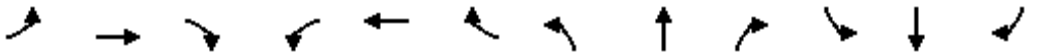
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	7	37	15	22	152	49	209	150	22	464	92
Future Volume (vph)	32	7	37	15	22	152	49	209	150	22	464	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	110		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		537			564			936			637	
Travel Time (s)		10.5			11.0			18.2			12.4	
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
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Total Split (s)	26.0	26.0		26.0	26.0		34.0	34.0		34.0	34.0	
Total Split (%)	43.3%	43.3%		43.3%	43.3%		56.7%	56.7%		56.7%	56.7%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 2: Masters Dr. & Bennett Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	7	37	15	22	152	49	209	150	22	464	92
Future Volume (veh/h)	32	7	37	15	22	152	49	209	150	22	464	92
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	34	7	39	16	23	160	52	220	158	23	488	97
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	167	54	129	76	41	212	587	712	511	744	1065	212
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	501	330	791	66	250	1296	830	1012	727	1005	1515	301
Grp Volume(v), veh/h	80	0	0	199	0	0	52	0	378	23	0	585
Grp Sat Flow(s),veh/h/ln	1623	0	0	1612	0	0	830	0	1739	1005	0	1816
Q Serve(g_s), s	0.0	0.0	0.0	2.3	0.0	0.0	1.8	0.0	4.9	0.5	0.0	8.5
Cycle Q Clear(g_c), s	2.4	0.0	0.0	7.0	0.0	0.0	10.2	0.0	4.9	5.5	0.0	8.5
Prop In Lane	0.42		0.49	0.08		0.80	1.00		0.42	1.00		0.17
Lane Grp Cap(c), veh/h	351	0	0	328	0	0	587	0	1223	744	0	1277
V/C Ratio(X)	0.23	0.00	0.00	0.61	0.00	0.00	0.09	0.00	0.31	0.03	0.00	0.46
Avail Cap(c_a), veh/h	638	0	0	652	0	0	587	0	1223	744	0	1277
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	0.78	0.00	0.78	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.0	0.0	0.0	23.9	0.0	0.0	6.1	0.0	3.4	4.4	0.0	3.9
Incr Delay (d2), s/veh	0.3	0.0	0.0	1.8	0.0	0.0	0.2	0.0	0.5	0.1	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.0	2.6	0.0	0.0	0.3	0.0	1.1	0.1	0.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.3	0.0	0.0	25.7	0.0	0.0	6.4	0.0	3.9	4.5	0.0	5.1
LnGrp LOS	C	A	A	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		80			199			430			608	
Approach Delay, s/veh		22.3			25.7			4.2			5.1	
Approach LOS		C			C			A			A	

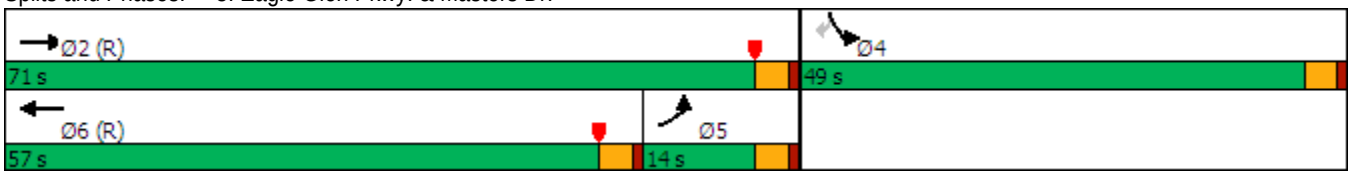
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		46.2		13.8		46.2		13.8				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		30.0		22.0		30.0		22.0				
Max Q Clear Time (g_c+I1), s		12.2		4.4		10.5		9.0				
Green Ext Time (p_c), s		2.5		0.3		3.9		0.9				

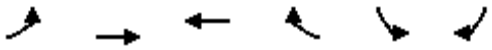
Intersection Summary												
HCM 6th Ctrl Delay			8.9									
HCM 6th LOS			A									

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	76	607	841	352	464	63
Future Volume (vph)	76	607	841	352	464	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	130	0
Storage Lanes	1			0	1	1
Taper Length (ft)	120				60	
Right Turn on Red				Yes		Yes
Link Speed (mph)		45	45		35	
Link Distance (ft)		1267	546		936	
Travel Time (s)		19.2	8.3		18.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases						4
Detector Phase	5	2	6		4	4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0		4.0	4.0
Minimum Split (s)	8.0	26.0	26.0		26.0	26.0
Total Split (s)	14.0	71.0	57.0		49.0	49.0
Total Split (%)	11.7%	59.2%	47.5%		40.8%	40.8%
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0		4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: Eagle Glen Pkwy. & Masters Dr.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	76	607	841	352	464	63
Future Volume (veh/h)	76	607	841	352	464	63
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	639	885	371	488	66
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	291	2269	1080	450	525	467
Arrive On Green	0.33	1.00	0.44	0.44	0.29	0.29
Sat Flow, veh/h	1781	3647	2539	1019	1781	1585
Grp Volume(v), veh/h	80	639	642	614	488	66
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1687	1781	1585
Q Serve(g_s), s	4.0	0.0	37.9	38.4	31.9	3.7
Cycle Q Clear(g_c), s	4.0	0.0	37.9	38.4	31.9	3.7
Prop In Lane	1.00			0.60	1.00	1.00
Lane Grp Cap(c), veh/h	291	2269	785	745	525	467
V/C Ratio(X)	0.27	0.28	0.82	0.82	0.93	0.14
Avail Cap(c_a), veh/h	291	2269	785	745	668	594
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	1.00	1.00	0.89	0.89
Uniform Delay (d), s/veh	35.1	0.0	29.3	29.4	41.1	31.1
Incr Delay (d2), s/veh	0.4	0.3	9.2	10.1	15.6	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	1.7	0.1	17.1	16.6	16.0	3.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.5	0.3	38.5	39.5	56.7	31.3
LnGrp LOS	D	A	D	D	E	C
Approach Vol, veh/h		719	1256		554	
Approach Delay, s/veh		4.2	39.0		53.6	
Approach LOS		A	D		D	

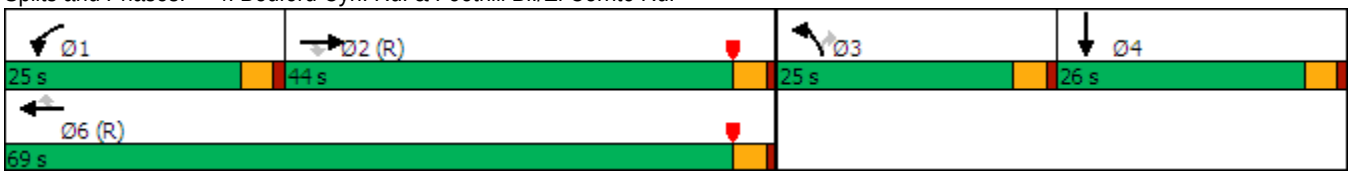
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		80.6		39.4	23.6	57.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		67.0		45.0	10.0	53.0
Max Q Clear Time (g_c+I1), s		2.0		33.9	6.0	40.4
Green Ext Time (p_c), s		4.5		1.4	0.0	6.3

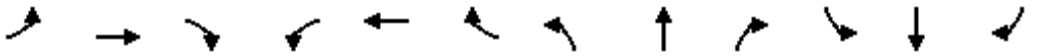
Intersection Summary	
HCM 6th Ctrl Delay	32.3
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1711	391	229	823	10	220	0	189	0	0	20
Future Volume (vph)	0	1711	391	229	823	10	220	0	189	0	0	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	135		135	0		125	0		0
Storage Lanes	0		1	1		1	1		1	0		0
Taper Length (ft)	100			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			45			40			30	
Link Distance (ft)		351			305			404			350	
Travel Time (s)		6.0			4.6			6.9			8.0	
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
Shared Lane Traffic (%)												
Turn Type		NA	Perm	Prot	NA	Perm	Prot		Perm		NA	
Protected Phases		2		1	6		3				4	
Permitted Phases			2			6			3			
Detector Phase		2	2	1	6	6	3		3		4	
Switch Phase												
Minimum Initial (s)		4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	
Minimum Split (s)		26.0	26.0	25.0	26.0	26.0	25.0		25.0		26.0	
Total Split (s)		44.0	44.0	25.0	69.0	69.0	25.0		25.0		26.0	
Total Split (%)		36.7%	36.7%	20.8%	57.5%	57.5%	20.8%		20.8%		21.7%	
Yellow Time (s)		3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	
All-Red Time (s)		1.0	1.0	1.0	1.0	1.0	1.0		1.0		1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	
Total Lost Time (s)		4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	
Lead/Lag		Lag	Lag	Lead			Lead		Lead		Lag	
Lead-Lag Optimize?		Yes	Yes	Yes			Yes		Yes		Yes	
Recall Mode		C-Max	C-Max	None	C-Max	C-Max	None		None		None	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Bedford Cyn. Rd. & Foothill Bl./El Cerrito Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1711	391	229	823	10	220	0	189	0	0	20
Future Volume (veh/h)	0	1711	391	229	823	10	220	0	189	0	0	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	1870	0	1870	0	1870	1870
Adj Flow Rate, veh/h	0	1746	399	234	840	0	224	0	193	0	0	0
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, %	0	2	2	2	2	2	2	0	2	0	2	2
Cap, veh/h	0	2168	967	264	2812		253	0	0	0	2	
Arrive On Green	0.00	0.61	0.61	0.10	0.53	0.00	0.14	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	3647	1585	1781	3554	1585	1781	224		0	-74814	0
Grp Volume(v), veh/h	0	1746	399	234	840	0	224	72.2		0	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1777	1585	1781	E		0	1870	0
Q Serve(g_s), s	0.0	45.2	15.7	15.6	15.8	0.0	14.8			0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	45.2	15.7	15.6	15.8	0.0	14.8			0.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		1.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	2168	967	264	2812		253			0	2	
V/C Ratio(X)	0.00	0.81	0.41	0.89	0.30		0.89			0.00	0.00	
Avail Cap(c_a), veh/h	0	2168	967	312	2812		312			0	343	
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.87	0.87	0.00	1.00			0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.9	12.2	53.1	9.6	0.0	50.5			0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.3	1.3	20.3	0.2	0.0	21.7			0.0	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
%ile BackOfQ(50%),veh/ln	0.0	17.6	5.5	8.6	6.7	0.0	8.0			0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	21.3	13.5	73.4	9.8	0.0	72.2			0.0	0.0	0.0
LnGrp LOS	A	C	B	E	A		E			A	A	
Approach Vol, veh/h		2145			1074	A					0	A
Approach Delay, s/veh		19.8			23.7						0.0	
Approach LOS		B			C							

Timer - Assigned Phs	1	2	3	4		6
Phs Duration (G+Y+Rc), s	21.8	77.2	21.0	0.0		99.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	21.0	40.0	21.0	22.0		65.0
Max Q Clear Time (g_c+I1), s	17.6	47.2	16.8	0.0		17.8
Green Ext Time (p_c), s	0.2	0.0	0.2	0.0		6.3

Intersection Summary	
HCM 6th Ctrl Delay	24.4
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

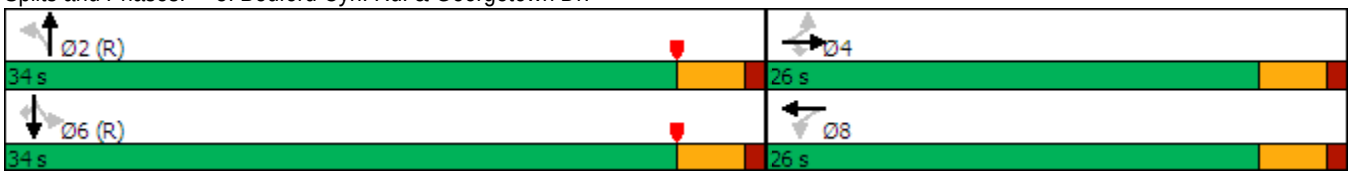
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

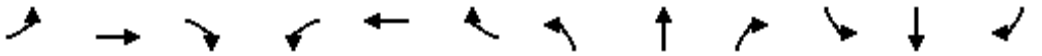
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	1	29	2	2	6	42	232	11	8	560	101
Future Volume (vph)	56	1	29	2	2	6	42	232	11	8	560	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	80		0	0		100
Storage Lanes	0		1	0		0	1		0	0		1
Taper Length (ft)	100			100			80			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			45	
Link Distance (ft)		786			169			443			297	
Travel Time (s)		11.9			2.6			10.1			4.5	
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
Shared Lane Traffic (%)												
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	4	8	8		2	2		6	6	6
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	26.0	26.0	26.0	26.0	26.0		26.0	26.0		26.0	26.0	26.0
Total Split (s)	26.0	26.0	26.0	26.0	26.0		34.0	34.0		34.0	34.0	34.0
Total Split (%)	43.3%	43.3%	43.3%	43.3%	43.3%		56.7%	56.7%		56.7%	56.7%	56.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0		4.0	4.0			4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None		C-Max	C-Max		C-Max	C-Max	C-Max

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 5: Bedford Cyn. Rd. & Georgetown Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	1	29	2	2	6	42	232	11	8	560	101
Future Volume (veh/h)	56	1	29	2	2	6	42	232	11	8	560	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		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	59	1	0	2	2	6	44	244	12	8	589	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	194	1		86	23	55	834	1439	71	65	1515	
Arrive On Green	0.05	0.05	0.00	0.05	0.05	0.05	0.81	0.81	0.81	0.81	0.81	0.00
Sat Flow, veh/h	1428	24	1585	258	441	1048	827	1768	87	6	1861	1585
Grp Volume(v), veh/h	60	0	0	10	0	0	44	0	256	597	0	0
Grp Sat Flow(s),veh/h/ln	1453	0	1585	1747	0	0	827	0	1855	1867	0	1585
Q Serve(g_s), s	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.4	0.0	0.0	0.3	0.0	0.0	0.4	0.0	1.8	5.2	0.0	0.0
Prop In Lane	0.98		1.00	0.20		0.60	1.00		0.05	0.01		1.00
Lane Grp Cap(c), veh/h	196	0		164	0	0	834	0	1510	1580	0	
V/C Ratio(X)	0.31	0.00		0.06	0.00	0.00	0.05	0.00	0.17	0.38	0.00	
Avail Cap(c_a), veh/h	639	0		665	0	0	834	0	1510	1580	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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.0	0.0	0.0	27.1	0.0	0.0	1.1	0.0	1.2	1.5	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.2	0.7	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.9	0.0	0.0	27.2	0.0	0.0	1.2	0.0	1.4	2.2	0.0	0.0
LnGrp LOS	C	A		C	A	A	A	A	A	A	A	
Approach Vol, veh/h		60	A		10			300			597	A
Approach Delay, s/veh		28.9			27.2			1.4			2.2	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		52.8		7.2		52.8		7.2				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		30.0		22.0		30.0		22.0				
Max Q Clear Time (g_c+I1), s		3.8		4.4		7.2		2.3				
Green Ext Time (p_c), s		1.8		0.2		3.6		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		3.9
HCM 6th LOS		A

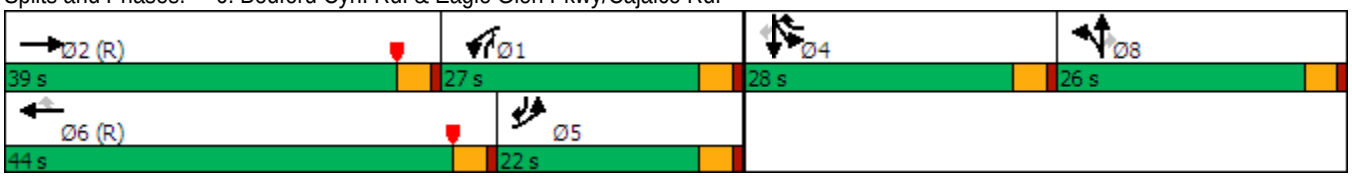
Notes

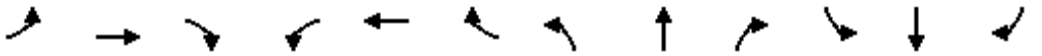
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	203	823	45	529	1010	145	39	61	359	430	87	144
Future Volume (vph)	203	823	45	529	1010	145	39	61	359	430	87	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	200		200	150		0	450		0
Storage Lanes	1		0	2		1	1		1	1		1
Taper Length (ft)	90			120			90			180		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		756			737			351			716	
Travel Time (s)		11.5			11.2			5.3			10.8	
Confl. Peds. (#/hr)						5						5
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
Shared Lane Traffic (%)										40%		
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2		1	6	4	8	8	1	4	4	5
Permitted Phases						6			8			4
Detector Phase	5	2		1	6	4	8	8	1	4	4	5
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	23.0		8.0	23.0	23.0	26.0	26.0	8.0	23.0	23.0	8.0
Total Split (s)	22.0	39.0		27.0	44.0	28.0	26.0	26.0	27.0	28.0	28.0	22.0
Total Split (%)	18.3%	32.5%		22.5%	36.7%	23.3%	21.7%	21.7%	22.5%	23.3%	23.3%	18.3%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lead		Lag	Lead				Lag			Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			Yes
Recall Mode	None	C-Max		None	C-Max	Max	None	None	None	Max	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 6: Bedford Cyn. Rd. & Eagle Glen Pkwy/Cajalco Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	203	823	45	529	1010	145	39	61	359	430	87	144
Future Volume (veh/h)	203	823	45	529	1010	145	39	61	359	430	87	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		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	214	866	47	557	1063	153	41	64	378	519	0	152
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	482	1000	54	1079	1185	843	112	118	594	713	0	743
Arrive On Green	0.27	0.29	0.29	0.21	0.22	0.22	0.06	0.06	0.06	0.20	0.00	0.20
Sat Flow, veh/h	1781	3428	186	3456	3554	1578	1781	1870	1585	3563	0	1573
Grp Volume(v), veh/h	214	449	464	557	1063	153	41	64	378	519	0	152
Grp Sat Flow(s),veh/h/ln	1781	1777	1837	1728	1777	1578	1781	1870	1585	1781	0	1573
Q Serve(g_s), s	12.0	28.7	28.7	17.1	34.9	6.8	2.6	4.0	0.0	16.4	0.0	0.0
Cycle Q Clear(g_c), s	12.0	28.7	28.7	17.1	34.9	6.8	2.6	4.0	0.0	16.4	0.0	0.0
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	482	518	536	1079	1185	843	112	118	594	713	0	743
V/C Ratio(X)	0.44	0.87	0.87	0.52	0.90	0.18	0.37	0.54	0.64	0.73	0.00	0.20
Avail Cap(c_a), veh/h	482	518	536	1079	1185	843	327	343	785	713	0	743
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.72	0.72	0.72	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.3	40.3	40.3	39.4	44.6	17.1	53.9	54.6	30.8	44.9	0.0	18.6
Incr Delay (d2), s/veh	0.6	17.4	17.0	0.3	8.1	0.3	2.0	3.9	1.1	6.4	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	5.1	14.5	15.0	7.5	16.9	3.8	1.2	2.0	8.8	7.6	0.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.9	57.7	57.3	39.7	52.7	17.4	55.9	58.4	31.9	51.4	0.0	19.2
LnGrp LOS	D	E	E	D	D	B	E	E	C	D	A	B
Approach Vol, veh/h		1127			1773			483			671	
Approach Delay, s/veh		53.6			45.6			37.5			44.1	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	41.5	39.0		28.0	36.5	44.0		11.5				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	23.0	35.0		24.0	18.0	40.0		22.0				
Max Q Clear Time (g_c+I1), s	19.1	30.7		18.4	14.0	36.9		6.0				
Green Ext Time (p_c), s	0.8	1.6		1.6	0.3	1.8		1.6				

Intersection Summary			
HCM 6th Ctrl Delay		46.6	
HCM 6th LOS		D	

Notes

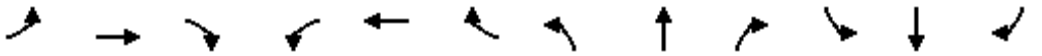
User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1012	888	130	560	0	0	0	0	155	39	492
Future Volume (vph)	0	1012	888	130	560	0	0	0	0	155	39	492
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	90		0	0		0	0		525
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	100			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		305			387			1098			1308	
Travel Time (s)		4.6			5.9			16.6			19.8	
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
Shared Lane Traffic (%)												
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Detector Phase		2	2	1	6					4	4	4
Switch Phase												
Minimum Initial (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Minimum Split (s)		50.0	50.0	30.0	26.0					35.0	35.0	35.0
Total Split (s)		55.0	55.0	30.0	85.0					35.0	35.0	35.0
Total Split (%)		45.8%	45.8%	25.0%	70.8%					29.2%	29.2%	29.2%
Yellow Time (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
All-Red Time (s)		1.0	1.0	1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0						0.0	0.0
Total Lost Time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Recall Mode		C-Max	C-Max	None	C-Max					Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 79 (66%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: I-15 SB Ramps & El Cerrito Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1012	888	130	560	0	0	0	0	155	39	492
Future Volume (veh/h)	0	1012	888	130	560	0	0	0	0	155	39	492
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	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1043	915	134	577	0				160	40	507
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	2	2	2	2	0				2	2	2
Cap, veh/h	0	1953	871	164	2399	0				372	93	409
Arrive On Green	0.00	1.00	1.00	0.06	0.45	0.00				0.26	0.26	0.26
Sat Flow, veh/h	0	3647	1585	1781	3647	0				1439	360	1585
Grp Volume(v), veh/h	0	1043	915	134	577	0				200	0	507
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1777	0				1798	0	1585
Q Serve(g_s), s	0.0	0.0	65.9	8.9	12.0	0.0				11.1	0.0	31.0
Cycle Q Clear(g_c), s	0.0	0.0	65.9	8.9	12.0	0.0				11.1	0.0	31.0
Prop In Lane	0.00		1.00	1.00		0.00				0.80		1.00
Lane Grp Cap(c), veh/h	0	1953	871	164	2399	0				465	0	409
V/C Ratio(X)	0.00	0.53	1.05	0.82	0.24	0.00				0.43	0.00	1.24
Avail Cap(c_a), veh/h	0	1953	871	386	2399	0				465	0	409
HCM Platoon Ratio	1.00	2.00	2.00	0.67	0.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.24	0.24	0.93	0.93	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	55.3	14.0	0.0				37.1	0.0	44.5
Incr Delay (d2), s/veh	0.0	0.3	30.4	8.9	0.2	0.0				2.9	0.0	126.5
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	7.4	4.4	4.9	0.0				5.1	0.0	26.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.3	30.4	64.2	14.2	0.0				40.0	0.0	171.0
LnGrp LOS	A	A	F	E	B	A				D	A	F
Approach Vol, veh/h		1958			711						707	
Approach Delay, s/veh		14.3			23.6						134.0	
Approach LOS		B			C						F	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.1	69.9		35.0		85.0
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s	26.0	51.0		31.0		81.0
Max Q Clear Time (g_c+I1), s	10.9	67.9		33.0		14.0
Green Ext Time (p_c), s	0.3	0.0		0.0		4.0

Intersection Summary	
HCM 6th Ctrl Delay	41.3
HCM 6th LOS	D

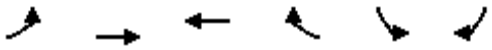
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	534	1078	930	350	638	820
Future Volume (vph)	534	1078	930	350	638	820
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290			250	0	0
Storage Lanes	2			0	2	2
Taper Length (ft)	120				25	
Right Turn on Red				Yes		Yes
Link Speed (mph)		45	45		45	
Link Distance (ft)		737	285		302	
Travel Time (s)		11.2	4.3		4.6	
Confl. Peds. (#/hr)						5
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	23.7	30.7	30.7	8.5	8.5
Total Split (s)	32.0	83.0	51.0	51.0	37.0	37.0
Total Split (%)	26.7%	69.2%	42.5%	42.5%	30.8%	30.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 8: Cajalco Rd. & I-15 SB Ramps





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	534	1078	930	350	638	820
Future Volume (veh/h)	534	1078	930	350	638	820
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	551	1111	959	361	658	845
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	622	3362	1582	705	950	767
Arrive On Green	0.36	1.00	0.45	0.45	0.28	0.28
Sat Flow, veh/h	3456	5274	3647	1585	3456	2790
Grp Volume(v), veh/h	551	1111	959	361	658	845
Grp Sat Flow(s),veh/h/ln	1728	1702	1777	1585	1728	1395
Q Serve(g_s), s	18.0	0.0	24.6	19.6	20.5	33.0
Cycle Q Clear(g_c), s	18.0	0.0	24.6	19.6	20.5	33.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	622	3362	1582	705	950	767
V/C Ratio(X)	0.89	0.33	0.61	0.51	0.69	1.10
Avail Cap(c_a), veh/h	806	3362	1582	705	950	767
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.63	0.63	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.2	0.0	25.3	23.9	39.0	43.5
Incr Delay (d2), s/veh	6.4	0.2	1.7	2.6	4.1	63.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	0.1	10.2	7.5	8.9	28.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	43.6	0.2	27.0	26.6	43.1	107.4
LnGrp LOS	D	A	C	C	D	F
Approach Vol, veh/h		1662	1320		1503	
Approach Delay, s/veh		14.6	26.9		79.2	
Approach LOS		B	C		E	

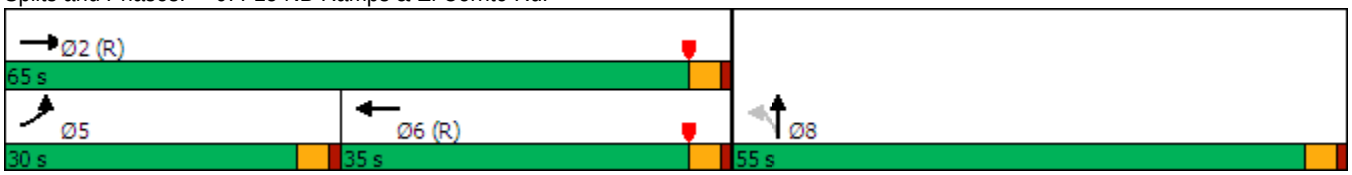
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		83.0		37.0	25.6	57.4
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		79.0		33.0	28.0	47.0
Max Q Clear Time (g_c+I1), s		2.0		35.0	20.0	26.6
Green Ext Time (p_c), s		6.1		0.0	1.6	6.3

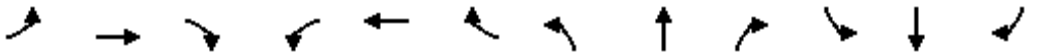
Intersection Summary		
HCM 6th Ctrl Delay	39.9	
HCM 6th LOS	D	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	493	674	0	0	276	85	414	8	110	0	0	0
Future Volume (vph)	493	674	0	0	276	85	414	8	110	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	60			100			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		387			489			1198			782	
Travel Time (s)		5.9			7.4			18.2			11.8	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA			NA		Perm	NA				
Protected Phases	5	2			6			8				
Permitted Phases							8					
Detector Phase	5	2			6		8	8				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		4.0	4.0				
Minimum Split (s)	8.0	26.0			26.0		26.0	26.0				
Total Split (s)	30.0	65.0			35.0		55.0	55.0				
Total Split (%)	25.0%	54.2%			29.2%		45.8%	45.8%				
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0				
All-Red Time (s)	1.0	1.0			1.0		1.0	1.0				
Lost Time Adjust (s)	0.0	0.0			0.0			0.0				
Total Lost Time (s)	4.0	4.0			4.0			4.0				
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?	Yes				Yes							
Recall Mode	None	C-Max			C-Max		Max	Max				

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 9: I-15 NB Ramps & El Cerrito Rd.



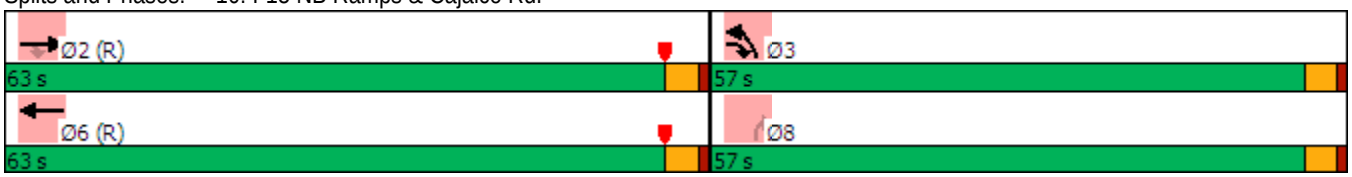


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	493	674	0	0	276	85	414	8	110	0	0	0
Future Volume (veh/h)	493	674	0	0	276	85	414	8	110	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
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	1870	1870	0	0	1870	1870	1900	1870	1900			
Adj Flow Rate, veh/h	519	709	0	0	291	89	436	8	116			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	602	951	0	0	810	243	575	11	153			
Arrive On Green	0.06	0.17	0.00	0.00	0.30	0.30	0.43	0.43	0.43			
Sat Flow, veh/h	3456	1870	0	0	2787	808	1353	25	360			
Grp Volume(v), veh/h	519	709	0	0	190	190	560	0	0			
Grp Sat Flow(s),veh/h/ln	1728	1870	0	0	1777	1725	1738	0	0			
Q Serve(g_s), s	17.9	43.3	0.0	0.0	10.0	10.4	32.8	0.0	0.0			
Cycle Q Clear(g_c), s	17.9	43.3	0.0	0.0	10.0	10.4	32.8	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.47	0.78		0.21			
Lane Grp Cap(c), veh/h	602	951	0	0	534	519	739	0	0			
V/C Ratio(X)	0.86	0.75	0.00	0.00	0.36	0.37	0.76	0.00	0.00			
Avail Cap(c_a), veh/h	749	951	0	0	534	519	739	0	0			
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.80	0.80	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	55.1	42.6	0.0	0.0	32.9	33.0	29.3	0.0	0.0			
Incr Delay (d2), s/veh	7.0	4.3	0.0	0.0	1.8	2.0	7.2	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			
%ile BackOfQ(50%),veh/ln	8.8	22.6	0.0	0.0	4.5	4.5	14.4	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.1	46.8	0.0	0.0	34.7	35.0	36.4	0.0	0.0			
LnGrp LOS	E	D	A	A	C	C	D	A	A			
Approach Vol, veh/h		1228			380			560				
Approach Delay, s/veh		53.3			34.8			36.4				
Approach LOS		D			C			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		65.0			24.9	40.1		55.0				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		61.0			26.0	31.0		51.0				
Max Q Clear Time (g_c+I1), s		45.3			19.9	12.4		34.8				
Green Ext Time (p_c), s		4.0			1.0	1.9		3.1				
Intersection Summary												
HCM 6th Ctrl Delay			45.7									
HCM 6th LOS			D									

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1123	593	0	1346	464	346
Future Volume (vph)	1123	593	0	1346	464	346
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		330	0		500	500
Storage Lanes		0	0		0	0
Taper Length (ft)			25		130	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	45	
Link Distance (ft)	293			191	332	
Travel Time (s)	4.4			2.9	5.0	
Confl. Peds. (#/hr)						5
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	0%	2%	2%	2%
Shared Lane Traffic (%)						
Turn Type	NA	pm+ov		NA	Prot	Perm
Protected Phases	2	3		6	3	
Permitted Phases		2				8
Detector Phase	2	3		6	3	8
Switch Phase						
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	23.7	8.5		30.7	8.5	8.5
Total Split (s)	63.0	57.0		63.0	57.0	57.0
Total Split (%)	52.5%	47.5%		52.5%	47.5%	47.5%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	Max		C-Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 95 (79%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	

Splits and Phases: 10: I-15 NB Ramps & Cajalco Rd.





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1123	593	0	1346	464	346
Future Volume (veh/h)	1123	593	0	1346	464	346
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	1170	618	0	1402	483	360
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	2510	1479	0	3163	1526	1232
Arrive On Green	0.49	0.49	0.00	0.49	0.44	0.44
Sat Flow, veh/h	5274	1585	0	6958	3456	2790
Grp Volume(v), veh/h	1170	618	0	1402	483	360
Grp Sat Flow(s),veh/h/ln	1702	1585	0	1609	1728	1395
Q Serve(g_s), s	18.1	5.1	0.0	17.0	10.9	9.9
Cycle Q Clear(g_c), s	18.1	5.1	0.0	17.0	10.9	9.9
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2510	1479	0	3163	1526	1232
V/C Ratio(X)	0.47	0.42	0.00	0.44	0.32	0.29
Avail Cap(c_a), veh/h	2510	1479	0	3163	1526	1232
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.1	0.4	0.0	19.8	21.7	21.5
Incr Delay (d2), s/veh	0.6	0.9	0.0	0.5	0.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	0.4	0.0	6.1	4.3	3.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.7	1.3	0.0	20.3	22.3	22.1
LnGrp LOS	C	A	A	C	C	C
Approach Vol, veh/h	1788			1402	843	
Approach Delay, s/veh	14.0			20.3	22.2	
Approach LOS	B			C	C	

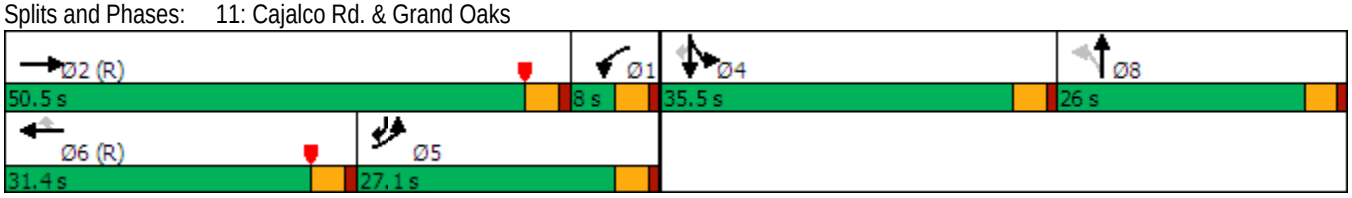
Timer - Assigned Phs	2				6	8
Phs Duration (G+Y+Rc), s	63.0				63.0	57.0
Change Period (Y+Rc), s	4.0				4.0	4.0
Max Green Setting (Gmax), s	59.0				59.0	53.0
Max Q Clear Time (g_c+I1), s	20.1				19.0	12.9
Green Ext Time (p_c), s	11.5				8.3	4.3

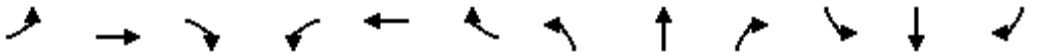
Intersection Summary	
HCM 6th Ctrl Delay	17.9
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	687	782	1	1	827	177	1	1	1	363	1	602
Future Volume (vph)	687	782	1	1	827	177	1	1	1	363	1	602
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	130		130	0		0	200		0
Storage Lanes	2		0	1		1	0		0	1		2
Taper Length (ft)	180			110			100			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		602			570			544			904	
Travel Time (s)		9.1			8.6			8.2			13.7	
Confl. Peds. (#/hr)						5				5		
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Split	NA	pm+ov
Protected Phases	5	2		1	6			8		4	4	5
Permitted Phases						6	8					4
Detector Phase	5	2		1	6	6	8	8		4	4	5
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	23.2		8.0	30.7	30.7	26.0	26.0		35.5	35.5	8.5
Total Split (s)	27.1	50.5		8.0	31.4	31.4	26.0	26.0		35.5	35.5	27.1
Total Split (%)	22.6%	42.1%		6.7%	26.2%	26.2%	21.7%	21.7%		29.6%	29.6%	22.6%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag	Lag	Lead		Lag	Lead	Lead						Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		Max	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 91 (76%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	

Splits and Phases: 11: Cajalco Rd. & Grand Oaks





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	687	782	1	1	827	177	1	1	1	363	1	602
Future Volume (veh/h)	687	782	1	1	827	177	1	1	1	363	1	602
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		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	701	798	1	1	844	181	1	1	1	370	1	614
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1288	2041	3	380	1166	360	2	2	2	466	1	1768
Arrive On Green	0.37	0.39	0.39	0.21	0.23	0.23	0.00	0.00	0.00	0.26	0.26	0.26
Sat Flow, veh/h	3456	5267	7	1781	5106	1575	579	579	579	1777	5	2774
Grp Volume(v), veh/h	701	516	283	1	844	181	3	0	0	371	0	614
Grp Sat Flow(s),veh/h/ln	1728	1702	1869	1781	1702	1575	1737	0	0	1782	0	1387
Q Serve(g_s), s	19.2	13.1	13.1	0.1	18.3	12.0	0.2	0.0	0.0	23.3	0.0	0.0
Cycle Q Clear(g_c), s	19.2	13.1	13.1	0.1	18.3	12.0	0.2	0.0	0.0	23.3	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.33		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	1288	1319	724	380	1166	360	6	0	0	468	0	1768
V/C Ratio(X)	0.54	0.39	0.39	0.00	0.72	0.50	0.54	0.00	0.00	0.79	0.00	0.35
Avail Cap(c_a), veh/h	1288	1319	724	380	1166	360	318	0	0	468	0	1768
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	1.00
Uniform Delay (d), s/veh	29.6	26.5	26.5	37.1	42.8	40.4	59.7	0.0	0.0	41.2	0.0	10.2
Incr Delay (d2), s/veh	0.5	0.9	1.6	0.0	3.9	5.0	64.2	0.0	0.0	13.0	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	5.3	5.9	0.0	7.9	5.0	0.2	0.0	0.0	11.5	0.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.1	27.4	28.1	37.1	46.7	45.3	123.9	0.0	0.0	54.2	0.0	10.8
LnGrp LOS	C	C	C	D	D	D	F	A	A	D	A	B
Approach Vol, veh/h		1500			1026			3			985	
Approach Delay, s/veh		28.8			46.5			123.9			27.1	
Approach LOS		C			D			F			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	29.6	50.5		35.5	48.7	31.4		4.4				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	4.0	46.5		31.5	23.1	27.4		22.0				
Max Q Clear Time (g_c+I1), s	2.1	15.1		25.3	21.2	20.3		2.2				
Green Ext Time (p_c), s	0.0	3.4		2.8	0.7	2.8		0.0				

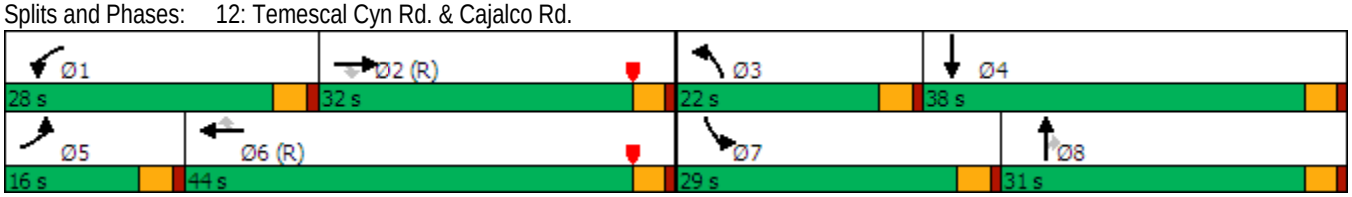
Intersection Summary			
HCM 6th Ctrl Delay		33.6	
HCM 6th LOS		C	

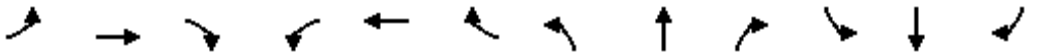
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	126	674	346	287	601	461	322	675	149	599	593	81
Future Volume (vph)	126	674	346	287	601	461	322	675	149	599	593	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	16	12	12	16	12	12	12
Storage Length (ft)	300		200	450		200	300		325	200		200
Storage Lanes	1		0	1		1	2		1	2		0
Taper Length (ft)	180			180			180			180		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		464			943			1167			1000	
Travel Time (s)		7.0			14.3			17.7			15.2	
Confl. Peds. (#/hr)			5			5						5
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	10.0	26.0	26.0	10.0	40.0	40.0	10.0	26.0	26.0	25.0	26.0	
Total Split (s)	16.0	32.0	32.0	28.0	44.0	44.0	22.0	31.0	31.0	29.0	38.0	
Total Split (%)	13.3%	26.7%	26.7%	23.3%	36.7%	36.7%	18.3%	25.8%	25.8%	24.2%	31.7%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	Max	None	Max	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 105
Control Type: Actuated-Coordinated

Splits and Phases: 12: Temescal Cyn Rd. & Cajalco Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	674	346	287	601	461	322	675	149	599	593	81
Future Volume (veh/h)	126	674	346	287	601	461	322	675	149	599	593	81
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		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	1945	1870	1870	1945	1870	1870	1870
Adj Flow Rate, veh/h	129	688	353	293	613	470	329	689	152	611	605	83
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	945	419	321	1834	590	397	800	371	675	958	131
Arrive On Green	0.09	0.27	0.27	0.18	0.36	0.36	0.11	0.23	0.23	0.20	0.31	0.31
Sat Flow, veh/h	1781	3554	1576	1781	5106	1642	3456	3554	1648	3456	3138	430
Grp Volume(v), veh/h	129	688	353	293	613	470	329	689	152	611	342	346
Grp Sat Flow(s),veh/h/ln	1781	1777	1576	1781	1702	1642	1728	1777	1648	1728	1777	1791
Q Serve(g_s), s	8.6	21.1	25.4	19.4	10.5	30.8	11.2	22.4	9.4	20.7	19.9	20.0
Cycle Q Clear(g_c), s	8.6	21.1	25.4	19.4	10.5	30.8	11.2	22.4	9.4	20.7	19.9	20.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	155	945	419	321	1834	590	397	800	371	675	543	547
V/C Ratio(X)	0.83	0.73	0.84	0.91	0.33	0.80	0.83	0.86	0.41	0.91	0.63	0.63
Avail Cap(c_a), veh/h	178	945	419	356	1834	590	518	800	371	720	543	547
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	53.9	40.1	41.7	48.2	28.0	34.5	52.0	44.7	39.7	47.2	35.8	35.9
Incr Delay (d2), s/veh	24.5	4.9	18.2	25.5	0.5	10.7	8.5	11.8	3.3	14.5	5.5	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	9.6	11.6	10.6	4.2	13.5	5.2	10.8	4.1	10.0	9.1	9.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.4	45.0	59.9	73.7	28.5	45.2	60.4	56.5	43.0	61.7	41.3	41.4
LnGrp LOS	E	D	E	E	C	D	E	E	D	E	D	D
Approach Vol, veh/h		1170			1376			1170			1299	
Approach Delay, s/veh		53.2			43.8			55.8			50.9	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.6	35.9	17.8	40.7	14.5	47.1	27.4	31.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	24.0	28.0	18.0	34.0	12.0	40.0	25.0	27.0
Max Q Clear Time (g_c+I1), s	21.4	27.4	13.2	22.0	10.6	32.8	22.7	24.4
Green Ext Time (p_c), s	0.3	0.3	0.6	2.2	0.0	3.0	0.7	1.1

Intersection Summary	
HCM 6th Ctrl Delay	50.7
HCM 6th LOS	D

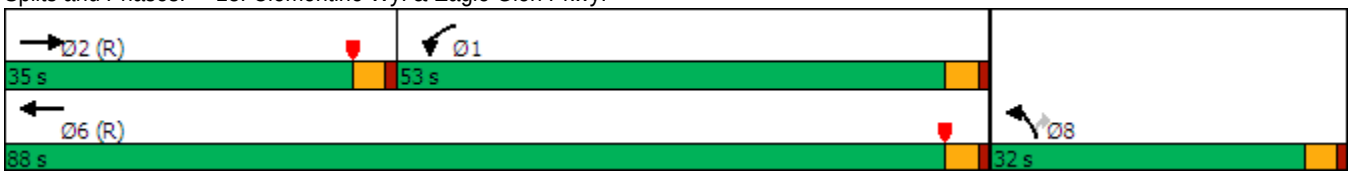
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	447	10	394	510	10	236
Future Volume (vph)	447	10	394	510	10	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	300		150	0
Storage Lanes		0	1		1	1
Taper Length (ft)			60		90	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	45	
Link Distance (ft)	366			1267	734	
Travel Time (s)	5.5			19.2	11.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	NA		Prot	NA	Prot	Perm
Protected Phases	2		1	6	8	
Permitted Phases						8
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	26.0		8.0	26.0	26.0	26.0
Total Split (s)	35.0		53.0	88.0	32.0	32.0
Total Split (%)	29.2%		44.2%	73.3%	26.7%	26.7%
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	C-Max		None	C-Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 113 (94%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	

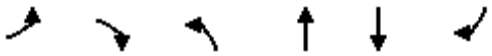
Splits and Phases: 13: Clementine Wy. & Eagle Glen Pkwy.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	447	10	394	510	10	236
Future Volume (veh/h)	447	10	394	510	10	236
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	471	11	415	537	11	248
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	917	21	727	2488	416	370
Arrive On Green	0.26	0.26	0.41	0.70	0.23	0.23
Sat Flow, veh/h	3643	83	1781	3647	1781	1585
Grp Volume(v), veh/h	236	246	415	537	11	248
Grp Sat Flow(s),veh/h/ln	1777	1855	1781	1777	1781	1585
Q Serve(g_s), s	13.6	13.6	21.6	6.4	0.6	17.1
Cycle Q Clear(g_c), s	13.6	13.6	21.6	6.4	0.6	17.1
Prop In Lane		0.04	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	459	479	727	2488	416	370
V/C Ratio(X)	0.51	0.51	0.57	0.22	0.03	0.67
Avail Cap(c_a), veh/h	459	479	727	2488	416	370
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.69	0.69	1.00	1.00
Uniform Delay (d), s/veh	38.0	38.1	27.4	6.4	35.5	41.8
Incr Delay (d2), s/veh	4.1	3.9	0.7	0.1	0.1	9.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	6.5	8.9	2.1	0.3	7.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	42.1	42.0	28.1	6.5	35.6	51.1
LnGrp LOS	D	D	C	A	D	D
Approach Vol, veh/h	482			952	259	
Approach Delay, s/veh	42.0			15.9	50.5	
Approach LOS	D			B	D	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	53.0	35.0				88.0	32.0
Change Period (Y+Rc), s	4.0	4.0				4.0	4.0
Max Green Setting (Gmax), s	49.0	31.0				84.0	28.0
Max Q Clear Time (g_c+I1), s	23.6	15.6				8.4	19.1
Green Ext Time (p_c), s	1.2	2.2				3.6	0.5

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



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	252	1	1	53	95	433
Future Volume (vph)	252	1	1	53	95	433
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			100
Storage Lanes	1	0	0			0
Taper Length (ft)	100		100			
Link Speed (mph)	45			45	45	
Link Distance (ft)	1253			542	608	
Travel Time (s)	19.0			8.2	9.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	5.9
Intersection LOS	A

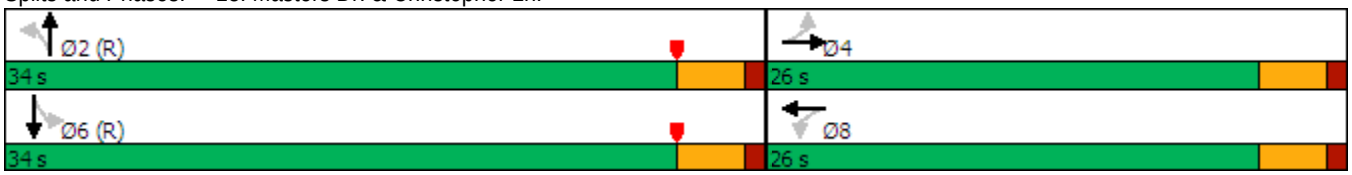
Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	266	57	556
Demand Flow Rate, veh/h	271	58	567
Vehicles Circulating, veh/h	102	270	1
Vehicles Exiting, veh/h	466	103	327
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.9	4.0	6.6
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	271	58	567
Cap Entry Lane, veh/h	1244	1048	1378
Entry HV Adj Factor	0.982	0.981	0.981
Flow Entry, veh/h	266	57	556
Cap Entry, veh/h	1221	1028	1352
V/C Ratio	0.218	0.055	0.411
Control Delay, s/veh	4.9	4.0	6.6
LOS	A	A	A
95th %tile Queue, veh	1	0	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	2	109	26	4	6	11	355	12	10	778	13
Future Volume (vph)	36	2	109	26	4	6	11	355	12	10	778	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		237			740			933			680	
Travel Time (s)		5.4			16.8			18.2			13.2	
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
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Total Split (s)	26.0	26.0		26.0	26.0		34.0	34.0		34.0	34.0	
Total Split (%)	43.3%	43.3%		43.3%	43.3%		56.7%	56.7%		56.7%	56.7%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

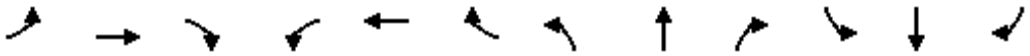
Splits and Phases: 18: Masters Dr. & Christopher Ln.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	2	109	26	4	6	11	355	12	10	778	13
Future Volume (veh/h)	36	2	109	26	4	6	11	355	12	10	778	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	2	115	27	4	6	12	374	13	11	819	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	111	18	155	234	38	33	603	1318	46	781	1345	23
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.73	0.73	0.73	1.00	1.00	1.00
Sat Flow, veh/h	274	131	1165	981	286	245	659	1797	62	997	1833	31
Grp Volume(v), veh/h	155	0	0	37	0	0	12	0	387	11	0	833
Grp Sat Flow(s),veh/h/ln	1570	0	0	1511	0	0	659	0	1859	997	0	1865
Q Serve(g_s), s	3.5	0.0	0.0	0.0	0.0	0.0	0.3	0.0	4.2	0.1	0.0	0.0
Cycle Q Clear(g_c), s	5.6	0.0	0.0	1.1	0.0	0.0	0.3	0.0	4.2	4.3	0.0	0.0
Prop In Lane	0.25		0.74	0.73		0.16	1.00		0.03	1.00		0.02
Lane Grp Cap(c), veh/h	284	0	0	305	0	0	603	0	1363	781	0	1368
V/C Ratio(X)	0.55	0.00	0.00	0.12	0.00	0.00	0.02	0.00	0.28	0.01	0.00	0.61
Avail Cap(c_a), veh/h	643	0	0	624	0	0	603	0	1363	781	0	1368
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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.84	0.00	0.84
Uniform Delay (d), s/veh	24.9	0.0	0.0	23.0	0.0	0.0	2.2	0.0	2.7	0.2	0.0	0.0
Incr Delay (d2), s/veh	1.6	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.5	0.0	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.6	0.0	0.0	23.2	0.0	0.0	2.2	0.0	3.2	0.2	0.0	1.7
LnGrp LOS	C	A	A	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		155			37			399			844	
Approach Delay, s/veh		26.6			23.2			3.2			1.7	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		48.0		12.0		48.0		12.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		30.0		22.0		30.0		22.0				
Max Q Clear Time (g_c+I1), s		6.2		7.6		6.3		3.1				
Green Ext Time (p_c), s		2.4		0.7		6.5		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			5.3									
HCM 6th LOS			A									



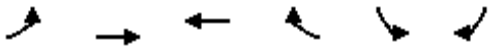
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	2	109	26	4	6	11	355	12	10	778	13
Future Volume (vph)	36	2	109	26	4	6	11	355	12	10	778	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	100			100			60			60		
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		237			740			933			680	
Travel Time (s)		5.4			16.8			18.2			13.2	
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
Shared Lane Traffic (%)												
Sign Control		Yield			Yield			Yield			Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	9.3
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	155	37	399	844
Demand Flow Rate, veh/h	158	38	406	860
Vehicles Circulating, veh/h	874	432	52	44
Vehicles Exiting, veh/h	30	26	980	426
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	10.4	4.6	5.6	11.1
Approach LOS	B	A	A	B

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	158	38	406	860
Cap Entry Lane, veh/h	566	888	1309	1319
Entry HV Adj Factor	0.981	0.972	0.982	0.981
Flow Entry, veh/h	155	37	399	844
Cap Entry, veh/h	555	863	1284	1294
V/C Ratio	0.279	0.043	0.310	0.652
Control Delay, s/veh	10.4	4.6	5.6	11.1
LOS	B	A	A	B
95th %tile Queue, veh	1	0	1	5



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	4	724	314	15	18	5
Future Volume (vph)	4	724	314	15	18	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	60				100	
Link Speed (mph)		35	35		30	
Link Distance (ft)		1212	796		251	
Travel Time (s)		23.6	15.5		5.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

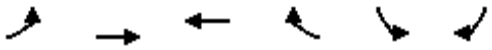
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	724	314	15	18	5
Future Vol, veh/h	4	724	314	15	18	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	120	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	762	331	16	19	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	347	0	-	0	1109	339
Stage 1	-	-	-	-	339	-
Stage 2	-	-	-	-	770	-
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	1212	-	-	-	232	703
Stage 1	-	-	-	-	722	-
Stage 2	-	-	-	-	457	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1212	-	-	-	231	703
Mov Cap-2 Maneuver	-	-	-	-	231	-
Stage 1	-	-	-	-	720	-
Stage 2	-	-	-	-	457	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	19.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1212	-	-	-	270
HCM Lane V/C Ratio	0.003	-	-	-	0.09
HCM Control Delay (s)	8	-	-	-	19.6
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.3



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	4	724	314	15	18	5
Future Volume (vph)	4	724	314	15	18	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	60				100	
Link Speed (mph)		35	35		30	
Link Distance (ft)		1212	796		251	
Travel Time (s)		23.6	15.5		5.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control		Yield	Yield		Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

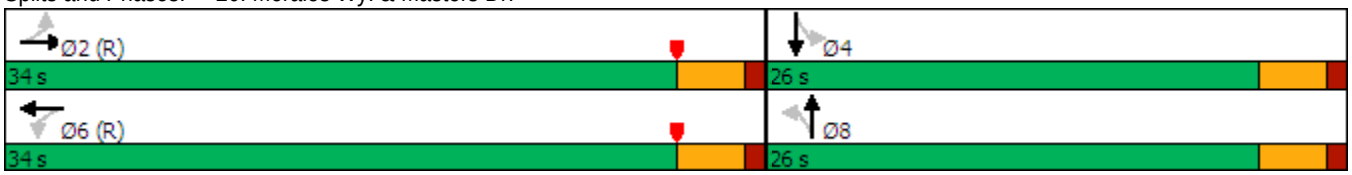
Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	766	347	24
Demand Flow Rate, veh/h	781	354	24
Vehicles Circulating, veh/h	19	4	338
Vehicles Exiting, veh/h	343	796	20
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	9.2	4.9	3.9
Approach LOS	A	A	A

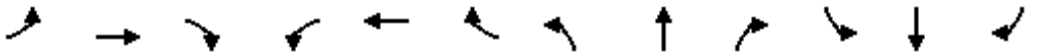
Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	781	354	24
Cap Entry Lane, veh/h	1353	1374	978
Entry HV Adj Factor	0.980	0.981	1.000
Flow Entry, veh/h	766	347	24
Cap Entry, veh/h	1327	1348	978
V/C Ratio	0.577	0.258	0.025
Control Delay, s/veh	9.2	4.9	3.9
LOS	A	A	A
95th %tile Queue, veh	4	1	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	565	162	45	272	4	58	3	40	3	1	3
Future Volume (vph)	3	565	162	45	272	4	58	3	40	3	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	60			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			30			45	
Link Distance (ft)		1243			906			626			709	
Travel Time (s)		24.2			17.6			14.2			10.7	
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
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Total Split (s)	34.0	34.0		34.0	34.0		26.0	26.0		26.0	26.0	
Total Split (%)	56.7%	56.7%		56.7%	56.7%		43.3%	43.3%		43.3%	43.3%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		Max	Max		Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: Morales Wy. & Masters Dr.

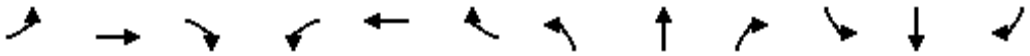




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	565	162	45	272	4	58	3	40	3	1	3
Future Volume (veh/h)	3	565	162	45	272	4	58	3	40	3	1	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		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	3	595	171	47	286	4	61	3	42	3	1	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	564	698	201	210	920	13	387	40	219	294	114	242
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.37	0.37	0.37	0.37	0.37	0.37
Sat Flow, veh/h	1089	1397	401	702	1840	26	798	110	596	569	310	659
Grp Volume(v), veh/h	3	0	766	47	0	290	106	0	0	7	0	0
Grp Sat Flow(s),veh/h/ln	1089	0	1798	702	0	1866	1504	0	0	1539	0	0
Q Serve(g_s), s	0.1	0.0	22.3	3.8	0.0	5.5	1.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.6	0.0	22.3	26.0	0.0	5.5	2.6	0.0	0.0	0.2	0.0	0.0
Prop In Lane	1.00		0.22	1.00		0.01	0.58		0.40	0.43		0.43
Lane Grp Cap(c), veh/h	564	0	899	210	0	933	646	0	0	650	0	0
V/C Ratio(X)	0.01	0.00	0.85	0.22	0.00	0.31	0.16	0.00	0.00	0.01	0.00	0.00
Avail Cap(c_a), veh/h	564	0	899	210	0	933	646	0	0	650	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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.5	0.0	13.1	24.4	0.0	8.9	12.8	0.0	0.0	12.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	10.0	2.4	0.0	0.9	0.5	0.0	0.0	0.0	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	0.0	0.0	9.5	0.7	0.0	2.0	1.0	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.6	0.0	23.1	26.8	0.0	9.7	13.4	0.0	0.0	12.1	0.0	0.0
LnGrp LOS	B	A	C	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		769			337			106			7	
Approach Delay, s/veh		23.0			12.1			13.4			12.1	
Approach LOS		C			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		34.0		26.0		34.0		26.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		30.0		22.0		30.0		22.0				
Max Q Clear Time (g_c+I1), s		24.3		2.2		28.0		4.6				
Green Ext Time (p_c), s		2.6		0.0		0.4		0.4				

Intersection Summary		
HCM 6th Ctrl Delay		19.1
HCM 6th LOS		B



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	565	162	45	272	4	58	3	40	3	1	3
Future Volume (vph)	3	565	162	45	272	4	58	3	40	3	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	60			60			100			100		
Link Speed (mph)		35			35			30			45	
Link Distance (ft)		1243			906			626			709	
Travel Time (s)		24.2			17.6			14.2			10.7	
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
Shared Lane Traffic (%)												
Sign Control		Yield			Yield			Yield			Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	769	337	106	7
Demand Flow Rate, veh/h	784	344	108	7
Vehicles Circulating, veh/h	52	68	613	402
Vehicles Exiting, veh/h	357	653	223	10
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	9.9	5.2	6.6	4.0
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	784	344	108	7
Cap Entry Lane, veh/h	1309	1287	738	916
Entry HV Adj Factor	0.981	0.980	0.981	0.997
Flow Entry, veh/h	769	337	106	7
Cap Entry, veh/h	1284	1262	724	913
V/C Ratio	0.599	0.267	0.146	0.008
Control Delay, s/veh	9.9	5.2	6.6	4.0
LOS	A	A	A	A
95th %tile Queue, veh	4	1	1	0



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	29	37	294	12	104	500
Future Volume (vph)	29	37	294	12	104	500
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	200	
Storage Lanes	1	0		0	1	
Taper Length (ft)	100				60	
Link Speed (mph)	45		45			45
Link Distance (ft)	302		233			567
Travel Time (s)	4.6		3.5			8.6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	37	294	12	104	500
Future Vol, veh/h	29	37	294	12	104	500
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	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	39	309	13	109	526

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	797	161	0	0	322	0
Stage 1	316	-	-	-	-	-
Stage 2	481	-	-	-	-	-
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	324	855	-	-	1235	-
Stage 1	712	-	-	-	-	-
Stage 2	588	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	295	855	-	-	1235	-
Mov Cap-2 Maneuver	295	-	-	-	-	-
Stage 1	649	-	-	-	-	-
Stage 2	588	-	-	-	-	-

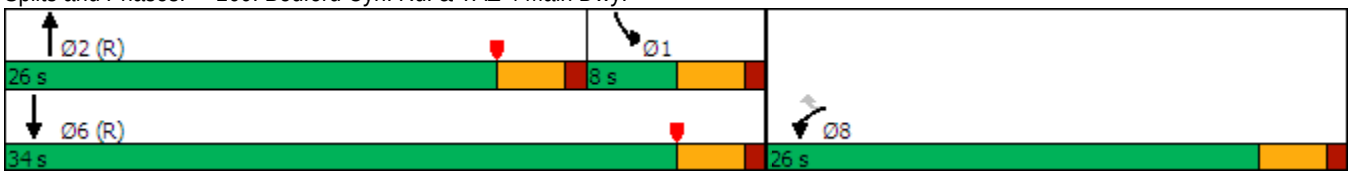
Approach	WB	NB	SB
HCM Control Delay, s	14.1	0	1.4
HCM LOS	B		

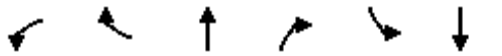
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	466	1235	-
HCM Lane V/C Ratio	-	-	0.149	0.089	-
HCM Control Delay (s)	-	-	14.1	8.2	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0.3	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	52	112	311	20	110	551
Future Volume (vph)	52	112	311	20	110	551
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	200	
Storage Lanes	1	1		0	1	
Taper Length (ft)	100				60	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	45		45			45
Link Distance (ft)	264		567			343
Travel Time (s)	4.0		8.6			5.2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8				
Detector Phase	8	8	2		1	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0		4.0	4.0
Minimum Split (s)	26.0	26.0	26.0		8.0	26.0
Total Split (s)	26.0	26.0	26.0		8.0	34.0
Total Split (%)	43.3%	43.3%	43.3%		13.3%	56.7%
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 160: Bedford Cyn. Rd. & TAZ 4 Main Dwy.





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	52	112	311	20	110	551
Future Volume (veh/h)	52	112	311	20	110	551
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	55	118	327	21	116	580
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	188	168	1244	79	584	2704
Arrive On Green	0.11	0.11	0.37	0.37	0.33	0.76
Sat Flow, veh/h	1781	1585	3485	217	1781	3647
Grp Volume(v), veh/h	55	118	171	177	116	580
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1831	1781	1777
Q Serve(g_s), s	1.7	4.3	4.0	4.1	2.8	2.8
Cycle Q Clear(g_c), s	1.7	4.3	4.0	4.1	2.8	2.8
Prop In Lane	1.00	1.00		0.12	1.00	
Lane Grp Cap(c), veh/h	188	168	652	671	584	2704
V/C Ratio(X)	0.29	0.70	0.26	0.26	0.20	0.21
Avail Cap(c_a), veh/h	653	581	652	671	584	2704
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	24.8	25.9	13.3	13.3	14.5	2.0
Incr Delay (d2), s/veh	0.8	5.3	1.0	1.0	0.2	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	0.7	1.7	1.5	1.6	1.0	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.6	31.2	14.3	14.3	14.7	2.2
LnGrp LOS	C	C	B	B	B	A
Approach Vol, veh/h	173		348			696
Approach Delay, s/veh	29.4		14.3			4.3
Approach LOS	C		B			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	23.7	26.0			49.7	10.3
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0
Max Green Setting (Gmax), s	4.0	22.0			30.0	22.0
Max Q Clear Time (g_c+I1), s	4.8	6.1			4.8	6.3
Green Ext Time (p_c), s	0.0	1.5			3.7	0.4

Intersection Summary		
HCM 6th Ctrl Delay		10.7
HCM 6th LOS		B



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	37	421	2	0	662
Future Volume (vph)	0	37	421	2	0	662
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		45			45
Link Distance (ft)	221		343			351
Travel Time (s)	3.3		5.2			5.3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.3

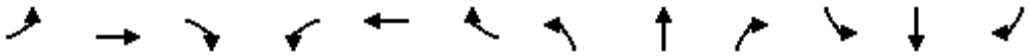
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	37	421	2	0	662
Future Vol, veh/h	0	37	421	2	0	662
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	39	443	2	0	697

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	223	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	780	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	780	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	780	-
HCM Lane V/C Ratio	-	-	0.05	-
HCM Control Delay (s)	-	-	9.9	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0.2	-

WITHOUT IMPROVEMENTS
(FOR FAIR SHARE ESTIMATES)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	190	75	123	104	165	125	262	261	191	132	6
Future Volume (vph)	8	190	75	123	104	165	125	262	261	191	132	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	135		0	130		200	100		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	100			90			60			65		
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		495			683			680			695	
Travel Time (s)		7.5			10.3			13.2			13.5	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

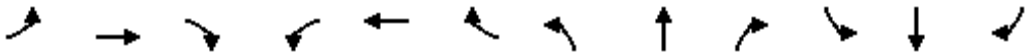
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	184.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	190	75	123	104	165	125	262	261	191	132	6
Future Vol, veh/h	8	190	75	123	104	165	125	262	261	191	132	6
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	253	100	164	139	220	167	349	348	255	176	8
Number of Lanes	1	1	0	1	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	3	2
HCM Control Delay	103	28.3	384.3	42.6
HCM LOS	F	D	F	E

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	50%	0%	72%	0%	100%	0%	0%	96%
Vol Right, %	0%	50%	0%	28%	0%	0%	100%	0%	4%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	125	523	8	265	123	104	165	191	138
LT Vol	125	0	8	0	123	0	0	191	0
Through Vol	0	262	0	190	0	104	0	0	132
RT Vol	0	261	0	75	0	0	165	0	6
Lane Flow Rate	167	697	11	353	164	139	220	255	184
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.51	1.97	0.034	1.055	0.507	0.409	0.607	0.793	0.546
Departure Headway (Hd)	11.414	10.524	13.256	12.508	13.056	12.523	11.777	13.141	12.577
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	318	356	272	293	279	290	308	278	289
Service Time	9.114	8.224	10.956	10.208	10.756	10.223	9.477	10.841	10.277
HCM Lane V/C Ratio	0.525	1.958	0.04	1.205	0.588	0.479	0.714	0.917	0.637
HCM Control Delay	25.4	470.1	16.4	105.6	28.5	23.6	31.1	52.1	29.4
HCM Lane LOS	D	F	C	F	D	C	D	F	D
HCM 95th-tile Q	2.7	46.9	0.1	11.7	2.7	1.9	3.7	6.2	3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	21	33	18	12	38	9	258	15	52	192	24
Future Volume (vph)	44	21	33	18	12	38	9	258	15	52	192	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	110		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		655			663			936			638	
Travel Time (s)		12.8			12.9			18.2			12.4	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

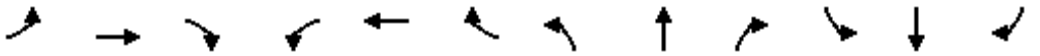
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	21	33	18	12	38	9	258	15	52	192	24
Future Vol, veh/h	44	21	33	18	12	38	9	258	15	52	192	24
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	46	22	35	19	13	40	9	272	16	55	202	25
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	9.4	8.9	11.6	10.2
HCM LOS	A	A	B	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	45%	26%	100%	0%
Vol Thru, %	0%	95%	21%	18%	0%	89%
Vol Right, %	0%	5%	34%	56%	0%	11%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	9	273	98	68	52	216
LT Vol	9	0	44	18	52	0
Through Vol	0	258	21	12	0	192
RT Vol	0	15	33	38	0	24
Lane Flow Rate	9	287	103	72	55	227
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.015	0.417	0.153	0.104	0.088	0.328
Departure Headway (Hd)	5.771	5.229	5.331	5.219	5.776	5.194
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	616	684	666	679	616	687
Service Time	3.544	3.001	3.416	3.31	3.55	2.967
HCM Lane V/C Ratio	0.015	0.42	0.155	0.106	0.089	0.33
HCM Control Delay	8.6	11.7	9.4	8.9	9.1	10.5
HCM Lane LOS	A	B	A	A	A	B
HCM 95th-tile Q	0	2.1	0.5	0.3	0.3	1.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	89	5	42	2	2	2	19	328	10	35	502	53
Future Volume (vph)	89	5	42	2	2	2	19	328	10	35	502	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	80		0	0		100
Storage Lanes	0		1	0		0	1		0	0		1
Taper Length (ft)	100			100			80			100		
Link Speed (mph)		45			45			30			45	
Link Distance (ft)		786			169			443			297	
Travel Time (s)		11.9			2.6			10.1			4.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	25.5
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	89	5	42	2	2	2	19	328	10	35	502	53
Future Vol, veh/h	89	5	42	2	2	2	19	328	10	35	502	53
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	94	5	44	2	2	2	20	353	11	38	540	57
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay	11.5	10.6	15.9	34.6
HCM LOS	B	B	C	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	95%	0%	33%	7%	0%
Vol Thru, %	0%	97%	5%	0%	33%	93%	0%
Vol Right, %	0%	3%	0%	100%	33%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	19	338	94	42	6	537	53
LT Vol	19	0	89	0	2	35	0
Through Vol	0	328	5	0	2	502	0
RT Vol	0	10	0	42	2	0	53
Lane Flow Rate	20	363	99	44	6	577	57
Geometry Grp	7	7	7	7	6	7	7
Degree of Util (X)	0.036	0.582	0.208	0.078	0.013	0.892	0.076
Departure Headway (Hd)	6.296	5.769	7.575	6.378	7.43	5.562	4.822
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	569	625	474	561	480	652	744
Service Time	4.027	3.499	5.321	4.123	5.496	3.288	2.547
HCM Lane V/C Ratio	0.035	0.581	0.209	0.078	0.013	0.885	0.077
HCM Control Delay	9.3	16.3	12.3	9.7	10.6	37.2	7.9
HCM Lane LOS	A	C	B	A	B	E	A
HCM 95th-tile Q	0.1	3.7	0.8	0.3	0	11	0.2

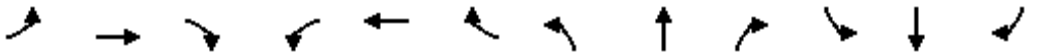
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1012	576	151	864	0	0	0	0	235	5	615
Future Volume (vph)	0	1012	576	151	864	0	0	0	0	235	5	615
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	90		0	0		0	0		525
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	100			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		305			387			1098			1308	
Travel Time (s)		4.6			5.9			16.6			19.8	
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
Shared Lane Traffic (%)												
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Detector Phase		2		1	6					4	4	4
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0					4.0	4.0	4.0
Minimum Split (s)		26.0		8.0	26.0					26.0	26.0	26.0
Total Split (s)		61.0		15.0	76.0					44.0	44.0	44.0
Total Split (%)		50.8%		12.5%	63.3%					36.7%	36.7%	36.7%
Yellow Time (s)		3.0		3.0	3.0					3.0	3.0	3.0
All-Red Time (s)		1.0		1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0						0.0	0.0
Total Lost Time (s)		4.0		4.0	4.0						4.0	4.0
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?		Yes		Yes								
Recall Mode		C-Max		None	C-Max					Max	Max	Max

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 28 (23%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 7: I-15 SB Ramps & El Cerrito Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1012	576	151	864	0	0	0	0	235	5	615
Future Volume (veh/h)	0	1012	576	151	864	0	0	0	0	235	5	615
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	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1065	606	159	909	0				247	5	647
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	2	2	2	2	0				2	2	2
Cap, veh/h	0	1057	573	163	2132	0				583	12	528
Arrive On Green	0.00	0.32	0.32	0.18	1.00	0.00				0.33	0.33	0.33
Sat Flow, veh/h	0	2318	1206	1781	3647	0				1748	35	1585
Grp Volume(v), veh/h	0	840	831	159	909	0				252	0	647
Grp Sat Flow(s),veh/h/ln	0	1777	1653	1781	1777	0				1783	0	1585
Q Serve(g_s), s	0.0	56.6	57.0	10.6	0.0	0.0				13.2	0.0	40.0
Cycle Q Clear(g_c), s	0.0	56.6	57.0	10.6	0.0	0.0				13.2	0.0	40.0
Prop In Lane	0.00		0.73	1.00		0.00				0.98		1.00
Lane Grp Cap(c), veh/h	0	844	785	163	2132	0				594	0	528
V/C Ratio(X)	0.00	1.00	1.06	0.97	0.43	0.00				0.42	0.00	1.22
Avail Cap(c_a), veh/h	0	844	785	163	2132	0				594	0	528
HCM Platoon Ratio	1.00	0.67	0.67	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.23	0.23	0.28	0.28	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	40.8	40.9	48.9	0.0	0.0				31.1	0.0	40.0
Incr Delay (d2), s/veh	0.0	13.8	33.7	30.6	0.2	0.0				2.2	0.0	117.1
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	28.2	30.8	5.5	0.1	0.0				5.8	0.0	31.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	54.5	74.6	79.4	0.2	0.0				33.3	0.0	157.1
LnGrp LOS	A	D	F	E	A	A				C	A	F
Approach Vol, veh/h		1671			1068						899	
Approach Delay, s/veh		64.5			12.0						122.4	
Approach LOS		E			B						F	

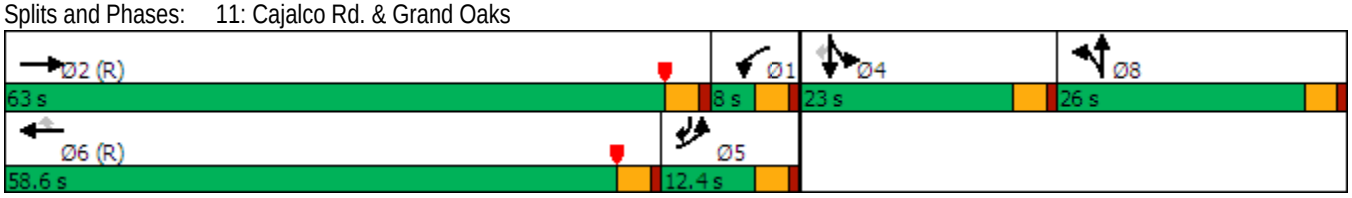
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.0	61.0		44.0		76.0
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s	11.0	57.0		40.0		72.0
Max Q Clear Time (g_c+I1), s	12.6	59.0		42.0		2.0
Green Ext Time (p_c), s	0.0	0.0		0.0		7.1

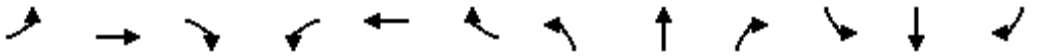
Intersection Summary	
HCM 6th Ctrl Delay	63.4
HCM 6th LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	213	555	1	1	1527	111	1	1	1	68	1	137
Future Volume (vph)	213	555	1	1	1527	111	1	1	1	68	1	137
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	130		130	0		0	200		0
Storage Lanes	2		0	1		1	0		0	1		2
Taper Length (ft)	180			110			100			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		627			570			544			904	
Travel Time (s)		9.5			8.6			8.2			13.7	
Confl. Peds. (#/hr)						5				5		
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split	NA	pm+ov
Protected Phases	5	2		1	6		8	8		4	4	5
Permitted Phases						6						4
Detector Phase	5	2		1	6	6	8	8		4	4	5
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	23.2		8.0	30.7	30.7	26.0	26.0		23.0	23.0	8.5
Total Split (s)	12.4	63.0		8.0	58.6	58.6	26.0	26.0		23.0	23.0	12.4
Total Split (%)	10.3%	52.5%		6.7%	48.8%	48.8%	21.7%	21.7%		19.2%	19.2%	10.3%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag	Lag	Lead		Lag	Lead	Lead						Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		Max	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	

Splits and Phases: 11: Cajalco Rd. & Grand Oaks





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	213	555	1	1	1527	111	1	1	1	68	1	137
Future Volume (veh/h)	213	555	1	1	1527	111	1	1	1	68	1	137
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		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	224	584	1	1	1607	117	1	1	1	72	1	144
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	864	1790	3	380	1617	719	2	2	2	278	4	1133
Arrive On Green	0.25	0.49	0.49	0.21	0.45	0.45	0.00	0.00	0.00	0.16	0.16	0.16
Sat Flow, veh/h	3456	3640	6	1781	3554	1580	579	579	579	1758	24	2746
Grp Volume(v), veh/h	224	285	300	1	1607	117	3	0	0	73	0	144
Grp Sat Flow(s),veh/h/ln	1728	1777	1869	1781	1777	1580	1737	0	0	1782	0	1373
Q Serve(g_s), s	6.2	11.7	11.7	0.1	54.0	5.2	0.2	0.0	0.0	4.3	0.0	0.0
Cycle Q Clear(g_c), s	6.2	11.7	11.7	0.1	54.0	5.2	0.2	0.0	0.0	4.3	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.33		0.33	0.99		1.00
Lane Grp Cap(c), veh/h	864	874	919	380	1617	719	6	0	0	282	0	1133
V/C Ratio(X)	0.26	0.33	0.33	0.00	0.99	0.16	0.54	0.00	0.00	0.26	0.00	0.13
Avail Cap(c_a), veh/h	864	874	919	380	1617	719	318	0	0	282	0	1133
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	1.00
Uniform Delay (d), s/veh	36.1	18.5	18.5	37.1	32.5	19.2	59.7	0.0	0.0	44.3	0.0	22.1
Incr Delay (d2), s/veh	0.2	1.0	0.9	0.0	21.0	0.5	64.2	0.0	0.0	2.2	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	4.8	5.0	0.0	26.1	1.9	0.2	0.0	0.0	2.0	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.2	19.5	19.4	37.1	53.5	19.7	123.9	0.0	0.0	46.5	0.0	22.4
LnGrp LOS	D	B	B	D	D	B	F	A	A	D	A	C
Approach Vol, veh/h		809			1725			3			217	
Approach Delay, s/veh		24.1			51.2			123.9			30.5	
Approach LOS		C			D			F			C	

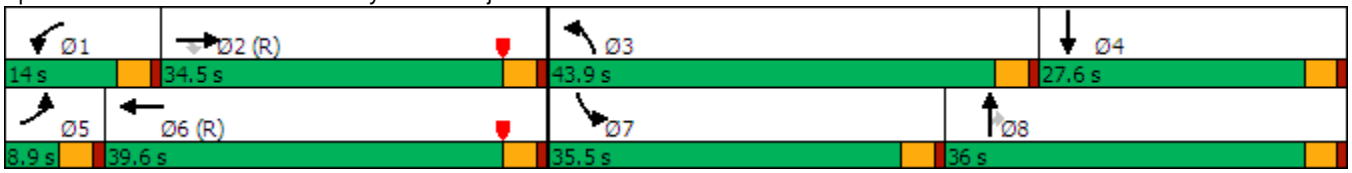
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	29.6	63.0		23.0	34.0	58.6		4.4				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	4.0	59.0		19.0	8.4	54.6		22.0				
Max Q Clear Time (g_c+I1), s	2.1	13.7		6.3	8.2	56.0		2.2				
Green Ext Time (p_c), s	0.0	2.2		0.8	0.0	0.0		0.0				

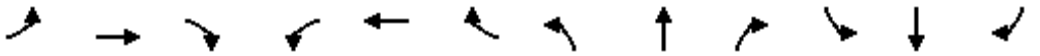
Intersection Summary		
HCM 6th Ctrl Delay		41.7
HCM 6th LOS		D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	375	211	104	583	621	980	858	379	233	138	75
Future Volume (vph)	37	375	211	104	583	621	980	858	379	233	138	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	16	12	12	16	12	12	12
Storage Length (ft)	300		200	100		200	160		160	185		200
Storage Lanes	1		0	1		0	2		1	1		0
Taper Length (ft)	180			115			90			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		464			939			1196			475	
Travel Time (s)		7.0			14.2			18.1			7.2	
Confl. Peds. (#/hr)			5			5						5
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.5	26.0	26.0	8.5	30.7		8.5	26.0	26.0	35.5	26.0	
Total Split (s)	8.9	34.5	34.5	14.0	39.6		43.9	36.0	36.0	35.5	27.6	
Total Split (%)	7.4%	28.8%	28.8%	11.7%	33.0%		36.6%	30.0%	30.0%	29.6%	23.0%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	Max	Max	None	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 10 (8%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Temescal Cyn Rd. & Cajalco Rd.

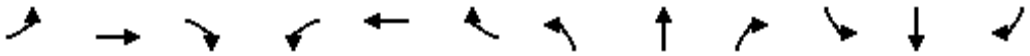




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	375	211	104	583	621	980	858	379	233	138	75
Future Volume (veh/h)	37	375	211	104	583	621	980	858	379	233	138	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1945	1870	1870	1945	1870	1870	1870
Adj Flow Rate, veh/h	38	387	218	107	601	640	1010	885	391	240	142	77
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	48	525	443	132	1115	517	1089	1271	590	274	446	228
Arrive On Green	0.03	0.28	0.28	0.07	0.33	0.33	0.32	0.36	0.36	0.15	0.20	0.20
Sat Flow, veh/h	1781	1870	1577	1781	3404	1578	3456	3554	1648	1781	2267	1161
Grp Volume(v), veh/h	38	387	218	107	601	640	1010	885	391	240	110	109
Grp Sat Flow(s),veh/h/ln	1781	1870	1577	1781	1702	1578	1728	1777	1648	1781	1777	1651
Q Serve(g_s), s	2.5	22.5	13.8	7.1	17.3	39.3	33.9	25.6	24.0	15.8	6.3	6.8
Cycle Q Clear(g_c), s	2.5	22.5	13.8	7.1	17.3	39.3	33.9	25.6	24.0	15.8	6.3	6.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.70
Lane Grp Cap(c), veh/h	48	525	443	132	1115	517	1089	1271	590	274	349	325
V/C Ratio(X)	0.78	0.74	0.49	0.81	0.54	1.24	0.93	0.70	0.66	0.87	0.31	0.34
Avail Cap(c_a), veh/h	73	525	443	148	1115	517	1149	1271	590	468	349	325
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	58.0	39.1	36.0	54.7	32.9	40.3	39.8	33.0	32.4	49.6	41.3	41.5
Incr Delay (d2), s/veh	26.6	8.9	3.9	25.6	1.9	123.0	12.4	3.2	5.8	9.3	2.3	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	11.2	5.6	4.0	7.2	32.1	15.6	11.1	10.1	7.5	2.9	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	84.6	48.0	39.9	80.4	34.8	163.3	52.1	36.1	38.2	58.9	43.6	44.3
LnGrp LOS	F	D	D	F	C	F	D	D	D	E	D	D
Approach Vol, veh/h		643			1348			2286			459	
Approach Delay, s/veh		47.4			99.4			43.6			51.8	
Approach LOS		D			F			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	37.7	41.8	27.6	7.3	43.3	22.5	46.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	30.5	39.9	23.6	4.9	35.6	31.5	32.0
Max Q Clear Time (g_c+I1), s	9.1	24.5	35.9	8.8	4.5	41.3	17.8	27.6
Green Ext Time (p_c), s	0.0	1.3	1.9	0.6	0.0	0.0	0.7	2.4

Intersection Summary	
HCM 6th Ctrl Delay	60.8
HCM 6th LOS	E



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	11	24	10	6	19	89	612	84	11	310	9
Future Volume (vph)	17	11	24	10	6	19	89	612	84	11	310	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		237			740			929			680	
Travel Time (s)		5.4			16.8			18.1			13.2	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

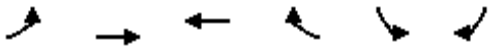
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	41.6
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	11	24	10	6	19	89	612	84	11	310	9
Future Vol, veh/h	17	11	24	10	6	19	89	612	84	11	310	9
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	12	25	11	6	20	94	644	88	12	326	9
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	10.2	9.9	56.6	14.1
HCM LOS	B	A	F	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	33%	29%	100%	0%
Vol Thru, %	0%	88%	21%	17%	0%	97%
Vol Right, %	0%	12%	46%	54%	0%	3%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	89	696	52	35	11	319
LT Vol	89	0	17	10	11	0
Through Vol	0	612	11	6	0	310
RT Vol	0	84	24	19	0	9
Lane Flow Rate	94	733	55	37	12	336
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.146	1.026	0.096	0.065	0.02	0.518
Departure Headway (Hd)	5.628	5.04	6.485	6.49	6.075	5.55
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	632	718	556	555	584	641
Service Time	3.404	2.816	4.485	4.49	3.871	3.346
HCM Lane V/C Ratio	0.149	1.021	0.099	0.067	0.021	0.524
HCM Control Delay	9.4	62.6	10.2	9.9	9	14.3
HCM Lane LOS	A	F	B	A	A	B
HCM 95th-tile Q	0.5	17.6	0.3	0.2	0.1	3



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	7	281	556	6	14	24
Future Volume (vph)	7	281	556	6	14	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	60				100	
Link Speed (mph)		35	35		30	
Link Distance (ft)		1222	796		251	
Travel Time (s)		23.8	15.5		5.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control		Stop	Stop		Stop	

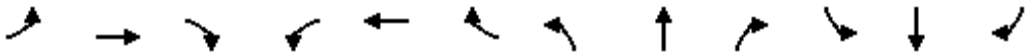
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	16
Intersection LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	281	556	6	14	24
Future Vol, veh/h	7	281	556	6	14	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	296	585	6	15	25
Number of Lanes	1	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	11.2	19	9
HCM LOS	B	C	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	37%
Vol Thru, %	0%	100%	99%	0%
Vol Right, %	0%	0%	1%	63%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	7	281	562	38
LT Vol	7	0	0	14
Through Vol	0	281	556	0
RT Vol	0	0	6	24
Lane Flow Rate	7	296	592	40
Geometry Grp	7	7	5	2
Degree of Util (X)	0.011	0.415	0.737	0.062
Departure Headway (Hd)	5.56	5.056	4.485	5.6
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	644	713	805	636
Service Time	3.291	2.787	2.508	3.662
HCM Lane V/C Ratio	0.011	0.415	0.735	0.063
HCM Control Delay	8.4	11.3	19	9
HCM Lane LOS	A	B	C	A
HCM 95th-tile Q	0	2	6.7	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	199	89	36	327	4	182	2	76	5	1	5
Future Volume (vph)	3	199	89	36	327	4	182	2	76	5	1	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	60			60			100			100		
Link Speed (mph)		35			35			30			45	
Link Distance (ft)		1243			910			626			548	
Travel Time (s)		24.2			17.7			14.2			8.3	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	17.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	199	89	36	327	4	182	2	76	5	1	5
Future Vol, veh/h	3	199	89	36	327	4	182	2	76	5	1	5
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	237	106	43	389	5	217	2	90	6	1	6
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	16.5	19.2	15.6	10
HCM LOS	C	C	C	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	70%	100%	0%	100%	0%	45%
Vol Thru, %	1%	0%	69%	0%	99%	9%
Vol Right, %	29%	0%	31%	0%	1%	45%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	260	3	288	36	331	11
LT Vol	182	3	0	36	0	5
Through Vol	2	0	199	0	327	1
RT Vol	76	0	89	0	4	5
Lane Flow Rate	310	4	343	43	394	13
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.52	0.007	0.572	0.079	0.665	0.025
Departure Headway (Hd)	6.051	6.735	6.006	6.596	6.079	6.859
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	594	529	597	541	591	525
Service Time	4.121	4.501	3.771	4.359	3.841	4.859
HCM Lane V/C Ratio	0.522	0.008	0.575	0.079	0.667	0.025
HCM Control Delay	15.6	9.5	16.6	9.9	20.2	10
HCM Lane LOS	C	A	C	A	C	A
HCM 95th-tile Q	3	0	3.6	0.3	5	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	108	330	237	135	28	103	150	145	38	234	2
Future Volume (vph)	4	108	330	237	135	28	103	150	145	38	234	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	135		0	130		200	100		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	100			90			60			65		
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		495			683			680			695	
Travel Time (s)		7.5			10.3			13.2			13.5	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	55.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	108	330	237	135	28	103	150	145	38	234	2
Future Vol, veh/h	4	108	330	237	135	28	103	150	145	38	234	2
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	114	347	249	142	29	108	158	153	40	246	2
Number of Lanes	1	1	0	1	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	3	2
HCM Control Delay	117.5	26.8	33.4	29.5
HCM LOS	F	D	D	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	51%	0%	25%	0%	100%	0%	0%	99%
Vol Right, %	0%	49%	0%	75%	0%	0%	100%	0%	1%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	103	295	4	438	237	135	28	38	236
LT Vol	103	0	4	0	237	0	0	38	0
Through Vol	0	150	0	108	0	135	0	0	234
RT Vol	0	145	0	330	0	0	28	0	2
Lane Flow Rate	108	311	4	461	249	142	29	40	248
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.297	0.779	0.012	1.141	0.687	0.371	0.071	0.114	0.672
Departure Headway (Hd)	10.448	9.568	9.983	8.91	10.463	9.939	9.205	10.868	10.338
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	346	382	357	406	347	364	391	332	353
Service Time	8.148	7.268	7.778	6.704	8.163	7.639	6.905	8.568	8.038
HCM Lane V/C Ratio	0.312	0.814	0.011	1.135	0.718	0.39	0.074	0.12	0.703
HCM Control Delay	17.5	38.9	12.9	118.5	33.3	18.4	12.6	15	31.8
HCM Lane LOS	C	E	B	F	D	C	B	B	D
HCM 95th-tile Q	1.2	6.5	0	17.1	4.8	1.7	0.2	0.4	4.6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	7	37	15	22	152	49	209	150	22	464	92
Future Volume (vph)	32	7	37	15	22	152	49	209	150	22	464	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	110		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		655			663			936			638	
Travel Time (s)		12.8			12.9			18.2			12.4	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

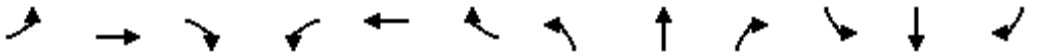
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	34.8
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	7	37	15	22	152	49	209	150	22	464	92
Future Vol, veh/h	32	7	37	15	22	152	49	209	150	22	464	92
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	7	39	16	23	160	52	220	158	23	488	97
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	11.7	13.3	18.4	56.5
HCM LOS	B	B	C	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	42%	8%	100%	0%
Vol Thru, %	0%	58%	9%	12%	0%	83%
Vol Right, %	0%	42%	49%	80%	0%	17%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	49	359	76	189	22	556
LT Vol	49	0	32	15	22	0
Through Vol	0	209	7	22	0	464
RT Vol	0	150	37	152	0	92
Lane Flow Rate	52	378	80	199	23	585
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.1	0.647	0.161	0.361	0.043	0.989
Departure Headway (Hd)	6.946	6.162	7.243	6.541	6.707	6.081
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	516	590	494	549	536	597
Service Time	4.69	3.881	5.313	4.599	4.419	3.792
HCM Lane V/C Ratio	0.101	0.641	0.162	0.362	0.043	0.98
HCM Control Delay	10.5	19.5	11.7	13.3	9.7	58.4
HCM Lane LOS	B	C	B	B	A	F
HCM 95th-tile Q	0.3	4.7	0.6	1.6	0.1	14.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	1	29	2	2	6	42	232	11	8	560	101
Future Volume (vph)	56	1	29	2	2	6	42	232	11	8	560	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	80		0	0		100
Storage Lanes	0		1	0		0	1		0	0		1
Taper Length (ft)	100			100			80			100		
Link Speed (mph)		45			45			30			45	
Link Distance (ft)		786			169			443			297	
Travel Time (s)		11.9			2.6			10.1			4.5	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	21.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	56	1	29	2	2	6	42	232	11	8	560	101
Future Vol, veh/h	56	1	29	2	2	6	42	232	11	8	560	101
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	59	1	31	2	2	6	44	244	12	8	589	106
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay	10.6	9.9	11.4	27.5
HCM LOS	B	A	B	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	98%	0%	20%	1%	0%
Vol Thru, %	0%	95%	2%	0%	20%	99%	0%
Vol Right, %	0%	5%	0%	100%	60%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	42	243	57	29	10	568	101
LT Vol	42	0	56	0	2	8	0
Through Vol	0	232	1	0	2	560	0
RT Vol	0	11	0	29	6	0	101
Lane Flow Rate	44	256	60	31	11	598	106
Geometry Grp	7	7	7	7	6	7	7
Degree of Util (X)	0.074	0.389	0.124	0.053	0.02	0.857	0.131
Departure Headway (Hd)	6.014	5.477	7.414	6.202	6.794	5.16	4.449
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	590	650	487	581	529	700	797
Service Time	3.813	3.275	5.115	3.904	4.801	2.935	2.224
HCM Lane V/C Ratio	0.075	0.394	0.123	0.053	0.021	0.854	0.133
HCM Control Delay	9.3	11.8	11.2	9.3	9.9	31	7.9
HCM Lane LOS	A	B	B	A	A	D	A
HCM 95th-tile Q	0.2	1.8	0.4	0.2	0.1	9.9	0.4

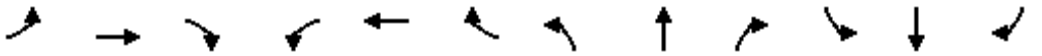
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1012	888	130	560	0	0	0	0	155	39	492
Future Volume (vph)	0	1012	888	130	560	0	0	0	0	155	39	492
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	90		0	0		0	0		525
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	100			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		305			387			1098			1308	
Travel Time (s)		4.6			5.9			16.6			19.8	
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
Shared Lane Traffic (%)												
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Detector Phase		2		1	6					4	4	4
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0					4.0	4.0	4.0
Minimum Split (s)		26.0		8.0	26.0					26.0	26.0	26.0
Total Split (s)		76.0		15.0	91.0					29.0	29.0	29.0
Total Split (%)		63.3%		12.5%	75.8%					24.2%	24.2%	24.2%
Yellow Time (s)		3.0		3.0	3.0					3.0	3.0	3.0
All-Red Time (s)		1.0		1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0						0.0	0.0
Total Lost Time (s)		4.0		4.0	4.0						4.0	4.0
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?		Yes		Yes								
Recall Mode		C-Max		None	C-Max					Max	Max	Max

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 28 (23%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 7: I-15 SB Ramps & El Cerrito Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1012	888	130	560	0	0	0	0	155	39	492
Future Volume (veh/h)	0	1012	888	130	560	0	0	0	0	155	39	492
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	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1043	915	134	577	0				160	40	507
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	2	2	2	2	0				2	2	2
Cap, veh/h	0	1158	883	158	2576	0				300	75	330
Arrive On Green	0.00	0.80	0.80	0.18	1.00	0.00				0.21	0.21	0.21
Sat Flow, veh/h	0	2013	1464	1781	3647	0				1439	360	1585
Grp Volume(v), veh/h	0	954	1004	134	577	0				200	0	507
Grp Sat Flow(s),veh/h/ln	0	1777	1607	1781	1777	0				1798	0	1585
Q Serve(g_s), s	0.0	44.6	72.4	8.7	0.0	0.0				11.9	0.0	25.0
Cycle Q Clear(g_c), s	0.0	44.6	72.4	8.7	0.0	0.0				11.9	0.0	25.0
Prop In Lane	0.00		0.91	1.00		0.00				0.80		1.00
Lane Grp Cap(c), veh/h	0	1072	969	158	2576	0				375	0	330
V/C Ratio(X)	0.00	0.89	1.04	0.85	0.22	0.00				0.53	0.00	1.54
Avail Cap(c_a), veh/h	0	1072	969	163	2576	0				375	0	330
HCM Platoon Ratio	1.00	1.33	1.33	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.09	0.09	0.93	0.93	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	9.1	11.9	48.6	0.0	0.0				42.3	0.0	47.5
Incr Delay (d2), s/veh	0.0	1.2	20.1	29.9	0.2	0.0				5.4	0.0	255.6
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	6.6	14.6	4.8	0.1	0.0				5.7	0.0	33.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.3	32.0	78.5	0.2	0.0				47.7	0.0	303.1
LnGrp LOS	A	B	F	E	A	A				D	A	F
Approach Vol, veh/h		1958			711						707	
Approach Delay, s/veh		21.4			14.9						230.9	
Approach LOS		C			B						F	

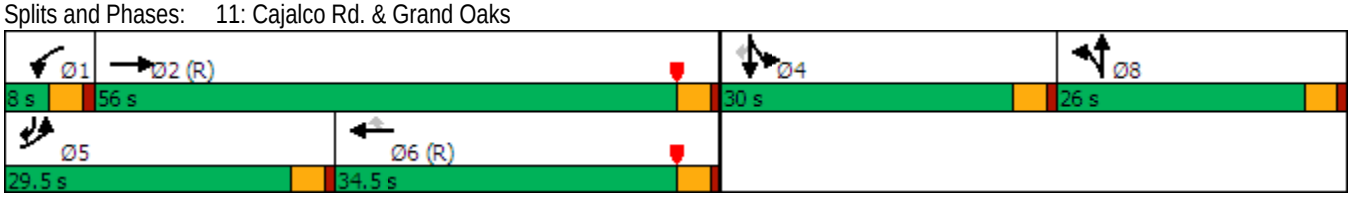
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	14.6	76.4		29.0		91.0						
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0						
Max Green Setting (Gmax), s	11.0	72.0		25.0		87.0						
Max Q Clear Time (g_c+I1), s	10.7	74.4		27.0		2.0						
Green Ext Time (p_c), s	0.0	0.0		0.0		4.0						

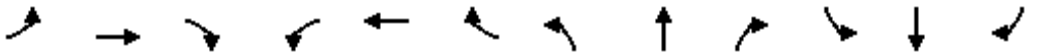
Intersection Summary												
HCM 6th Ctrl Delay			63.9									
HCM 6th LOS			E									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	687	782	1	1	827	177	1	1	1	363	1	602
Future Volume (vph)	687	782	1	1	827	177	1	1	1	363	1	602
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	130		130	0		0	200		0
Storage Lanes	2		0	1		1	0		0	1		2
Taper Length (ft)	180			110			100			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		627			570			544			904	
Travel Time (s)		9.5			8.6			8.2			13.7	
Confl. Peds. (#/hr)						5				5		
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split	NA	pm+ov
Protected Phases	5	2		1	6		8	8		4	4	5
Permitted Phases						6						4
Detector Phase	5	2		1	6	6	8	8		4	4	5
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	23.2		8.0	30.7	30.7	26.0	26.0		23.0	23.0	8.5
Total Split (s)	29.5	56.0		8.0	34.5	34.5	26.0	26.0		30.0	30.0	29.5
Total Split (%)	24.6%	46.7%		6.7%	28.8%	28.8%	21.7%	21.7%		25.0%	25.0%	24.6%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		Max	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 43 (36%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	

Splits and Phases: 11: Cajalco Rd. & Grand Oaks





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	687	782	1	1	827	177	1	1	1	363	1	602
Future Volume (veh/h)	687	782	1	1	827	177	1	1	1	363	1	602
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		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	701	798	1	1	844	181	1	1	1	370	1	614
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	734	2352	3	2	1543	686	2	2	2	385	1	1190
Arrive On Green	0.21	0.65	0.65	0.00	0.43	0.43	0.00	0.00	0.00	0.22	0.22	0.22
Sat Flow, veh/h	3456	3642	5	1781	3554	1580	579	579	579	1777	5	2758
Grp Volume(v), veh/h	701	389	410	1	844	181	3	0	0	371	0	614
Grp Sat Flow(s),veh/h/ln	1728	1777	1870	1781	1777	1580	1737	0	0	1782	0	1379
Q Serve(g_s), s	24.0	11.9	11.9	0.1	21.1	8.8	0.2	0.0	0.0	24.7	0.0	19.6
Cycle Q Clear(g_c), s	24.0	11.9	11.9	0.1	21.1	8.8	0.2	0.0	0.0	24.7	0.0	19.6
Prop In Lane	1.00		0.00	1.00		1.00	0.33		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	734	1147	1207	2	1543	686	6	0	0	386	0	1190
V/C Ratio(X)	0.95	0.34	0.34	0.51	0.55	0.26	0.54	0.00	0.00	0.96	0.00	0.52
Avail Cap(c_a), veh/h	734	1147	1207	59	1543	686	318	0	0	386	0	1190
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	1.00
Uniform Delay (d), s/veh	46.7	9.6	9.6	59.9	25.2	21.7	59.7	0.0	0.0	46.5	0.0	25.2
Incr Delay (d2), s/veh	22.7	0.8	0.8	131.7	1.4	0.9	64.2	0.0	0.0	37.0	0.0	1.6
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	12.3	4.4	4.6	0.1	8.8	3.3	0.2	0.0	0.0	14.5	0.0	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.4	10.4	10.4	191.6	26.6	22.6	123.9	0.0	0.0	83.5	0.0	26.8
LnGrp LOS	E	B	B	F	C	C	F	A	A	F	A	C
Approach Vol, veh/h		1500			1026			3			985	
Approach Delay, s/veh		38.0			26.0			123.9			48.1	
Approach LOS		D			C			F			D	

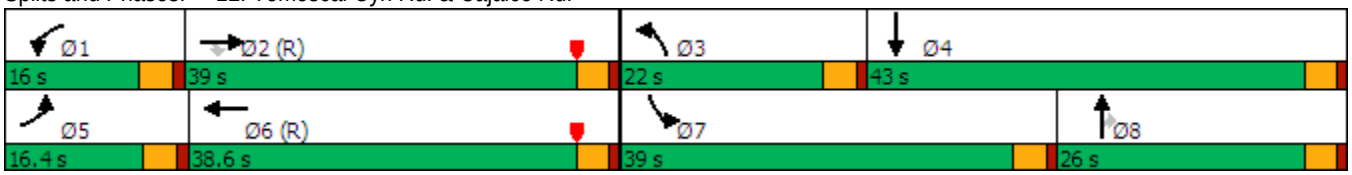
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.1	81.5		30.0	29.5	56.1		4.4				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	4.0	52.0		26.0	25.5	30.5		22.0				
Max Q Clear Time (g_c+I1), s	2.1	13.9		26.7	26.0	23.1		2.2				
Green Ext Time (p_c), s	0.0	3.2		0.0	0.0	2.9		0.0				

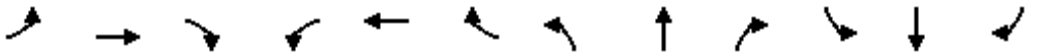
Intersection Summary			
HCM 6th Ctrl Delay		37.4	
HCM 6th LOS		D	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	126	674	346	287	601	461	322	675	149	599	593	81
Future Volume (vph)	126	674	346	287	601	461	322	675	149	599	593	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	16	12	12	16	12	12	12
Storage Length (ft)	300		200	100		200	160		160	185		200
Storage Lanes	1		0	1		0	2		1	1		0
Taper Length (ft)	180			115			90			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		464			939			1196			475	
Travel Time (s)		7.0			14.2			18.1			7.2	
Confl. Peds. (#/hr)			5			5						5
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.5	26.0	26.0	8.5	30.7		8.5	26.0	26.0	35.5	26.0	
Total Split (s)	16.4	39.0	39.0	16.0	38.6		22.0	26.0	26.0	39.0	43.0	
Total Split (%)	13.7%	32.5%	32.5%	13.3%	32.2%		18.3%	21.7%	21.7%	32.5%	35.8%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	Max	Max	None	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 10 (8%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Temescal Cyn Rd. & Cajalco Rd.

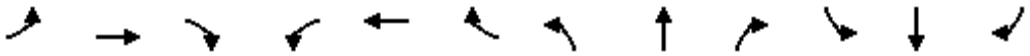




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	674	346	287	601	461	322	675	149	599	593	81
Future Volume (veh/h)	126	674	346	287	601	461	322	675	149	599	593	81
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		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	1945	1870	1870	1945	1870	1870	1870
Adj Flow Rate, veh/h	129	688	353	293	613	470	329	689	152	611	605	83
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	546	460	178	1036	480	397	652	302	520	1130	155
Arrive On Green	0.09	0.29	0.29	0.10	0.30	0.30	0.11	0.18	0.18	0.29	0.36	0.36
Sat Flow, veh/h	1781	1870	1577	1781	3404	1577	3456	3554	1648	1781	3138	430
Grp Volume(v), veh/h	129	688	353	293	613	470	329	689	152	611	342	346
Grp Sat Flow(s),veh/h/ln	1781	1870	1577	1781	1702	1577	1728	1777	1648	1781	1777	1791
Q Serve(g_s), s	8.6	35.0	24.5	12.0	18.3	35.4	11.2	22.0	10.0	35.0	18.3	18.4
Cycle Q Clear(g_c), s	8.6	35.0	24.5	12.0	18.3	35.4	11.2	22.0	10.0	35.0	18.3	18.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	155	546	460	178	1036	480	397	652	302	520	640	645
V/C Ratio(X)	0.83	1.26	0.77	1.64	0.59	0.98	0.83	1.06	0.50	1.18	0.53	0.54
Avail Cap(c_a), veh/h	184	546	460	178	1036	480	518	652	302	520	640	645
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	53.9	42.5	38.8	54.0	35.4	41.4	52.0	49.0	44.1	42.5	30.4	30.4
Incr Delay (d2), s/veh	23.1	131.7	11.6	314.0	2.5	36.2	8.5	51.5	5.9	97.9	3.2	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	35.4	10.6	20.8	7.7	18.0	5.2	14.1	4.5	28.8	8.1	8.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.0	174.2	50.4	368.0	37.9	77.5	60.4	100.5	50.0	140.4	33.6	33.6
LnGrp LOS	E	F	D	F	D	E	E	F	D	F	C	C
Approach Vol, veh/h		1170			1376			1170			1299	
Approach Delay, s/veh		126.2			121.7			82.6			83.9	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	39.0	17.8	47.2	14.5	40.5	39.0	26.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	35.0	18.0	39.0	12.4	34.6	35.0	22.0
Max Q Clear Time (g_c+I1), s	14.0	37.0	13.2	20.4	10.6	37.4	37.0	24.0
Green Ext Time (p_c), s	0.0	0.0	0.6	2.5	0.1	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	103.8
HCM 6th LOS	F



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	2	109	26	4	6	11	355	12	10	778	13
Future Volume (vph)	36	2	109	26	4	6	11	355	12	10	778	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		237			740			929			680	
Travel Time (s)		5.4			16.8			18.1			13.2	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

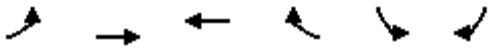
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	106.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	36	2	109	26	4	6	11	355	12	10	778	13
Future Vol, veh/h	36	2	109	26	4	6	11	355	12	10	778	13
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	2	115	27	4	6	12	374	13	11	819	14
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	12.5	11.5	18.8	169.8
HCM LOS	B	B	C	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	24%	72%	100%	0%
Vol Thru, %	0%	97%	1%	11%	0%	98%
Vol Right, %	0%	3%	74%	17%	0%	2%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	11	367	147	36	10	791
LT Vol	11	0	36	26	10	0
Through Vol	0	355	2	4	0	778
RT Vol	0	12	109	6	0	13
Lane Flow Rate	12	386	155	38	11	833
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.021	0.634	0.273	0.076	0.018	1.317
Departure Headway (Hd)	6.78	6.247	6.938	7.89	6.214	5.696
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	531	583	521	457	577	641
Service Time	4.48	3.947	4.938	5.89	3.938	3.42
HCM Lane V/C Ratio	0.023	0.662	0.298	0.083	0.019	1.3
HCM Control Delay	9.6	19.1	12.5	11.5	9.1	171.8
HCM Lane LOS	A	C	B	B	A	F
HCM 95th-tile Q	0.1	4.4	1.1	0.2	0.1	34.1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	4	724	314	15	18	5
Future Volume (vph)	4	724	314	15	18	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	60				100	
Link Speed (mph)		35	35		30	
Link Distance (ft)		1222	796		251	
Travel Time (s)		23.8	15.5		5.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control		Stop	Stop		Stop	

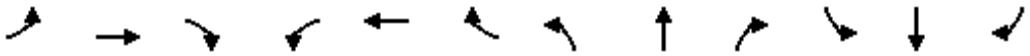
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	45.6
Intersection LOS	E

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	724	314	15	18	5
Future Vol, veh/h	4	724	314	15	18	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	762	331	16	19	5
Number of Lanes	1	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	61.8	12.3	9.8
HCM LOS	F	B	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	78%
Vol Thru, %	0%	100%	95%	0%
Vol Right, %	0%	0%	5%	22%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	4	724	329	23
LT Vol	4	0	0	18
Through Vol	0	724	314	0
RT Vol	0	0	15	5
Lane Flow Rate	4	762	346	24
Geometry Grp	7	7	5	2
Degree of Util (X)	0.006	1.029	0.47	0.043
Departure Headway (Hd)	5.365	4.863	4.884	6.546
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	668	747	731	550
Service Time	3.089	2.587	2.955	4.546
HCM Lane V/C Ratio	0.006	1.02	0.473	0.044
HCM Control Delay	8.1	62.1	12.3	9.8
HCM Lane LOS	A	F	B	A
HCM 95th-tile Q	0	18.2	2.5	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	565	162	45	272	4	58	3	40	3	1	3
Future Volume (vph)	3	565	162	45	272	4	58	3	40	3	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	60			60			100			100		
Link Speed (mph)		35			35			30			45	
Link Distance (ft)		1243			910			626			548	
Travel Time (s)		24.2			17.7			14.2			8.3	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	52.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	565	162	45	272	4	58	3	40	3	1	3
Future Vol, veh/h	3	565	162	45	272	4	58	3	40	3	1	3
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	595	171	47	286	4	61	3	42	3	1	3
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	77	12.2	11	9.9
HCM LOS	F	B	B	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	57%	100%	0%	100%	0%	43%
Vol Thru, %	3%	0%	78%	0%	99%	14%
Vol Right, %	40%	0%	22%	0%	1%	43%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	101	3	727	45	276	7
LT Vol	58	3	0	45	0	3
Through Vol	3	0	565	0	272	1
RT Vol	40	0	162	0	4	3
Lane Flow Rate	106	3	765	47	291	7
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.185	0.005	1.075	0.079	0.442	0.013
Departure Headway (Hd)	6.5	5.718	5.057	6.161	5.644	6.802
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	555	622	712	585	642	529
Service Time	4.5	3.492	2.831	3.861	3.344	4.802
HCM Lane V/C Ratio	0.191	0.005	1.074	0.08	0.453	0.013
HCM Control Delay	11	8.5	77.3	9.4	12.7	9.9
HCM Lane LOS	B	A	F	A	B	A
HCM 95th-tile Q	0.7	0	20.4	0.3	2.3	0

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APPENDIX 6.2:

HORIZON YEAR 2035 WITH PROJECT INTERSECTION OPERATIONS ANALYSIS WORKSHEETS AND QUEUEING ANALYSIS WORKSHEETS

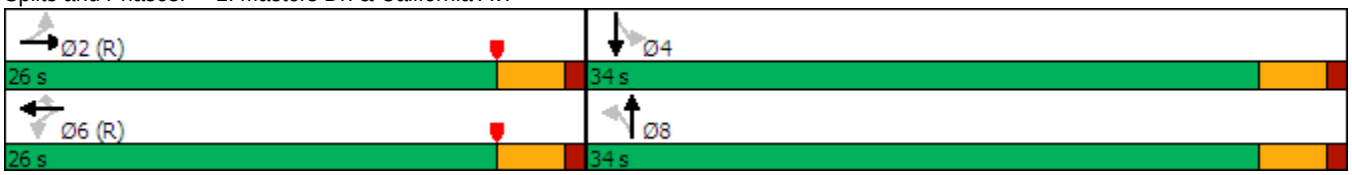
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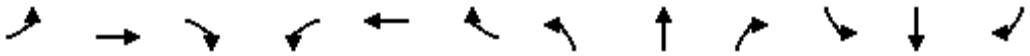
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	190	78	124	104	165	128	263	262	191	133	6
Future Volume (vph)	8	190	78	124	104	165	128	263	262	191	133	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	135		0	130		200	100		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	100			90			60			65		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		495			683			680			695	
Travel Time (s)		7.5			10.3			13.2			13.5	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6		6	8			4		
Detector Phase	2	2		6	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0	26.0	26.0	26.0		26.0	26.0	
Total Split (s)	26.0	26.0		26.0	26.0	26.0	34.0	34.0		34.0	34.0	
Total Split (%)	43.3%	43.3%		43.3%	43.3%	43.3%	56.7%	56.7%		56.7%	56.7%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	Max	Max		Max	Max	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 1: Masters Dr. & California Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	190	78	124	104	165	128	263	262	191	133	6
Future Volume (veh/h)	8	190	78	124	104	165	128	263	262	191	133	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	253	104	165	139	220	171	351	349	255	177	8
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	443	462	190	333	686	581	653	430	428	215	888	40
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.34	0.34	0.34	0.50	0.50	0.50
Sat Flow, veh/h	1022	1259	518	1024	1870	1585	1199	861	856	746	1776	80
Grp Volume(v), veh/h	11	0	357	165	139	220	171	0	700	255	0	185
Grp Sat Flow(s),veh/h/ln	1022	0	1777	1024	1870	1585	1199	0	1716	746	0	1856
Q Serve(g_s), s	0.4	0.0	9.6	9.1	3.1	6.1	6.6	0.0	22.4	7.6	0.0	3.3
Cycle Q Clear(g_c), s	3.5	0.0	9.6	18.7	3.1	6.1	10.0	0.0	22.4	30.0	0.0	3.3
Prop In Lane	1.00		0.29	1.00		1.00	1.00		0.50	1.00		0.04
Lane Grp Cap(c), veh/h	443	0	652	333	686	581	653	0	858	215	0	928
V/C Ratio(X)	0.02	0.00	0.55	0.50	0.20	0.38	0.26	0.00	0.82	1.19	0.00	0.20
Avail Cap(c_a), veh/h	443	0	652	333	686	581	653	0	858	215	0	928
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.85	0.00	0.85	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.2	0.0	15.1	22.5	13.0	14.0	14.6	0.0	17.4	28.3	0.0	8.3
Incr Delay (d2), s/veh	0.1	0.0	3.3	5.2	0.7	1.9	0.8	0.0	7.3	121.6	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	3.7	2.4	1.2	2.1	1.9	0.0	10.4	10.2	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.3	0.0	18.4	27.7	13.7	15.8	15.4	0.0	24.7	149.9	0.0	8.8
LnGrp LOS	B	A	B	C	B	B	B	A	C	F	A	A
Approach Vol, veh/h		368			524			871			440	
Approach Delay, s/veh		18.2			19.0			22.9			90.6	
Approach LOS		B			B			C			F	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		26.0		34.0		26.0		34.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		22.0		30.0		22.0		30.0				
Max Q Clear Time (g_c+I1), s		11.6		32.0		20.7		24.4				
Green Ext Time (p_c), s		1.5		0.0		0.3		2.6				

Intersection Summary		
HCM 6th Ctrl Delay		34.7
HCM 6th LOS		C

Notes

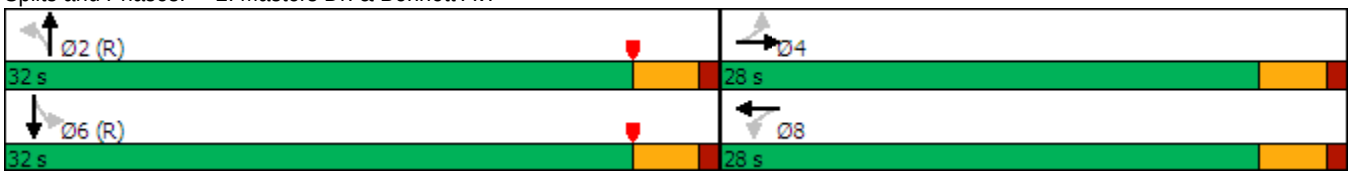
User approved pedestrian interval to be less than phase max green.

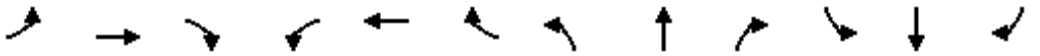
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	21	33	21	12	38	9	273	18	52	205	24
Future Volume (vph)	44	21	33	21	12	38	9	273	18	52	205	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	110		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		537			564			936			637	
Travel Time (s)		10.5			11.0			18.2			12.4	
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
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Total Split (s)	28.0	28.0		28.0	28.0		32.0	32.0		32.0	32.0	
Total Split (%)	46.7%	46.7%		46.7%	46.7%		53.3%	53.3%		53.3%	53.3%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 2: Masters Dr. & Bennett Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	21	33	21	12	38	9	273	18	52	205	24
Future Volume (veh/h)	44	21	33	21	12	38	9	273	18	52	205	24
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	46	22	35	22	13	40	9	287	19	55	216	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	146	42	52	111	40	84	962	1342	89	902	1273	147
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.77	0.77	0.77	0.77	0.77	0.77
Sat Flow, veh/h	636	450	559	359	431	903	1139	1735	115	1073	1646	190
Grp Volume(v), veh/h	103	0	0	75	0	0	9	0	306	55	0	241
Grp Sat Flow(s),veh/h/ln	1644	0	0	1692	0	0	1139	0	1850	1073	0	1836
Q Serve(g_s), s	1.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	2.7	0.9	0.0	2.1
Cycle Q Clear(g_c), s	3.5	0.0	0.0	2.4	0.0	0.0	2.2	0.0	2.7	3.6	0.0	2.1
Prop In Lane	0.45		0.34	0.29		0.53	1.00		0.06	1.00		0.10
Lane Grp Cap(c), veh/h	240	0	0	235	0	0	962	0	1431	902	0	1420
V/C Ratio(X)	0.43	0.00	0.00	0.32	0.00	0.00	0.01	0.00	0.21	0.06	0.00	0.17
Avail Cap(c_a), veh/h	706	0	0	709	0	0	962	0	1431	902	0	1420
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	0.94	0.00	0.94	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.2	0.0	0.0	25.8	0.0	0.0	2.1	0.0	1.8	2.3	0.0	1.8
Incr Delay (d2), s/veh	1.2	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.3	0.1	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.4	0.1	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.4	0.0	0.0	26.6	0.0	0.0	2.1	0.0	2.2	2.5	0.0	2.0
LnGrp LOS	C	A	A	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		103			75			315			296	
Approach Delay, s/veh		27.4			26.6			2.2			2.1	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.4		9.6		50.4		9.6				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		28.0		24.0		28.0		24.0				
Max Q Clear Time (g_c+I1), s		4.7		5.5		5.6		4.4				
Green Ext Time (p_c), s		1.8		0.4		1.5		0.3				

Intersection Summary		
HCM 6th Ctrl Delay		7.8
HCM 6th LOS		A

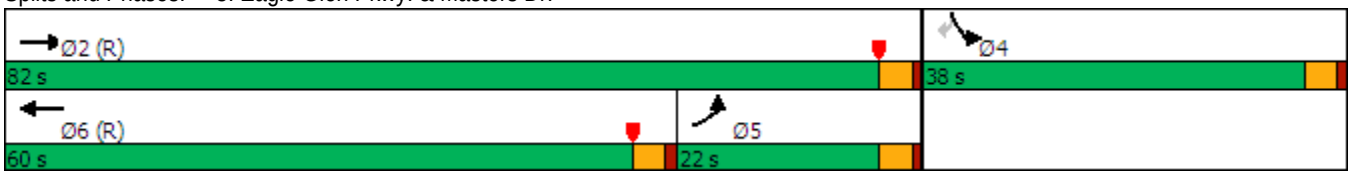
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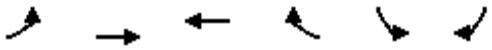
User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	78	852	541	258	230	29
Future Volume (vph)	78	852	541	258	230	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	130	0
Storage Lanes	1			0	1	1
Taper Length (ft)	120				60	
Right Turn on Red				Yes		Yes
Link Speed (mph)		45	45		35	
Link Distance (ft)		1267	546		936	
Travel Time (s)		19.2	8.3		18.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases						4
Detector Phase	5	2	6		4	4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0		4.0	4.0
Minimum Split (s)	8.0	26.0	26.0		26.0	26.0
Total Split (s)	22.0	82.0	60.0		38.0	38.0
Total Split (%)	18.3%	68.3%	50.0%		31.7%	31.7%
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0		4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: Eagle Glen Pkwy. & Masters Dr.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	78	852	541	258	230	29
Future Volume (veh/h)	78	852	541	258	230	29
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	897	569	272	242	31
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	495	2765	1089	520	277	246
Arrive On Green	0.56	1.00	0.47	0.47	0.16	0.16
Sat Flow, veh/h	1781	3647	2427	1114	1781	1585
Grp Volume(v), veh/h	82	897	433	408	242	31
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1670	1781	1585
Q Serve(g_s), s	2.7	0.0	20.6	20.7	15.9	2.0
Cycle Q Clear(g_c), s	2.7	0.0	20.6	20.7	15.9	2.0
Prop In Lane	1.00			0.67	1.00	1.00
Lane Grp Cap(c), veh/h	495	2765	829	779	277	246
V/C Ratio(X)	0.17	0.32	0.52	0.52	0.88	0.13
Avail Cap(c_a), veh/h	495	2765	829	779	505	449
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	1.00	1.00	0.99	0.99
Uniform Delay (d), s/veh	19.8	0.0	22.6	22.6	49.5	43.7
Incr Delay (d2), s/veh	0.1	0.3	2.3	2.5	8.5	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	1.1	0.1	8.7	8.2	7.7	1.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.0	0.3	24.9	25.1	58.0	43.9
LnGrp LOS	B	A	C	C	E	D
Approach Vol, veh/h		979	841		273	
Approach Delay, s/veh		1.9	25.0		56.4	
Approach LOS		A	C		E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		97.4		22.6	37.4	60.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		78.0		34.0	18.0	56.0
Max Q Clear Time (g_c+I1), s		2.0		17.9	4.7	22.7
Green Ext Time (p_c), s		7.0		0.7	0.1	5.5

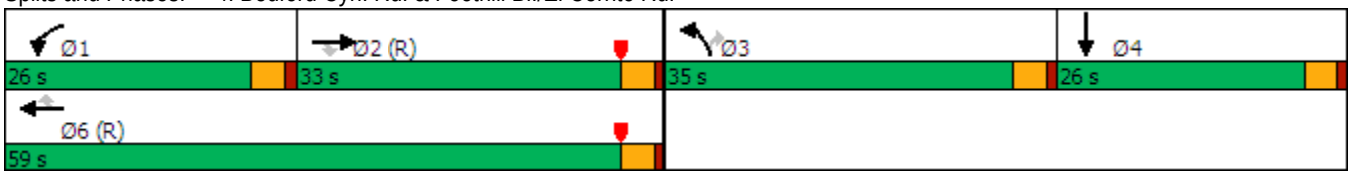
Intersection Summary	
HCM 6th Ctrl Delay	18.3
HCM 6th LOS	B

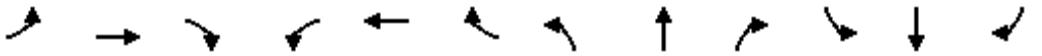
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1275	282	305	1179	20	424	0	319	0	0	10
Future Volume (vph)	0	1275	282	305	1179	20	424	0	319	0	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	135		135	0		125	0		0
Storage Lanes	0		1	1		1	1		1	0		0
Taper Length (ft)	100			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			45			40			30	
Link Distance (ft)		351			305			404			350	
Travel Time (s)		6.0			4.6			6.9			8.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Turn Type		NA	Perm	Prot	NA	Perm	Prot		Perm		NA	
Protected Phases		2		1	6		3				4	
Permitted Phases			2			6			3			
Detector Phase		2	2	1	6	6	3		3		4	
Switch Phase												
Minimum Initial (s)		4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	
Minimum Split (s)		26.0	26.0	26.0	26.0	26.0	35.0		35.0		26.0	
Total Split (s)		33.0	33.0	26.0	59.0	59.0	35.0		35.0		26.0	
Total Split (%)		27.5%	27.5%	21.7%	49.2%	49.2%	29.2%		29.2%		21.7%	
Yellow Time (s)		3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	
All-Red Time (s)		1.0	1.0	1.0	1.0	1.0	1.0		1.0		1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	
Total Lost Time (s)		4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	
Lead/Lag		Lag	Lag	Lead			Lead		Lead		Lag	
Lead-Lag Optimize?		Yes	Yes	Yes			Yes		Yes		Yes	
Recall Mode		C-Max	C-Max	None	C-Max	C-Max	None		None		None	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 115
Control Type: Actuated-Coordinated

Splits and Phases: 4: Bedford Cyn. Rd. & Foothill Bl./El Cerrito Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1275	282	305	1179	20	424	0	319	0	0	10
Future Volume (veh/h)	0	1275	282	305	1179	20	424	0	319	0	0	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	0	1870	1870	1870	1870	1870	1870	0	1870	0	1870	1870
Adj Flow Rate, veh/h	0	1342	297	321	1241	0	446	0	336	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	2	2	0	2	0	2	2
Cap, veh/h	0	1629	726	327	2399		460	0	0	0	2	
Arrive On Green	0.00	0.46	0.46	0.37	1.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	3647	1585	1781	3554	1585	1781	446		0	-74814	0
Grp Volume(v), veh/h	0	1342	297	321	1241	0	446	78.0		0	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1777	1585	1781	E		0	1870	0
Q Serve(g_s), s	0.0	39.4	15.0	21.4	0.0	0.0	29.7			0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	39.4	15.0	21.4	0.0	0.0	29.7			0.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		1.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	1629	726	327	2399		460			0	2	
V/C Ratio(X)	0.00	0.82	0.41	0.98	0.52		0.97			0.00	0.00	
Avail Cap(c_a), veh/h	0	1629	726	327	2399		460			0	343	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.69	0.69	0.00	1.00			0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	28.3	21.7	37.8	0.0	0.0	44.0			0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.9	1.7	36.8	0.6	0.0	34.0			0.0	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
%ile BackOfQ(50%),veh/ln	0.0	16.9	5.7	10.4	0.2	0.0	17.1			0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	33.2	23.4	74.6	0.6	0.0	78.0			0.0	0.0	0.0
LnGrp LOS	A	C	C	E	A		E			A	A	
Approach Vol, veh/h		1639			1562	A					0	A
Approach Delay, s/veh		31.4			15.8						0.0	
Approach LOS		C			B							

Timer - Assigned Phs	1	2	3	4		6
Phs Duration (G+Y+Rc), s	26.0	59.0	35.0	0.0		85.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	22.0	29.0	31.0	22.0		55.0
Max Q Clear Time (g_c+I1), s	23.4	41.4	31.7	0.0		2.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0		11.3

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

Notes

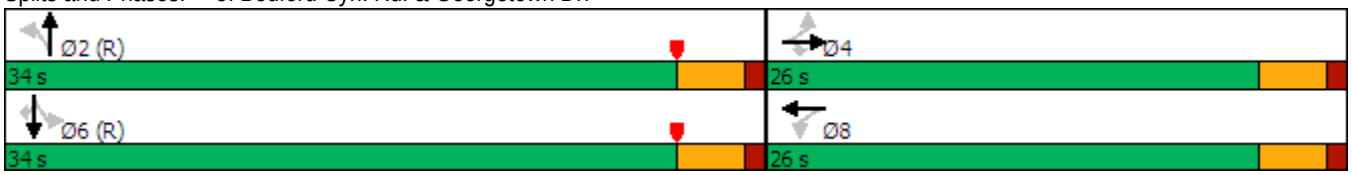
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

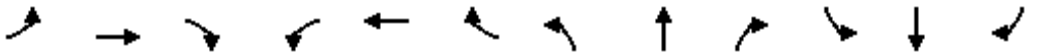
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	89	5	45	2	2	2	22	347	10	35	519	53
Future Volume (vph)	89	5	45	2	2	2	22	347	10	35	519	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	80		0	0		100
Storage Lanes	0		1	0		0	1		0	0		1
Taper Length (ft)	100			100			80			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			45	
Link Distance (ft)		786			169			443			297	
Travel Time (s)		11.9			2.6			10.1			4.5	
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
Shared Lane Traffic (%)												
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	4	8	8		2	2		6	6	6
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	26.0	26.0	26.0	26.0	26.0		26.0	26.0		26.0	26.0	26.0
Total Split (s)	26.0	26.0	26.0	26.0	26.0		34.0	34.0		34.0	34.0	34.0
Total Split (%)	43.3%	43.3%	43.3%	43.3%	43.3%		56.7%	56.7%		56.7%	56.7%	56.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0		4.0	4.0			4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None		C-Max	C-Max		C-Max	C-Max	C-Max

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 5: Bedford Cyn. Rd. & Georgetown Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	5	45	2	2	2	22	347	10	35	519	53
Future Volume (veh/h)	89	5	45	2	2	2	22	347	10	35	519	53
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	94	5	0	2	2	2	23	365	11	37	546	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	237	6		105	77	51	819	1407	42	108	1375	
Arrive On Green	0.09	0.09	0.00	0.09	0.09	0.09	0.78	0.78	0.78	0.78	0.78	0.00
Sat Flow, veh/h	1370	73	1585	288	876	582	861	1806	54	57	1764	1585
Grp Volume(v), veh/h	99	0	0	6	0	0	23	0	376	583	0	0
Grp Sat Flow(s),veh/h/ln	1443	0	1585	1746	0	0	861	0	1861	1821	0	1585
Q Serve(g_s), s	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.0	0.0	0.0	0.2	0.0	0.0	0.3	0.0	3.4	6.0	0.0	0.0
Prop In Lane	0.95		1.00	0.33		0.33	1.00		0.03	0.06		1.00
Lane Grp Cap(c), veh/h	243	0		233	0	0	819	0	1450	1483	0	
V/C Ratio(X)	0.41	0.00		0.03	0.00	0.00	0.03	0.00	0.26	0.39	0.00	
Avail Cap(c_a), veh/h	642	0		680	0	0	819	0	1450	1483	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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	26.8	0.0	0.0	25.1	0.0	0.0	1.5	0.0	1.8	2.1	0.0	0.0
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.4	0.8	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	1.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.6	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.9	0.0	0.0	25.1	0.0	0.0	1.6	0.0	2.3	2.9	0.0	0.0
LnGrp LOS	C	A		C	A	A	A	A	A	A	A	
Approach Vol, veh/h		99	A		6			399			583	A
Approach Delay, s/veh		27.9			25.1			2.2			2.9	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.8		9.2		50.8		9.2				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		30.0		22.0		30.0		22.0				
Max Q Clear Time (g_c+I1), s		5.4		6.0		8.0		2.2				
Green Ext Time (p_c), s		2.5		0.3		3.6		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			5.1									
HCM 6th LOS			A									

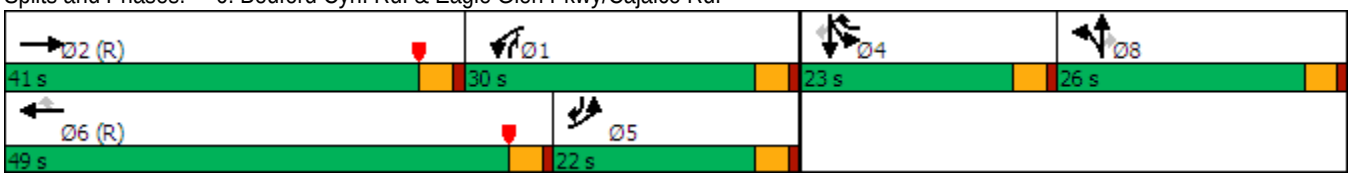
Notes

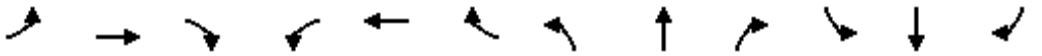
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	143	899	40	297	481	422	58	83	568	154	55	259
Future Volume (vph)	143	899	40	297	481	422	58	83	568	154	55	259
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	200		200	150		0	450		0
Storage Lanes	1		0	2		1	1		1	1		1
Taper Length (ft)	90			120			90			180		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		756			737			351			716	
Travel Time (s)		11.5			11.2			5.3			10.8	
Confl. Peds. (#/hr)						5						5
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
Shared Lane Traffic (%)										33%		
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2		1	6	4	8	8	1	4	4	5
Permitted Phases						6			8			4
Detector Phase	5	2		1	6	4	8	8	1	4	4	5
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	23.0		8.0	23.0	23.0	26.0	26.0	8.0	23.0	23.0	8.0
Total Split (s)	22.0	41.0		30.0	49.0	23.0	26.0	26.0	30.0	23.0	23.0	22.0
Total Split (%)	18.3%	34.2%		25.0%	40.8%	19.2%	21.7%	21.7%	25.0%	19.2%	19.2%	18.3%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lead		Lag	Lead				Lag			Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			Yes
Recall Mode	None	C-Max		None	C-Max	Max	None	None	None	Max	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 6: Bedford Cyn. Rd. & Eagle Glen Pkwy/Cajalco Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	899	40	297	481	422	58	83	568	154	55	259
Future Volume (veh/h)	143	899	40	297	481	422	58	83	568	154	55	259
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		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	151	946	42	313	506	444	61	87	598	110	131	273
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	303	1069	47	819	1333	843	290	305	634	282	296	518
Arrive On Green	0.17	0.31	0.31	0.08	0.12	0.12	0.05	0.05	0.05	0.16	0.16	0.16
Sat Flow, veh/h	1781	3466	154	3456	3554	1579	1781	1870	1585	1781	1870	1570
Grp Volume(v), veh/h	151	485	503	313	506	444	61	87	598	110	131	273
Grp Sat Flow(s),veh/h/ln	1781	1777	1843	1728	1777	1579	1781	1870	1585	1781	1870	1570
Q Serve(g_s), s	9.2	31.2	31.2	10.3	15.7	24.3	3.9	5.4	16.5	6.6	7.6	0.0
Cycle Q Clear(g_c), s	9.2	31.2	31.2	10.3	15.7	24.3	3.9	5.4	16.5	6.6	7.6	0.0
Prop In Lane	1.00		0.08	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	303	548	568	819	1333	843	290	305	634	282	296	518
V/C Ratio(X)	0.50	0.89	0.89	0.38	0.38	0.53	0.21	0.29	0.94	0.39	0.44	0.53
Avail Cap(c_a), veh/h	303	548	568	819	1333	843	327	343	666	282	296	518
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.86	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.1	39.5	39.5	47.0	39.7	26.3	49.4	50.1	41.2	45.3	45.7	32.7
Incr Delay (d2), s/veh	1.3	18.6	18.1	0.3	0.7	2.0	0.4	0.5	21.5	4.0	4.7	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	15.8	16.3	4.7	7.6	14.2	1.8	2.6	10.2	3.2	3.8	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.4	58.1	57.6	47.2	40.5	28.3	49.7	50.6	62.7	49.3	50.4	36.5
LnGrp LOS	D	E	E	D	D	C	D	D	E	D	D	D
Approach Vol, veh/h		1139			1263			746			514	
Approach Delay, s/veh		56.3			37.9			60.2			42.8	
Approach LOS		E			D			E			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	32.4	41.0		23.0	24.4	49.0		23.6				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	26.0	37.0		19.0	18.0	45.0		22.0				
Max Q Clear Time (g_c+I1), s	12.3	33.2		9.6	11.2	26.3		18.5				
Green Ext Time (p_c), s	0.9	1.6		1.6	0.2	4.2		1.1				

Intersection Summary			
HCM 6th Ctrl Delay		48.8	
HCM 6th LOS		D	

Notes

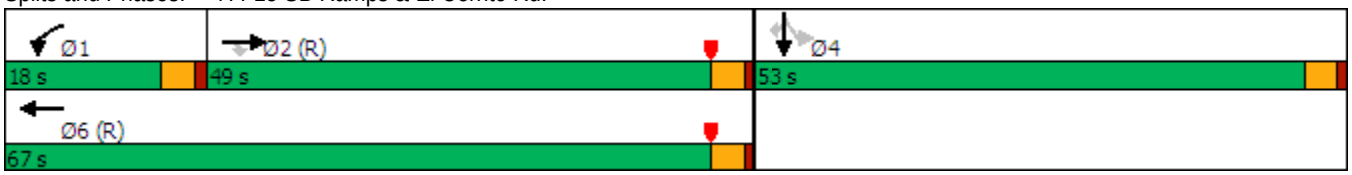
User approved volume balancing among the lanes for turning movement.

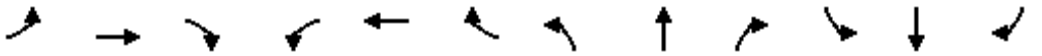
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1018	576	151	869	0	0	0	0	235	5	615
Future Volume (vph)	0	1018	576	151	869	0	0	0	0	235	5	615
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	90		0	0		0	0		525
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	100			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		305			387			1098			1308	
Travel Time (s)		4.6			5.9			16.6			19.8	
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
Shared Lane Traffic (%)												
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Detector Phase		2	2	1	6					4	4	4
Switch Phase												
Minimum Initial (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Minimum Split (s)		26.0	26.0	8.0	26.0					26.0	26.0	26.0
Total Split (s)		49.0	49.0	18.0	67.0					53.0	53.0	53.0
Total Split (%)		40.8%	40.8%	15.0%	55.8%					44.2%	44.2%	44.2%
Yellow Time (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
All-Red Time (s)		1.0	1.0	1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0						0.0	0.0
Total Lost Time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Recall Mode		C-Max	C-Max	None	C-Max					Max	Max	Max

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 18 (15%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 7: I-15 SB Ramps & El Cerrito Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1018	576	151	869	0	0	0	0	235	5	615
Future Volume (veh/h)	0	1018	576	151	869	0	0	0	0	235	5	615
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	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1072	606	159	915	0				247	5	647
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	2	2	2	2	0				2	2	2
Cap, veh/h	0	1381	616	183	1866	0				714	14	647
Arrive On Green	0.00	0.26	0.26	0.21	1.00	0.00				0.41	0.41	0.41
Sat Flow, veh/h	0	3647	1585	1781	3647	0				1748	35	1585
Grp Volume(v), veh/h	0	1072	606	159	915	0				252	0	647
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1777	0				1783	0	1585
Q Serve(g_s), s	0.0	33.6	45.6	10.4	0.0	0.0				11.7	0.0	49.0
Cycle Q Clear(g_c), s	0.0	33.6	45.6	10.4	0.0	0.0				11.7	0.0	49.0
Prop In Lane	0.00		1.00	1.00		0.00				0.98		1.00
Lane Grp Cap(c), veh/h	0	1381	616	183	1866	0				728	0	647
V/C Ratio(X)	0.00	0.78	0.98	0.87	0.49	0.00				0.35	0.00	1.00
Avail Cap(c_a), veh/h	0	1381	616	208	1866	0				728	0	647
HCM Platoon Ratio	1.00	0.67	0.67	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.12	0.12	0.49	0.49	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	39.5	44.0	46.9	0.0	0.0				24.5	0.0	35.5
Incr Delay (d2), s/veh	0.0	0.5	9.3	15.7	0.5	0.0				1.3	0.0	35.3
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	15.1	19.7	4.8	0.1	0.0				5.0	0.0	24.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	40.1	53.3	62.6	0.5	0.0				25.8	0.0	70.8
LnGrp LOS	A	D	D	E	A	A				C	A	E
Approach Vol, veh/h		1678			1074						899	
Approach Delay, s/veh		44.8			9.6						58.2	
Approach LOS		D			A						E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	16.4	50.6		53.0		67.0
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s	14.0	45.0		49.0		63.0
Max Q Clear Time (g_c+I1), s	12.4	47.6		51.0		2.0
Green Ext Time (p_c), s	0.1	0.0		0.0		7.2

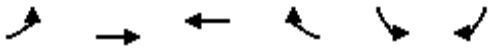
Intersection Summary	
HCM 6th Ctrl Delay	37.8
HCM 6th LOS	D

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	427	1195	859	190	381	431
Future Volume (vph)	427	1195	859	190	381	431
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290			250	0	0
Storage Lanes	2			0	2	2
Taper Length (ft)	120				25	
Right Turn on Red				Yes		Yes
Link Speed (mph)		45	45		45	
Link Distance (ft)		737	285		302	
Travel Time (s)		11.2	4.3		4.6	
Confl. Peds. (#/hr)						5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	23.7	30.7	30.7	8.5	8.5
Total Split (s)	33.0	89.0	56.0	56.0	31.0	31.0
Total Split (%)	27.5%	74.2%	46.7%	46.7%	25.8%	25.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 8: Cajalco Rd. & I-15 SB Ramps





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	427	1195	859	190	381	431
Future Volume (veh/h)	427	1195	859	190	381	431
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	449	1258	904	200	401	454
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	526	3617	1858	829	778	628
Arrive On Green	0.30	1.00	0.52	0.52	0.22	0.22
Sat Flow, veh/h	3456	5274	3647	1585	3456	2790
Grp Volume(v), veh/h	449	1258	904	200	401	454
Grp Sat Flow(s),veh/h/ln	1728	1702	1777	1585	1728	1395
Q Serve(g_s), s	14.7	0.0	19.5	8.3	12.2	18.1
Cycle Q Clear(g_c), s	14.7	0.0	19.5	8.3	12.2	18.1
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	526	3617	1858	829	778	628
V/C Ratio(X)	0.85	0.35	0.49	0.24	0.52	0.72
Avail Cap(c_a), veh/h	835	3617	1858	829	778	628
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.48	0.48	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.5	0.0	18.3	15.6	40.8	43.0
Incr Delay (d2), s/veh	2.6	0.1	0.9	0.7	2.4	7.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	0.0	7.7	3.0	5.3	14.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	43.0	0.1	19.2	16.3	43.2	50.1
LnGrp LOS	D	A	B	B	D	D
Approach Vol, veh/h		1707	1104		855	
Approach Delay, s/veh		11.4	18.7		46.9	
Approach LOS		B	B		D	

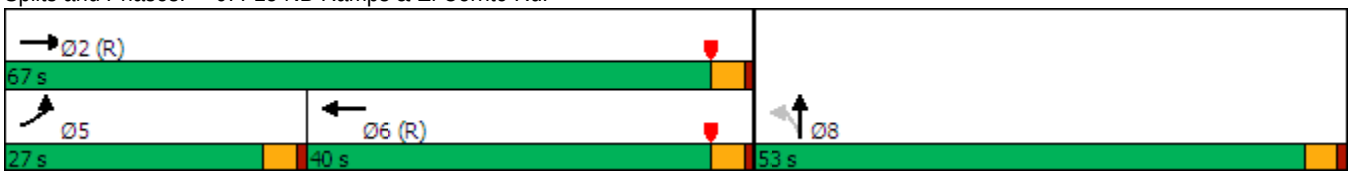
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		89.0		31.0	22.3	66.7
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		85.0		27.0	29.0	52.0
Max Q Clear Time (g_c+I1), s		2.0		20.1	16.7	21.5
Green Ext Time (p_c), s		7.3		2.4	1.6	5.6

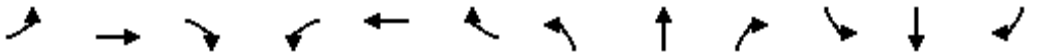
Intersection Summary		
HCM 6th Ctrl Delay	21.9	
HCM 6th LOS	C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	643	608	0	0	563	364	457	2	206	0	0	0
Future Volume (vph)	643	608	0	0	563	364	457	2	206	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	60			100			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		387			489			1198			782	
Travel Time (s)		5.9			7.4			18.2			11.8	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA			NA		Perm	NA				
Protected Phases	5	2			6			8				
Permitted Phases							8					
Detector Phase	5	2			6		8	8				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		4.0	4.0				
Minimum Split (s)	8.0	26.0			26.0		26.0	26.0				
Total Split (s)	27.0	67.0			40.0		53.0	53.0				
Total Split (%)	22.5%	55.8%			33.3%		44.2%	44.2%				
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0				
All-Red Time (s)	1.0	1.0			1.0		1.0	1.0				
Lost Time Adjust (s)	0.0	0.0			0.0			0.0				
Total Lost Time (s)	4.0	4.0			4.0			4.0				
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?	Yes				Yes							
Recall Mode	None	C-Max			C-Max		Max	Max				

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 9: I-15 NB Ramps & El Cerrito Rd.





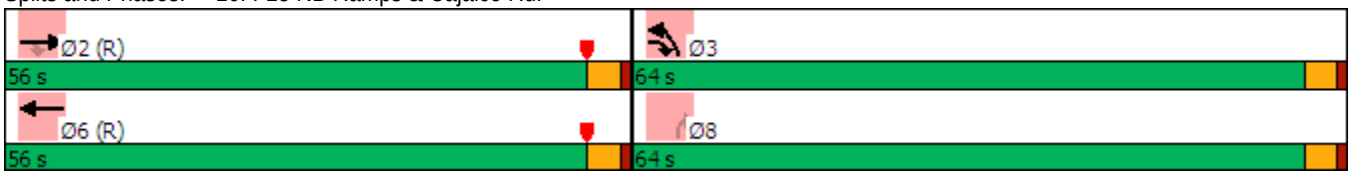
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	643	608	0	0	563	364	457	2	206	0	0	0
Future Volume (veh/h)	643	608	0	0	563	364	457	2	206	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
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	1870	1870	0	0	1870	1870	1900	1870	1900			
Adj Flow Rate, veh/h	677	640	0	0	593	383	481	2	217			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	683	982	0	0	637	411	481	2	217			
Arrive On Green	0.32	0.88	0.00	0.00	0.30	0.30	0.41	0.41	0.41			
Sat Flow, veh/h	3563	1870	0	0	2123	1371	1179	5	532			
Grp Volume(v), veh/h	677	640	0	0	522	454	700	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1870	1624	1716	0	0			
Q Serve(g_s), s	22.7	11.8	0.0	0.0	32.6	32.6	48.9	0.0	0.0			
Cycle Q Clear(g_c), s	22.7	11.8	0.0	0.0	32.6	32.6	48.9	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.84	0.69		0.31			
Lane Grp Cap(c), veh/h	683	982	0	0	561	487	701	0	0			
V/C Ratio(X)	0.99	0.65	0.00	0.00	0.93	0.93	1.00	0.00	0.00			
Avail Cap(c_a), veh/h	683	982	0	0	561	487	701	0	0			
HCM Platoon Ratio	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.51	0.51	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	40.7	4.2	0.0	0.0	40.8	40.8	35.5	0.0	0.0			
Incr Delay (d2), s/veh	22.5	1.7	0.0	0.0	24.3	26.8	33.8	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	10.4	2.7	0.0	0.0	18.1	16.0	25.7	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.2	6.0	0.0	0.0	65.1	67.6	69.3	0.0	0.0			
LnGrp LOS	E	A	A	A	E	E	E	A	A			
Approach Vol, veh/h		1317			976			700				
Approach Delay, s/veh		35.4			66.3			69.3				
Approach LOS		D			E			E				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		67.0			27.0	40.0		53.0				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		63.0			23.0	36.0		49.0				
Max Q Clear Time (g_c+I1), s		13.8			24.7	34.6		50.9				
Green Ext Time (p_c), s		4.4			0.0	0.8		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			53.4									
HCM 6th LOS			D									

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	654	923	0	1871	311	132
Future Volume (vph)	654	923	0	1871	311	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		330	0		500	500
Storage Lanes		0	0		0	0
Taper Length (ft)			25		130	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	45	
Link Distance (ft)	293			191	332	
Travel Time (s)	4.4			2.9	5.0	
Confl. Peds. (#/hr)						5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	0%	2%	2%	2%
Shared Lane Traffic (%)						
Turn Type	NA	pm+ov		NA	Prot	Perm
Protected Phases	2	3		6	3	
Permitted Phases		2				8
Detector Phase	2	3		6	3	8
Switch Phase						
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	23.7	8.5		30.7	8.5	8.5
Total Split (s)	56.0	64.0		56.0	64.0	64.0
Total Split (%)	46.7%	53.3%		46.7%	53.3%	53.3%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	Max		C-Max	Max	Max

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 95 (79%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 40
Control Type: Actuated-Coordinated

Splits and Phases: 10: I-15 NB Ramps & Cajalco Rd.





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	654	923	0	1871	311	132
Future Volume (veh/h)	654	923	0	1871	311	132
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	688	972	0	1969	327	139
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	2213	1479	0	2788	1728	1395
Arrive On Green	0.43	0.43	0.00	0.43	0.50	0.50
Sat Flow, veh/h	5274	1585	0	6958	3456	2790
Grp Volume(v), veh/h	688	972	0	1969	327	139
Grp Sat Flow(s),veh/h/ln	1702	1585	0	1609	1728	1395
Q Serve(g_s), s	10.6	12.7	0.0	30.0	6.3	3.1
Cycle Q Clear(g_c), s	10.6	12.7	0.0	30.0	6.3	3.1
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2213	1479	0	2788	1728	1395
V/C Ratio(X)	0.31	0.66	0.00	0.71	0.19	0.10
Avail Cap(c_a), veh/h	2213	1479	0	2788	1728	1395
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.3	0.7	0.0	27.8	16.6	15.8
Incr Delay (d2), s/veh	0.4	2.3	0.0	1.5	0.2	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	4.1	0.9	0.0	11.2	2.4	1.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.6	3.0	0.0	29.3	16.8	15.9
LnGrp LOS	C	A	A	C	B	B
Approach Vol, veh/h	1660			1969	466	
Approach Delay, s/veh	11.1			29.3	16.5	
Approach LOS	B			C	B	

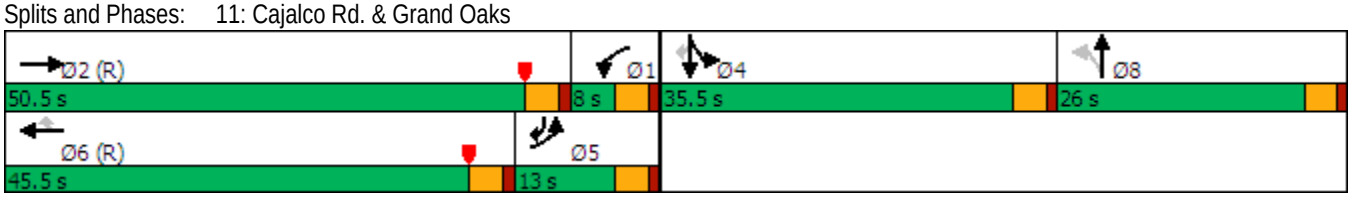
Timer - Assigned Phs	2				6	8
Phs Duration (G+Y+Rc), s	56.0				56.0	64.0
Change Period (Y+Rc), s	4.0				4.0	4.0
Max Green Setting (Gmax), s	52.0				52.0	60.0
Max Q Clear Time (g_c+I1), s	14.7				32.0	8.3
Green Ext Time (p_c), s	11.8				10.7	2.2

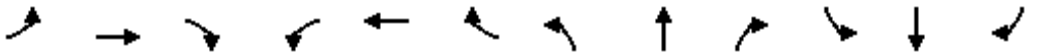
Intersection Summary	
HCM 6th Ctrl Delay	20.5
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	213	573	1	1	1543	111	1	1	1	68	1	137
Future Volume (vph)	213	573	1	1	1543	111	1	1	1	68	1	137
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	130		130	0		0	200		0
Storage Lanes	2		0	1		1	0		0	1		2
Taper Length (ft)	180			110			100			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		602			570			544			904	
Travel Time (s)		9.1			8.6			8.2			13.7	
Confl. Peds. (#/hr)						5				5		
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Split	NA	pm+ov
Protected Phases	5	2		1	6			8		4	4	5
Permitted Phases						6	8					4
Detector Phase	5	2		1	6	6	8	8		4	4	5
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	23.2		8.0	30.7	30.7	26.0	26.0		35.5	35.5	8.5
Total Split (s)	13.0	50.5		8.0	45.5	45.5	26.0	26.0		35.5	35.5	13.0
Total Split (%)	10.8%	42.1%		6.7%	37.9%	37.9%	21.7%	21.7%		29.6%	29.6%	10.8%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag	Lag	Lead		Lag	Lead	Lead						Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		Max	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 91 (76%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	

Splits and Phases: 11: Cajalco Rd. & Grand Oaks





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	213	573	1	1	1543	111	1	1	1	68	1	137
Future Volume (veh/h)	213	573	1	1	1543	111	1	1	1	68	1	137
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		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	224	603	1	1	1624	117	1	1	1	72	1	144
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	882	2040	3	380	1766	546	2	2	2	461	6	1440
Arrive On Green	0.26	0.39	0.39	0.21	0.35	0.35	0.00	0.00	0.00	0.26	0.26	0.26
Sat Flow, veh/h	3456	5264	9	1781	5106	1578	579	579	579	1758	24	2774
Grp Volume(v), veh/h	224	390	214	1	1624	117	3	0	0	73	0	144
Grp Sat Flow(s),veh/h/ln	1728	1702	1869	1781	1702	1578	1737	0	0	1782	0	1387
Q Serve(g_s), s	6.2	9.5	9.5	0.1	36.6	6.3	0.2	0.0	0.0	3.8	0.0	0.0
Cycle Q Clear(g_c), s	6.2	9.5	9.5	0.1	36.6	6.3	0.2	0.0	0.0	3.8	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.33		0.33	0.99		1.00
Lane Grp Cap(c), veh/h	882	1319	724	380	1766	546	6	0	0	468	0	1440
V/C Ratio(X)	0.25	0.30	0.30	0.00	0.92	0.21	0.54	0.00	0.00	0.16	0.00	0.10
Avail Cap(c_a), veh/h	882	1319	724	380	1766	546	318	0	0	468	0	1440
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	1.00
Uniform Delay (d), s/veh	35.6	25.4	25.4	37.1	37.7	27.7	59.7	0.0	0.0	34.0	0.0	14.7
Incr Delay (d2), s/veh	0.2	0.6	1.0	0.0	9.3	0.9	64.2	0.0	0.0	0.7	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	3.8	4.3	0.0	16.0	2.4	0.2	0.0	0.0	1.7	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.7	26.0	26.5	37.1	46.9	28.6	123.9	0.0	0.0	34.7	0.0	14.9
LnGrp LOS	D	C	C	D	D	C	F	A	A	C	A	B
Approach Vol, veh/h		828			1742			3			217	
Approach Delay, s/veh		28.8			45.7			123.9			21.5	
Approach LOS		C			D			F			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	29.6	50.5		35.5	34.6	45.5		4.4				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	4.0	46.5		31.5	9.0	41.5		22.0				
Max Q Clear Time (g_c+I1), s	2.1	11.5		5.8	8.2	38.6		2.2				
Green Ext Time (p_c), s	0.0	2.5		1.0	0.1	2.1		0.0				

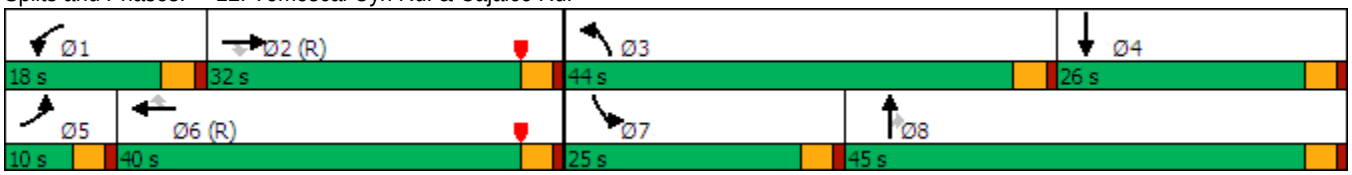
Intersection Summary												
HCM 6th Ctrl Delay			38.9									
HCM 6th LOS			D									

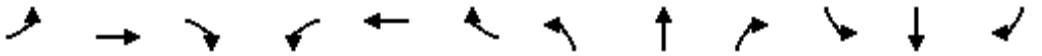
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	384	215	104	591	621	984	858	379	233	138	79
Future Volume (vph)	41	384	215	104	591	621	984	858	379	233	138	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	16	12	12	16	12	12	12
Storage Length (ft)	300		200	450		200	300		325	200		200
Storage Lanes	1		0	1		1	2		1	2		0
Taper Length (ft)	180			180			180			180		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		464			943			1167			1000	
Travel Time (s)		7.0			14.3			17.7			15.2	
Confl. Peds. (#/hr)			5			5						5
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	10.0	26.0	26.0	10.0	40.0	40.0	10.0	26.0	26.0	25.0	26.0	
Total Split (s)	10.0	32.0	32.0	18.0	40.0	40.0	44.0	45.0	45.0	25.0	26.0	
Total Split (%)	8.3%	26.7%	26.7%	15.0%	33.3%	33.3%	36.7%	37.5%	37.5%	20.8%	21.7%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	Max	None	Max	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 105
Control Type: Actuated-Coordinated

Splits and Phases: 12: Temescal Cyn Rd. & Cajalco Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	384	215	104	591	621	984	858	379	233	138	79
Future Volume (veh/h)	41	384	215	104	591	621	984	858	379	233	138	79
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		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1945	1870	1870	1945	1870	1870	1870
Adj Flow Rate, veh/h	42	396	222	107	609	640	1014	885	391	240	142	81
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	54	1039	461	133	1720	553	1093	1454	675	312	408	219
Arrive On Green	0.03	0.29	0.29	0.07	0.34	0.34	0.32	0.41	0.41	0.09	0.18	0.18
Sat Flow, veh/h	1781	3554	1577	1781	5106	1641	3456	3554	1648	3456	2224	1196
Grp Volume(v), veh/h	42	396	222	107	609	640	1014	885	391	240	112	111
Grp Sat Flow(s),veh/h/ln	1781	1777	1577	1781	1702	1641	1728	1777	1648	1728	1777	1643
Q Serve(g_s), s	2.8	10.6	13.9	7.1	10.8	40.4	34.1	23.5	22.0	8.1	6.6	7.1
Cycle Q Clear(g_c), s	2.8	10.6	13.9	7.1	10.8	40.4	34.1	23.5	22.0	8.1	6.6	7.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.73
Lane Grp Cap(c), veh/h	54	1039	461	133	1720	553	1093	1454	675	312	326	301
V/C Ratio(X)	0.78	0.38	0.48	0.81	0.35	1.16	0.93	0.61	0.58	0.77	0.34	0.37
Avail Cap(c_a), veh/h	89	1039	461	208	1720	553	1152	1454	675	605	326	301
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	33.8	35.0	54.7	30.0	39.8	39.7	27.9	27.4	53.4	42.7	42.9
Incr Delay (d2), s/veh	21.1	1.1	3.6	11.8	0.6	89.9	12.4	1.9	3.6	4.0	2.9	3.5
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	1.6	4.6	5.6	3.5	4.4	29.3	15.7	9.9	8.9	3.6	3.1	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.9	34.9	38.5	66.5	30.5	129.7	52.1	29.8	31.1	57.3	45.6	46.4
LnGrp LOS	E	C	D	E	C	F	D	C	C	E	D	D
Approach Vol, veh/h		660			1356			2290			463	
Approach Delay, s/veh		38.9			80.2			39.9			51.9	
Approach LOS		D			F			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	39.1	42.0	26.0	7.6	44.4	14.8	53.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	28.0	40.0	22.0	6.0	36.0	21.0	41.0
Max Q Clear Time (g_c+I1), s	9.1	15.9	36.1	9.1	4.8	42.4	10.1	25.5
Green Ext Time (p_c), s	0.1	2.1	1.9	0.6	0.0	0.0	0.7	5.4

Intersection Summary	
HCM 6th Ctrl Delay	52.4
HCM 6th LOS	D

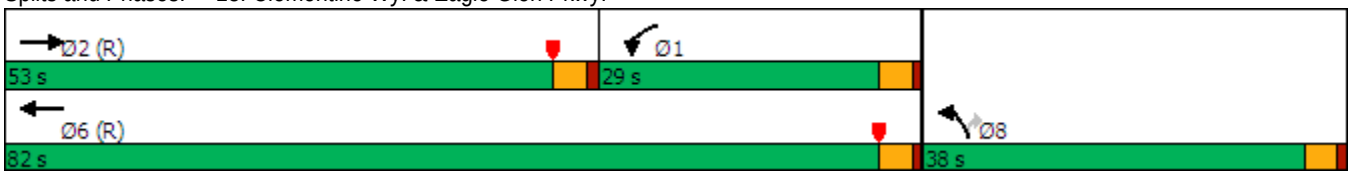
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	567	10	120	450	10	363
Future Volume (vph)	567	10	120	450	10	363
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	300		150	0
Storage Lanes		0	1		1	1
Taper Length (ft)			60		90	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	45	
Link Distance (ft)	366			1267	734	
Travel Time (s)	5.5			19.2	11.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	NA		Prot	NA	Prot	Perm
Protected Phases	2		1	6	8	
Permitted Phases						8
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	26.0		8.0	26.0	26.0	26.0
Total Split (s)	53.0		29.0	82.0	38.0	38.0
Total Split (%)	44.2%		24.2%	68.3%	31.7%	31.7%
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	C-Max		None	C-Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 85 (71%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 13: Clementine Wy. & Eagle Glen Pkwy.

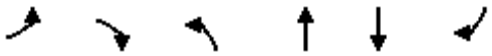




Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	567	10	120	450	10	363
Future Volume (veh/h)	567	10	120	450	10	363
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	597	11	126	474	11	382
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1458	27	371	2310	505	449
Arrive On Green	0.41	0.41	0.21	0.65	0.28	0.28
Sat Flow, veh/h	3663	66	1781	3647	1781	1585
Grp Volume(v), veh/h	297	311	126	474	11	382
Grp Sat Flow(s),veh/h/ln	1777	1859	1781	1777	1781	1585
Q Serve(g_s), s	14.3	14.3	7.2	6.5	0.5	27.3
Cycle Q Clear(g_c), s	14.3	14.3	7.2	6.5	0.5	27.3
Prop In Lane		0.04	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	726	759	371	2310	505	449
V/C Ratio(X)	0.41	0.41	0.34	0.21	0.02	0.85
Avail Cap(c_a), veh/h	726	759	371	2310	505	449
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.92	0.92	1.00	1.00
Uniform Delay (d), s/veh	25.2	25.2	40.5	8.5	31.0	40.6
Incr Delay (d2), s/veh	1.7	1.6	0.5	0.2	0.1	18.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	6.4	3.1	2.3	0.2	12.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.9	26.9	41.0	8.7	31.1	58.6
LnGrp LOS	C	C	D	A	C	E
Approach Vol, veh/h	608			600	393	
Approach Delay, s/veh	26.9			15.4	57.8	
Approach LOS	C			B	E	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	29.0	53.0				82.0	38.0
Change Period (Y+Rc), s	4.0	4.0				4.0	4.0
Max Green Setting (Gmax), s	25.0	49.0				78.0	34.0
Max Q Clear Time (g_c+I1), s	9.2	16.3				8.5	29.3
Green Ext Time (p_c), s	0.2	3.5				3.1	0.6

Intersection Summary			
HCM 6th Ctrl Delay		30.2	
HCM 6th LOS		C	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	434	1	1	86	28	126
Future Volume (vph)	434	1	1	86	28	126
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			100
Storage Lanes	1	0	0			0
Taper Length (ft)	100		100			
Link Speed (mph)	45			45	45	
Link Distance (ft)	1253			542	608	
Travel Time (s)	19.0			8.2	9.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	5.3
Intersection LOS	A

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	458	92	162
Demand Flow Rate, veh/h	467	94	166
Vehicles Circulating, veh/h	30	466	1
Vehicles Exiting, veh/h	137	31	559
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	6.0	5.4	3.6
Approach LOS	A	A	A

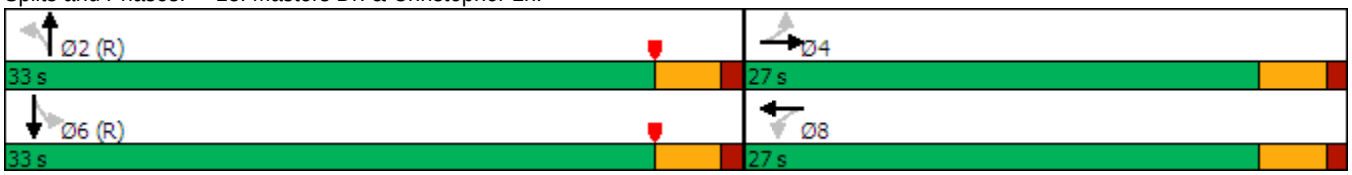
Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	467	94	166
Cap Entry Lane, veh/h	1338	858	1378
Entry HV Adj Factor	0.981	0.981	0.978
Flow Entry, veh/h	458	92	162
Cap Entry, veh/h	1312	841	1349
V/C Ratio	0.349	0.110	0.120
Control Delay, s/veh	6.0	5.4	3.6
LOS	A	A	A
95th %tile Queue, veh	2	0	0

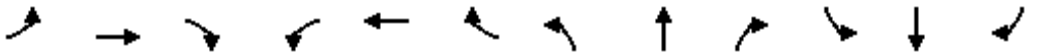
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	11	25	11	6	19	90	618	85	11	315	9
Future Volume (vph)	17	11	25	11	6	19	90	618	85	11	315	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		237			740			933			680	
Travel Time (s)		5.4			16.8			18.2			13.2	
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
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Total Split (s)	27.0	27.0		27.0	27.0		33.0	33.0		33.0	33.0	
Total Split (%)	45.0%	45.0%		45.0%	45.0%		55.0%	55.0%		55.0%	55.0%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 18: Masters Dr. & Christopher Ln.

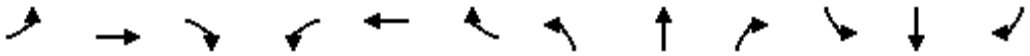




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	11	25	11	6	19	90	618	85	11	315	9
Future Volume (veh/h)	17	11	25	11	6	19	90	618	85	11	315	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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	18	12	26	12	6	20	95	651	89	12	332	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	21	42	105	18	48	816	1309	179	613	1473	40
Arrive On Green	0.05	0.05	0.05	0.05	0.05	0.05	0.81	0.81	0.81	0.27	0.27	0.27
Sat Flow, veh/h	506	384	772	476	331	897	1039	1611	220	719	1812	49
Grp Volume(v), veh/h	56	0	0	38	0	0	95	0	740	12	0	341
Grp Sat Flow(s),veh/h/ln	1662	0	0	1703	0	0	1039	0	1831	719	0	1862
Q Serve(g_s), s	0.7	0.0	0.0	0.0	0.0	0.0	2.0	0.0	7.6	0.8	0.0	8.6
Cycle Q Clear(g_c), s	1.9	0.0	0.0	1.2	0.0	0.0	10.6	0.0	7.6	8.4	0.0	8.6
Prop In Lane	0.32		0.46	0.32		0.53	1.00		0.12	1.00		0.03
Lane Grp Cap(c), veh/h	169	0	0	171	0	0	816	0	1488	613	0	1513
V/C Ratio(X)	0.33	0.00	0.00	0.22	0.00	0.00	0.12	0.00	0.50	0.02	0.00	0.23
Avail Cap(c_a), veh/h	684	0	0	680	0	0	816	0	1488	613	0	1513
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.93	0.00	0.93
Uniform Delay (d), s/veh	27.7	0.0	0.0	27.4	0.0	0.0	3.6	0.0	1.8	10.2	0.0	7.2
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.6	0.0	0.0	0.3	0.0	1.2	0.1	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	0.5	0.0	0.0	0.3	0.0	0.5	0.1	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.9	0.0	0.0	28.1	0.0	0.0	3.9	0.0	3.0	10.2	0.0	7.6
LnGrp LOS	C	A	A	C	A	A	A	A	A	B	A	A
Approach Vol, veh/h		56			38			835			353	
Approach Delay, s/veh		28.9			28.1			3.1			7.7	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		52.8		7.2		52.8		7.2				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		29.0		23.0		29.0		23.0				
Max Q Clear Time (g_c+I1), s		12.6		3.9		10.6		3.2				
Green Ext Time (p_c), s		5.2		0.2		1.9		0.1				

Intersection Summary	
HCM 6th Ctrl Delay	6.2
HCM 6th LOS	A



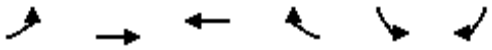
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	11	25	11	6	19	90	618	85	11	315	9
Future Volume (vph)	17	11	25	11	6	19	90	618	85	11	315	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	100			100			60			60		
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		237			740			933			680	
Travel Time (s)		5.4			16.8			18.2			13.2	
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
Shared Lane Traffic (%)												
Sign Control		Yield			Yield			Yield			Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	9.0
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	56	38	835	353
Demand Flow Rate, veh/h	57	38	852	360
Vehicles Circulating, veh/h	363	779	42	115
Vehicles Exiting, veh/h	112	115	378	702
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.4	6.5	10.9	5.7
Approach LOS	A	A	B	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	57	38	852	360
Cap Entry Lane, veh/h	953	623	1322	1227
Entry HV Adj Factor	0.978	0.997	0.980	0.982
Flow Entry, veh/h	56	38	835	353
Cap Entry, veh/h	932	622	1296	1204
V/C Ratio	0.060	0.061	0.644	0.293
Control Delay, s/veh	4.4	6.5	10.9	5.7
LOS	A	A	B	A
95th %tile Queue, veh	0	0	5	1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	7	290	566	7	15	24
Future Volume (vph)	7	290	566	7	15	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	60				100	
Link Speed (mph)		35	35		30	
Link Distance (ft)		1212	796		251	
Travel Time (s)		23.6	15.5		5.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

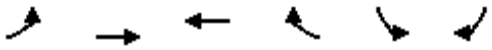
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	290	566	7	15	24
Future Vol, veh/h	7	290	566	7	15	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	120	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	305	596	7	16	25

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	603	0	-	0	919	600
Stage 1	-	-	-	-	600	-
Stage 2	-	-	-	-	319	-
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	975	-	-	-	301	501
Stage 1	-	-	-	-	548	-
Stage 2	-	-	-	-	737	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	975	-	-	-	299	501
Mov Cap-2 Maneuver	-	-	-	-	299	-
Stage 1	-	-	-	-	544	-
Stage 2	-	-	-	-	737	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	15.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	975	-	-	-	398
HCM Lane V/C Ratio	0.008	-	-	-	0.103
HCM Control Delay (s)	8.7	-	-	-	15.1
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.3



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	7	290	566	7	15	24
Future Volume (vph)	7	290	566	7	15	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	60				100	
Link Speed (mph)		35	35		30	
Link Distance (ft)		1212	796		251	
Travel Time (s)		23.6	15.5		5.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control		Yield	Yield		Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	6.2
Intersection LOS	A

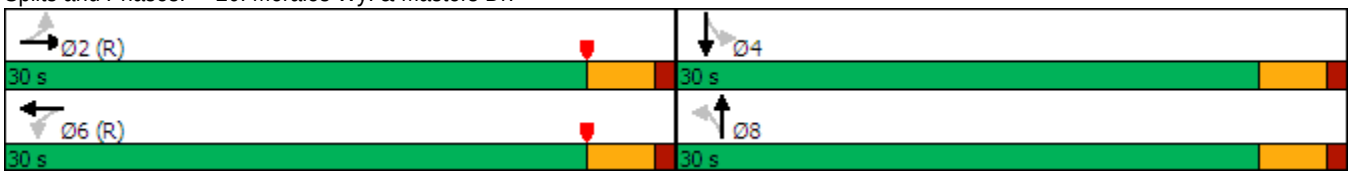
Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	312	603	41
Demand Flow Rate, veh/h	318	615	42
Vehicles Circulating, veh/h	16	7	608
Vehicles Exiting, veh/h	633	327	14
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.7	7.1	5.5
Approach LOS	A	A	A

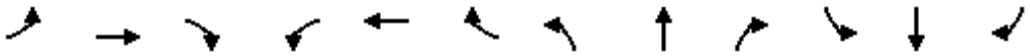
Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	318	615	42
Cap Entry Lane, veh/h	1358	1370	742
Entry HV Adj Factor	0.981	0.981	0.976
Flow Entry, veh/h	312	603	41
Cap Entry, veh/h	1331	1343	725
V/C Ratio	0.234	0.449	0.057
Control Delay, s/veh	4.7	7.1	5.5
LOS	A	A	A
95th %tile Queue, veh	1	2	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	210	89	39	339	4	182	2	79	5	1	5
Future Volume (vph)	3	210	89	39	339	4	182	2	79	5	1	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	60			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			30			45	
Link Distance (ft)		1243			906			626			709	
Travel Time (s)		24.2			17.6			14.2			10.7	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Total Split (s)	30.0	30.0		30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		Max	Max		Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: Morales Wy. & Masters Dr.

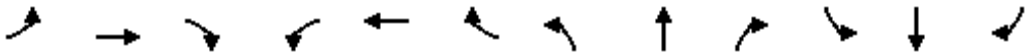




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	210	89	39	339	4	182	2	79	5	1	5
Future Volume (veh/h)	3	210	89	39	339	4	182	2	79	5	1	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		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	4	250	106	46	404	5	217	2	94	6	1	6
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	388	540	229	419	799	10	525	22	191	363	82	306
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	977	1247	529	1025	1843	23	978	51	442	635	189	706
Grp Volume(v), veh/h	4	0	356	46	0	409	313	0	0	13	0	0
Grp Sat Flow(s),veh/h/ln	977	0	1775	1025	0	1866	1470	0	0	1531	0	0
Q Serve(g_s), s	0.2	0.0	8.5	2.0	0.0	9.5	8.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.7	0.0	8.5	10.5	0.0	9.5	9.0	0.0	0.0	0.3	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.01	0.69		0.30	0.46		0.46
Lane Grp Cap(c), veh/h	388	0	769	419	0	809	739	0	0	751	0	0
V/C Ratio(X)	0.01	0.00	0.46	0.11	0.00	0.51	0.42	0.00	0.00	0.02	0.00	0.00
Avail Cap(c_a), veh/h	388	0	769	419	0	809	739	0	0	751	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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.9	0.0	12.0	15.8	0.0	12.3	12.1	0.0	0.0	9.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	2.0	0.5	0.0	2.3	1.8	0.0	0.0	0.0	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	0.0	0.0	3.2	0.5	0.0	3.8	2.9	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.9	0.0	14.0	16.3	0.0	14.6	13.9	0.0	0.0	9.7	0.0	0.0
LnGrp LOS	B	A	B	B	A	B	B	A	A	A	A	A
Approach Vol, veh/h		360			455			313			13	
Approach Delay, s/veh		14.1			14.8			13.9			9.7	
Approach LOS		B			B			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		30.0		30.0		30.0		30.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		26.0		26.0		26.0		26.0				
Max Q Clear Time (g_c+I1), s		11.7		2.3		12.5		11.0				
Green Ext Time (p_c), s		1.8		0.0		2.2		1.6				

Intersection Summary												
HCM 6th Ctrl Delay			14.3									
HCM 6th LOS			B									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	210	89	39	339	4	182	2	79	5	1	5
Future Volume (vph)	3	210	89	39	339	4	182	2	79	5	1	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	60			60			100			100		
Link Speed (mph)		35			35			30			45	
Link Distance (ft)		1243			906			626			709	
Travel Time (s)		24.2			17.6			14.2			10.7	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)												
Sign Control		Yield			Yield			Yield			Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	6.7
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	360	455	313	13
Demand Flow Rate, veh/h	367	464	319	13
Vehicles Circulating, veh/h	54	227	265	680
Vehicles Exiting, veh/h	639	357	156	11
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.3	7.9	6.5	5.4
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	367	464	319	13
Cap Entry Lane, veh/h	1306	1095	1053	690
Entry HV Adj Factor	0.981	0.980	0.981	0.998
Flow Entry, veh/h	360	455	313	13
Cap Entry, veh/h	1281	1073	1033	689
V/C Ratio	0.281	0.424	0.303	0.019
Control Delay, s/veh	5.3	7.9	6.5	5.4
LOS	A	A	A	A
95th %tile Queue, veh	1	2	1	0



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	5	70	496	24	76	149
Future Volume (vph)	5	70	496	24	76	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	200	
Storage Lanes	1	0		0	1	
Taper Length (ft)	100				60	
Link Speed (mph)	45		45			45
Link Distance (ft)	302		233			567
Travel Time (s)	4.6		3.5			8.6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	70	496	24	76	149
Future Vol, veh/h	5	70	496	24	76	149
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	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	74	522	25	80	157

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	774	274	0	0	547	0
Stage 1	535	-	-	-	-	-
Stage 2	239	-	-	-	-	-
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	335	724	-	-	1018	-
Stage 1	551	-	-	-	-	-
Stage 2	778	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	309	724	-	-	1018	-
Mov Cap-2 Maneuver	309	-	-	-	-	-
Stage 1	507	-	-	-	-	-
Stage 2	778	-	-	-	-	-

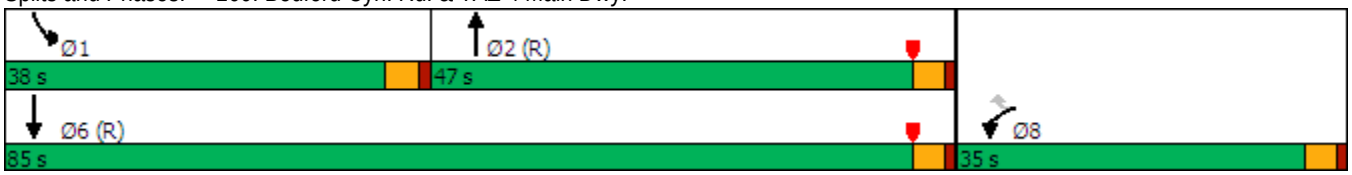
Approach	WB	NB	SB
HCM Control Delay, s	11.1	0	3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	665	1018	-
HCM Lane V/C Ratio	-	-	0.119	0.079	-
HCM Control Delay (s)	-	-	11.1	8.8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0.3	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	7	152	513	54	174	218
Future Volume (vph)	7	152	513	54	174	218
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	200	
Storage Lanes	1	1		0	1	
Taper Length (ft)	100				60	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	45		45			45
Link Distance (ft)	264		567			343
Travel Time (s)	4.0		8.6			5.2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8				
Detector Phase	8	8	2		1	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0		4.0	4.0
Minimum Split (s)	26.0	26.0	26.0		8.0	26.0
Total Split (s)	35.0	35.0	47.0		38.0	85.0
Total Split (%)	29.2%	29.2%	39.2%		31.7%	70.8%
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 160: Bedford Cyn. Rd. & TAZ 4 Main Dwy.





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	7	152	513	54	174	218
Future Volume (veh/h)	7	152	513	54	174	218
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	160	540	57	183	229
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	211	188	2143	226	215	2895
Arrive On Green	0.12	0.12	0.66	0.66	0.12	0.81
Sat Flow, veh/h	1781	1585	3338	342	1781	3647
Grp Volume(v), veh/h	7	160	295	302	183	229
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1809	1781	1777
Q Serve(g_s), s	0.4	11.9	8.1	8.2	12.1	1.5
Cycle Q Clear(g_c), s	0.4	11.9	8.1	8.2	12.1	1.5
Prop In Lane	1.00	1.00		0.19	1.00	
Lane Grp Cap(c), veh/h	211	188	1174	1195	215	2895
V/C Ratio(X)	0.03	0.85	0.25	0.25	0.85	0.08
Avail Cap(c_a), veh/h	460	409	1174	1195	505	2895
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	46.8	51.8	8.3	8.3	51.7	2.2
Incr Delay (d2), s/veh	0.1	10.2	0.5	0.5	9.1	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	0.2	5.1	2.9	3.0	5.8	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	46.9	62.0	8.8	8.8	60.8	2.3
LnGrp LOS	D	E	A	A	E	A
Approach Vol, veh/h	167		597			412
Approach Delay, s/veh	61.4		8.8			28.3
Approach LOS	E		A			C

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	18.5	83.3			101.8	18.2
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0
Max Green Setting (Gmax), s	34.0	43.0			81.0	31.0
Max Q Clear Time (g_c+I1), s	14.1	10.2			3.5	13.9
Green Ext Time (p_c), s	0.4	3.5			1.4	0.4

Intersection Summary		
HCM 6th Ctrl Delay		23.1
HCM 6th LOS		C



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	50	659	6	0	392
Future Volume (vph)	0	50	659	6	0	392
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		45			45
Link Distance (ft)	221		343			351
Travel Time (s)	3.3		5.2			5.3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	50	659	6	0	392
Future Vol, veh/h	0	50	659	6	0	392
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	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	53	694	6	0	413

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	350	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	646	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	646	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.1	0	0
HCM LOS	B		

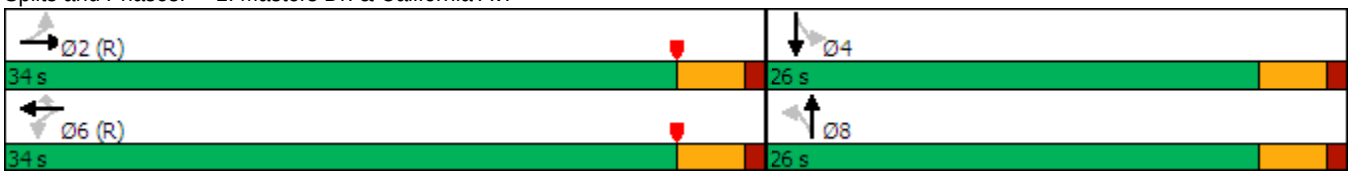
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	646	-
HCM Lane V/C Ratio	-	-	0.081	-
HCM Control Delay (s)	-	-	11.1	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.3	-

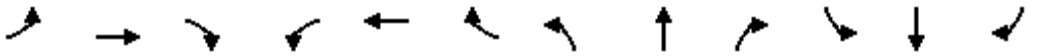
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	108	333	239	135	28	105	151	146	38	236	2
Future Volume (vph)	4	108	333	239	135	28	105	151	146	38	236	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	135		0	130		200	100		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	100			90			60			65		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		495			683			680			695	
Travel Time (s)		7.5			10.3			13.2			13.5	
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
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6		6	8			4		
Detector Phase	2	2		6	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0	26.0	26.0	26.0		26.0	26.0	
Total Split (s)	34.0	34.0		34.0	34.0	34.0	26.0	26.0		26.0	26.0	
Total Split (%)	56.7%	56.7%		56.7%	56.7%	56.7%	43.3%	43.3%		43.3%	43.3%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	Max	Max		Max	Max	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 1: Masters Dr. & California Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	108	333	239	135	28	105	151	146	38	236	2
Future Volume (veh/h)	4	108	333	239	135	28	105	151	146	38	236	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		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	4	114	351	252	142	29	111	159	154	40	248	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	677	202	621	401	935	793	424	320	310	329	679	5
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.12	0.12	0.12	0.37	0.37	0.37
Sat Flow, veh/h	1214	404	1243	928	1870	1585	1130	873	845	1067	1853	15
Grp Volume(v), veh/h	4	0	465	252	142	29	111	0	313	40	0	250
Grp Sat Flow(s),veh/h/ln	1214	0	1647	928	1870	1585	1130	0	1718	1067	0	1868
Q Serve(g_s), s	0.1	0.0	11.8	15.6	2.5	0.6	5.6	0.0	10.2	1.9	0.0	5.9
Cycle Q Clear(g_c), s	2.6	0.0	11.8	27.4	2.5	0.6	11.4	0.0	10.2	12.1	0.0	5.9
Prop In Lane	1.00		0.75	1.00		1.00	1.00		0.49	1.00		0.01
Lane Grp Cap(c), veh/h	677	0	823	401	935	793	424	0	630	329	0	685
V/C Ratio(X)	0.01	0.00	0.56	0.63	0.15	0.04	0.26	0.00	0.50	0.12	0.00	0.37
Avail Cap(c_a), veh/h	677	0	823	401	935	793	424	0	630	329	0	685
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.97	0.00	0.97	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.8	0.0	10.5	20.0	8.1	7.6	24.5	0.0	21.2	20.1	0.0	13.9
Incr Delay (d2), s/veh	0.0	0.0	2.8	7.3	0.3	0.1	1.5	0.0	2.7	0.8	0.0	1.5
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	0.0	0.0	3.7	3.6	0.8	0.2	1.8	0.0	4.8	0.5	0.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.8	0.0	13.2	27.3	8.5	7.7	25.9	0.0	23.9	20.9	0.0	15.4
LnGrp LOS	A	A	B	C	A	A	C	A	C	C	A	B
Approach Vol, veh/h		469			423			424			290	
Approach Delay, s/veh		13.2			19.6			24.4			16.2	
Approach LOS		B			B			C			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		34.0		26.0		34.0		26.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		30.0		22.0		30.0		22.0				
Max Q Clear Time (g_c+I1), s		13.8		14.1		29.4		13.4				
Green Ext Time (p_c), s		2.6		0.9		0.1		1.5				

Intersection Summary												
HCM 6th Ctrl Delay			18.4									
HCM 6th LOS			B									

Notes

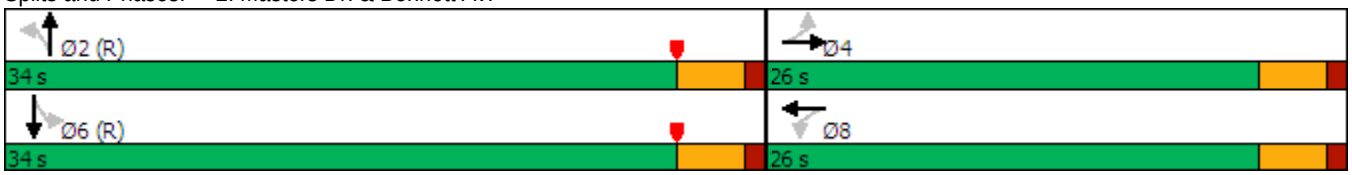
User approved pedestrian interval to be less than phase max green.

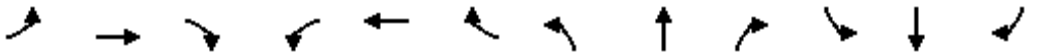
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	7	37	18	22	152	49	221	152	22	481	92
Future Volume (vph)	32	7	37	18	22	152	49	221	152	22	481	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	110		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		537			564			936			637	
Travel Time (s)		10.5			11.0			18.2			12.4	
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
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Total Split (s)	26.0	26.0		26.0	26.0		34.0	34.0		34.0	34.0	
Total Split (%)	43.3%	43.3%		43.3%	43.3%		56.7%	56.7%		56.7%	56.7%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 2: Masters Dr. & Bennett Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	7	37	18	22	152	49	221	152	22	481	92
Future Volume (veh/h)	32	7	37	18	22	152	49	221	152	22	481	92
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	34	7	39	19	23	160	52	233	160	23	506	97
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	54	130	79	42	211	571	724	497	729	1070	205
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	500	328	788	81	254	1276	816	1033	709	991	1525	292
Grp Volume(v), veh/h	80	0	0	202	0	0	52	0	393	23	0	603
Grp Sat Flow(s),veh/h/ln	1616	0	0	1610	0	0	816	0	1743	991	0	1818
Q Serve(g_s), s	0.0	0.0	0.0	2.6	0.0	0.0	1.8	0.0	5.2	0.6	0.0	8.9
Cycle Q Clear(g_c), s	2.4	0.0	0.0	7.1	0.0	0.0	10.7	0.0	5.2	5.8	0.0	8.9
Prop In Lane	0.42		0.49	0.09		0.79	1.00		0.41	1.00		0.16
Lane Grp Cap(c), veh/h	353	0	0	332	0	0	571	0	1222	729	0	1275
V/C Ratio(X)	0.23	0.00	0.00	0.61	0.00	0.00	0.09	0.00	0.32	0.03	0.00	0.47
Avail Cap(c_a), veh/h	637	0	0	652	0	0	571	0	1222	729	0	1275
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	0.78	0.00	0.78	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.9	0.0	0.0	23.8	0.0	0.0	6.4	0.0	3.5	4.6	0.0	4.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	1.8	0.0	0.0	0.2	0.0	0.5	0.1	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.0	2.7	0.0	0.0	0.3	0.0	1.1	0.1	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.2	0.0	0.0	25.6	0.0	0.0	6.7	0.0	4.0	4.7	0.0	5.3
LnGrp LOS	C	A	A	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		80			202			445			626	
Approach Delay, s/veh		22.2			25.6			4.3			5.2	
Approach LOS		C			C			A			A	

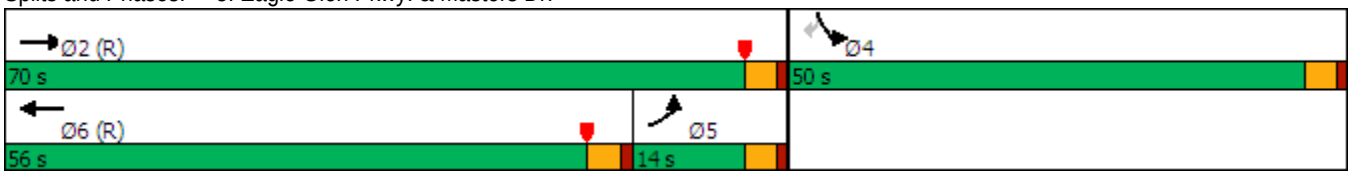
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		46.1		13.9		46.1		13.9				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		30.0		22.0		30.0		22.0				
Max Q Clear Time (g_c+I1), s		12.7		4.4		10.9		9.1				
Green Ext Time (p_c), s		2.6		0.3		4.0		0.9				

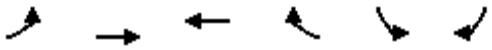
Intersection Summary												
HCM 6th Ctrl Delay			9.0									
HCM 6th LOS			A									

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	76	607	806	366	484	63
Future Volume (vph)	76	607	806	366	484	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	130	0
Storage Lanes	1			0	1	1
Taper Length (ft)	120				60	
Right Turn on Red				Yes		Yes
Link Speed (mph)		45	45		35	
Link Distance (ft)		1267	546		936	
Travel Time (s)		19.2	8.3		18.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases						4
Detector Phase	5	2	6		4	4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0		4.0	4.0
Minimum Split (s)	8.0	26.0	26.0		26.0	26.0
Total Split (s)	14.0	70.0	56.0		50.0	50.0
Total Split (%)	11.7%	58.3%	46.7%		41.7%	41.7%
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0		4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: Eagle Glen Pkwy. & Masters Dr.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	76	607	806	366	484	63
Future Volume (veh/h)	76	607	806	366	484	63
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	639	848	385	509	66
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	285	2227	1031	466	546	486
Arrive On Green	0.32	1.00	0.43	0.43	0.31	0.31
Sat Flow, veh/h	1781	3647	2473	1074	1781	1585
Grp Volume(v), veh/h	80	639	632	601	509	66
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1677	1781	1585
Q Serve(g_s), s	4.0	0.0	37.5	38.0	33.3	3.6
Cycle Q Clear(g_c), s	4.0	0.0	37.5	38.0	33.3	3.6
Prop In Lane	1.00			0.64	1.00	1.00
Lane Grp Cap(c), veh/h	285	2227	770	727	546	486
V/C Ratio(X)	0.28	0.29	0.82	0.83	0.93	0.14
Avail Cap(c_a), veh/h	285	2227	770	727	683	608
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	1.00	1.00	0.88	0.88
Uniform Delay (d), s/veh	35.6	0.0	29.9	30.0	40.4	30.1
Incr Delay (d2), s/veh	0.5	0.3	9.6	10.4	15.8	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	1.7	0.1	17.1	16.4	16.7	3.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	36.1	0.3	39.5	40.5	56.2	30.2
LnGrp LOS	D	A	D	D	E	C
Approach Vol, veh/h		719	1233		575	
Approach Delay, s/veh		4.3	40.0		53.2	
Approach LOS		A	D		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		79.2		40.8	23.2	56.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		66.0		46.0	10.0	52.0
Max Q Clear Time (g_c+I1), s		2.0		35.3	6.0	40.0
Green Ext Time (p_c), s		4.5		1.5	0.0	6.0

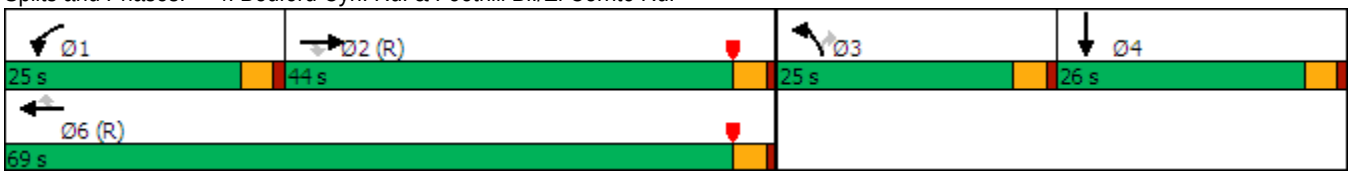
Intersection Summary	
HCM 6th Ctrl Delay	32.8
HCM 6th LOS	C

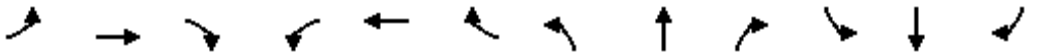
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1711	406	236	823	10	230	0	194	0	0	20
Future Volume (vph)	0	1711	406	236	823	10	230	0	194	0	0	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	135		135	0		125	0		0
Storage Lanes	0		1	1		1	1		1	0		0
Taper Length (ft)	100			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			45			40			30	
Link Distance (ft)		351			305			404			350	
Travel Time (s)		6.0			4.6			6.9			8.0	
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
Shared Lane Traffic (%)												
Turn Type		NA	Perm	Prot	NA	Perm	Prot		Perm		NA	
Protected Phases		2		1	6		3				4	
Permitted Phases			2			6			3			
Detector Phase		2	2	1	6	6	3		3		4	
Switch Phase												
Minimum Initial (s)		4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	
Minimum Split (s)		26.0	26.0	25.0	26.0	26.0	25.0		25.0		26.0	
Total Split (s)		44.0	44.0	25.0	69.0	69.0	25.0		25.0		26.0	
Total Split (%)		36.7%	36.7%	20.8%	57.5%	57.5%	20.8%		20.8%		21.7%	
Yellow Time (s)		3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	
All-Red Time (s)		1.0	1.0	1.0	1.0	1.0	1.0		1.0		1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	
Total Lost Time (s)		4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	
Lead/Lag		Lag	Lag	Lead			Lead		Lead		Lag	
Lead-Lag Optimize?		Yes	Yes	Yes			Yes		Yes		Yes	
Recall Mode		C-Max	C-Max	None	C-Max	C-Max	None		None		None	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 115
Control Type: Actuated-Coordinated

Splits and Phases: 4: Bedford Cyn. Rd. & Foothill Bl./El Cerrito Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1711	406	236	823	10	230	0	194	0	0	20
Future Volume (veh/h)	0	1711	406	236	823	10	230	0	194	0	0	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	1870	0	1870	0	1870	1870
Adj Flow Rate, veh/h	0	1746	414	241	840	0	235	0	198	0	0	0
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, %	0	2	2	2	2	2	2	0	2	0	2	2
Cap, veh/h	0	2133	951	271	2791		263	0	0	0	2	
Arrive On Green	0.00	0.60	0.60	0.10	0.53	0.00	0.15	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	3647	1585	1781	3554	1585	1781	235		0	-74814	0
Grp Volume(v), veh/h	0	1746	414	241	840	0	235	73.6		0	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1777	1585	1781	E		0	1870	0
Q Serve(g_s), s	0.0	46.3	17.0	16.0	16.0	0.0	15.5			0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	46.3	17.0	16.0	16.0	0.0	15.5			0.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		1.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	2133	951	271	2791		263			0	2	
V/C Ratio(X)	0.00	0.82	0.44	0.89	0.30		0.89			0.00	0.00	
Avail Cap(c_a), veh/h	0	2133	951	312	2791		312			0	343	
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.87	0.87	0.00	1.00			0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	18.8	13.0	52.9	9.9	0.0	50.2			0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.6	1.4	21.3	0.2	0.0	23.4			0.0	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
%ile BackOfQ(50%),veh/ln	0.0	18.2	6.0	8.9	6.8	0.0	8.5			0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	22.5	14.4	74.2	10.1	0.0	73.6			0.0	0.0	0.0
LnGrp LOS	A	C	B	E	B		E			A	A	
Approach Vol, veh/h		2160			1081	A					0	A
Approach Delay, s/veh		20.9			24.4						0.0	
Approach LOS		C			C							

Timer - Assigned Phs	1	2	3	4		6
Phs Duration (G+Y+Rc), s	22.2	76.0	21.7	0.0		98.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	21.0	40.0	21.0	22.0		65.0
Max Q Clear Time (g_c+I1), s	18.0	48.3	17.5	0.0		18.0
Green Ext Time (p_c), s	0.2	0.0	0.2	0.0		6.3

Intersection Summary	
HCM 6th Ctrl Delay	25.6
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

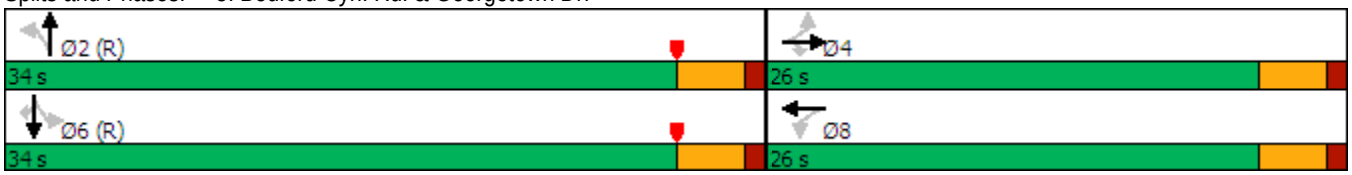
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

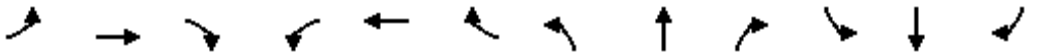
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	1	32	2	2	6	44	247	11	8	582	101
Future Volume (vph)	56	1	32	2	2	6	44	247	11	8	582	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	80		0	0		100
Storage Lanes	0		1	0		0	1		0	0		1
Taper Length (ft)	100			100			80			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			45	
Link Distance (ft)		786			169			443			297	
Travel Time (s)		11.9			2.6			10.1			4.5	
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
Shared Lane Traffic (%)												
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	4	8	8		2	2		6	6	6
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	26.0	26.0	26.0	26.0	26.0		26.0	26.0		26.0	26.0	26.0
Total Split (s)	26.0	26.0	26.0	26.0	26.0		34.0	34.0		34.0	34.0	34.0
Total Split (%)	43.3%	43.3%	43.3%	43.3%	43.3%		56.7%	56.7%		56.7%	56.7%	56.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0		4.0	4.0			4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None		C-Max	C-Max		C-Max	C-Max	C-Max

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 5: Bedford Cyn. Rd. & Georgetown Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	1	32	2	2	6	44	247	11	8	582	101
Future Volume (veh/h)	56	1	32	2	2	6	44	247	11	8	582	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		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	59	1	0	2	2	6	46	260	12	8	613	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	194	1		86	23	55	816	1444	67	65	1515	
Arrive On Green	0.05	0.05	0.00	0.05	0.05	0.05	0.81	0.81	0.81	0.81	0.81	0.00
Sat Flow, veh/h	1428	24	1585	258	441	1048	809	1774	82	5	1861	1585
Grp Volume(v), veh/h	60	0	0	10	0	0	46	0	272	621	0	0
Grp Sat Flow(s),veh/h/ln	1453	0	1585	1747	0	0	809	0	1856	1867	0	1585
Q Serve(g_s), s	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.4	0.0	0.0	0.3	0.0	0.0	0.4	0.0	1.9	5.6	0.0	0.0
Prop In Lane	0.98		1.00	0.20		0.60	1.00		0.04	0.01		1.00
Lane Grp Cap(c), veh/h	196	0		164	0	0	816	0	1510	1580	0	
V/C Ratio(X)	0.31	0.00		0.06	0.00	0.00	0.06	0.00	0.18	0.39	0.00	
Avail Cap(c_a), veh/h	639	0		665	0	0	816	0	1510	1580	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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.0	0.0	0.0	27.1	0.0	0.0	1.1	0.0	1.2	1.6	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.3	0.7	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.9	0.0	0.0	27.2	0.0	0.0	1.2	0.0	1.5	2.3	0.0	0.0
LnGrp LOS	C	A		C	A	A	A	A	A	A	A	
Approach Vol, veh/h		60	A		10			318			621	A
Approach Delay, s/veh		28.9			27.2			1.4			2.3	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		52.8		7.2		52.8		7.2				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		30.0		22.0		30.0		22.0				
Max Q Clear Time (g_c+I1), s		3.9		4.4		7.6		2.3				
Green Ext Time (p_c), s		2.0		0.2		3.8		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		3.9
HCM 6th LOS		A

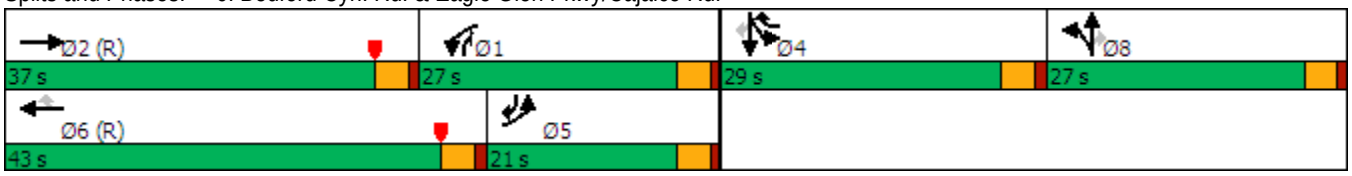
Notes

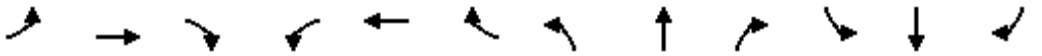
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	203	809	79	731	931	145	97	78	468	420	122	144
Future Volume (vph)	203	809	79	731	931	145	97	78	468	420	122	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	200		200	150		0	450		0
Storage Lanes	1		0	2		1	1		1	1		1
Taper Length (ft)	90			120			90			180		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		756			737			351			716	
Travel Time (s)		11.5			11.2			5.3			10.8	
Confl. Peds. (#/hr)						5						5
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
Shared Lane Traffic (%)										36%		
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2		1	6	4	8	8	1	4	4	5
Permitted Phases						6			8			4
Detector Phase	5	2		1	6	4	8	8	1	4	4	5
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	37.0		8.0	43.0	29.0	27.0	27.0	8.0	29.0	29.0	8.0
Total Split (s)	21.0	37.0		27.0	43.0	29.0	27.0	27.0	27.0	29.0	29.0	21.0
Total Split (%)	17.5%	30.8%		22.5%	35.8%	24.2%	22.5%	22.5%	22.5%	24.2%	24.2%	17.5%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lead		Lag	Lead				Lag			Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			Yes
Recall Mode	None	C-Max		None	C-Max	Max	None	None	None	Max	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	

Splits and Phases: 6: Bedford Cyn. Rd. & Eagle Glen Pkwy/Cajalco Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	203	809	79	731	931	145	97	78	468	420	122	144
Future Volume (veh/h)	203	809	79	731	931	145	97	78	468	420	122	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		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	214	852	83	769	980	153	102	82	493	285	348	152
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	433	900	88	1013	1155	843	161	169	608	371	390	713
Arrive On Green	0.24	0.28	0.28	0.10	0.11	0.11	0.09	0.09	0.09	0.21	0.21	0.21
Sat Flow, veh/h	1781	3271	319	3456	3554	1578	1781	1870	1585	1781	1870	1574
Grp Volume(v), veh/h	214	463	472	769	980	153	102	82	493	285	348	152
Grp Sat Flow(s),veh/h/ln	1781	1777	1813	1728	1777	1578	1781	1870	1585	1781	1870	1574
Q Serve(g_s), s	12.4	30.6	30.6	26.0	32.5	7.4	6.6	5.0	0.0	18.1	21.7	0.0
Cycle Q Clear(g_c), s	12.4	30.6	30.6	26.0	32.5	7.4	6.6	5.0	0.0	18.1	21.7	0.0
Prop In Lane	1.00		0.18	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	433	489	499	1013	1155	843	161	169	608	371	390	713
V/C Ratio(X)	0.49	0.95	0.95	0.76	0.85	0.18	0.63	0.49	0.81	0.77	0.89	0.21
Avail Cap(c_a), veh/h	433	489	499	1013	1155	843	341	358	768	371	390	713
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)	1.00	1.00	1.00	0.65	0.65	0.65	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.1	42.6	42.6	50.1	50.7	19.6	52.7	51.9	33.1	44.8	46.2	20.0
Incr Delay (d2), s/veh	0.9	29.5	29.1	2.2	5.3	0.3	4.1	2.2	5.3	14.1	25.3	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	16.9	17.2	12.3	16.2	4.5	3.1	2.4	13.0	9.2	12.5	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.9	72.1	71.7	52.3	55.9	19.9	56.8	54.1	38.4	58.9	71.5	20.7
LnGrp LOS	D	E	E	D	E	B	E	D	D	E	E	C
Approach Vol, veh/h		1149			1902			677			785	
Approach Delay, s/veh		66.0			51.6			43.1			57.1	
Approach LOS		E			D			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	39.2	37.0		29.0	33.2	43.0		14.8				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	23.0	33.0		25.0	17.0	39.0		23.0				
Max Q Clear Time (g_c+I1), s	28.0	32.6		23.7	14.4	34.5		8.6				
Green Ext Time (p_c), s	0.0	0.2		0.5	0.2	2.2		2.2				

Intersection Summary			
HCM 6th Ctrl Delay		54.9	
HCM 6th LOS		D	

Notes

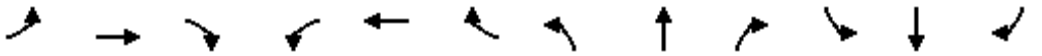
User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1017	888	130	567	0	0	0	0	155	39	492
Future Volume (vph)	0	1017	888	130	567	0	0	0	0	155	39	492
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	90		0	0		0	0		525
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	100			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		305			387			1098			1308	
Travel Time (s)		4.6			5.9			16.6			19.8	
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
Shared Lane Traffic (%)												
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Detector Phase		2	2	1	6					4	4	4
Switch Phase												
Minimum Initial (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Minimum Split (s)		50.0	50.0	30.0	26.0					35.0	35.0	35.0
Total Split (s)		55.0	55.0	30.0	85.0					35.0	35.0	35.0
Total Split (%)		45.8%	45.8%	25.0%	70.8%					29.2%	29.2%	29.2%
Yellow Time (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
All-Red Time (s)		1.0	1.0	1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0						0.0	0.0
Total Lost Time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Recall Mode		C-Max	C-Max	None	C-Max					Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 79 (66%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: I-15 SB Ramps & El Cerrito Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1017	888	130	567	0	0	0	0	155	39	492
Future Volume (veh/h)	0	1017	888	130	567	0	0	0	0	155	39	492
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	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1048	915	134	585	0				160	40	507
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	2	2	2	2	0				2	2	2
Cap, veh/h	0	1954	872	163	2399	0				372	93	409
Arrive On Green	0.00	1.00	1.00	0.09	0.68	0.00				0.26	0.26	0.26
Sat Flow, veh/h	0	3647	1585	1781	3647	0				1439	360	1585
Grp Volume(v), veh/h	0	1048	915	134	585	0				200	0	507
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1777	0				1798	0	1585
Q Serve(g_s), s	0.0	0.0	0.0	8.9	7.7	0.0				11.1	0.0	31.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	8.9	7.7	0.0				11.1	0.0	31.0
Prop In Lane	0.00		1.00	1.00		0.00				0.80		1.00
Lane Grp Cap(c), veh/h	0	1954	872	163	2399	0				465	0	409
V/C Ratio(X)	0.00	0.54	1.05	0.82	0.24	0.00				0.43	0.00	1.24
Avail Cap(c_a), veh/h	0	1954	872	386	2399	0				465	0	409
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	0.22	0.22	0.93	0.93	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	53.5	7.6	0.0				37.1	0.0	44.5
Incr Delay (d2), s/veh	0.0	0.2	29.6	9.1	0.2	0.0				2.9	0.0	126.5
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	7.2	4.3	2.6	0.0				5.1	0.0	26.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.2	29.6	62.6	7.8	0.0				40.0	0.0	171.0
LnGrp LOS	A	A	F	E	A	A				D	A	F
Approach Vol, veh/h		1963			719						707	
Approach Delay, s/veh		13.9			18.0						134.0	
Approach LOS		B			B						F	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	15.0	70.0		35.0		85.0						
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0						
Max Green Setting (Gmax), s	26.0	51.0		31.0		81.0						
Max Q Clear Time (g_c+I1), s	10.9	2.0		33.0		9.7						
Green Ext Time (p_c), s	0.3	16.9		0.0		4.0						

Intersection Summary												
HCM 6th Ctrl Delay			39.8									
HCM 6th LOS			D									

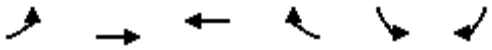
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	566	1130	998	350	638	876
Future Volume (vph)	566	1130	998	350	638	876
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290			250	0	0
Storage Lanes	2			0	2	2
Taper Length (ft)	120				25	
Right Turn on Red				Yes		Yes
Link Speed (mph)		45	45		45	
Link Distance (ft)		737	285		302	
Travel Time (s)		11.2	4.3		4.6	
Confl. Peds. (#/hr)						5
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	23.7	30.7	30.7	8.5	8.5
Total Split (s)	32.0	83.4	51.4	51.4	36.6	36.6
Total Split (%)	26.7%	69.5%	42.8%	42.8%	30.5%	30.5%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 8: Cajalco Rd. & I-15 SB Ramps





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	566	1130	998	350	638	876
Future Volume (veh/h)	566	1130	998	350	638	876
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	584	1165	1029	361	658	903
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	652	3379	1562	697	939	758
Arrive On Green	0.38	1.00	0.44	0.44	0.27	0.27
Sat Flow, veh/h	3456	5274	3647	1585	3456	2790
Grp Volume(v), veh/h	584	1165	1029	361	658	903
Grp Sat Flow(s),veh/h/ln	1728	1702	1777	1585	1728	1395
Q Serve(g_s), s	19.1	0.0	27.4	19.8	20.6	32.6
Cycle Q Clear(g_c), s	19.1	0.0	27.4	19.8	20.6	32.6
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	652	3379	1562	697	939	758
V/C Ratio(X)	0.90	0.34	0.66	0.52	0.70	1.19
Avail Cap(c_a), veh/h	806	3379	1562	697	939	758
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.46	0.46	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.2	0.0	26.5	24.4	39.3	43.7
Incr Delay (d2), s/veh	5.5	0.1	2.2	2.7	4.4	99.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	0.0	11.4	7.6	9.0	32.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	41.8	0.1	28.7	27.1	43.7	142.7
LnGrp LOS	D	A	C	C	D	F
Approach Vol, veh/h		1749	1390		1561	
Approach Delay, s/veh		14.0	28.3		101.0	
Approach LOS		B	C		F	

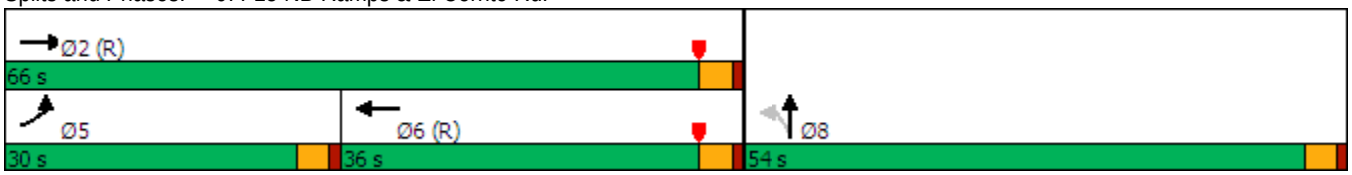
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		83.4		36.6	26.6	56.8
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		79.4		32.6	28.0	47.4
Max Q Clear Time (g_c+I1), s		2.0		34.6	21.1	29.4
Green Ext Time (p_c), s		6.5		0.0	1.6	6.4

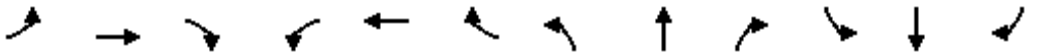
Intersection Summary		
HCM 6th Ctrl Delay		47.1
HCM 6th LOS		D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	493	679	0	0	283	85	414	8	110	0	0	0
Future Volume (vph)	493	679	0	0	283	85	414	8	110	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	60			100			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		387			489			1198			782	
Travel Time (s)		5.9			7.4			18.2			11.8	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA			NA		Perm	NA				
Protected Phases	5	2			6			8				
Permitted Phases							8					
Detector Phase	5	2			6		8	8				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		4.0	4.0				
Minimum Split (s)	8.0	26.0			26.0		26.0	26.0				
Total Split (s)	30.0	66.0			36.0		54.0	54.0				
Total Split (%)	25.0%	55.0%			30.0%		45.0%	45.0%				
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0				
All-Red Time (s)	1.0	1.0			1.0		1.0	1.0				
Lost Time Adjust (s)	0.0	0.0			0.0			0.0				
Total Lost Time (s)	4.0	4.0			4.0			4.0				
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?	Yes				Yes							
Recall Mode	None	C-Max			C-Max		Max	Max				

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 9: I-15 NB Ramps & El Cerrito Rd.



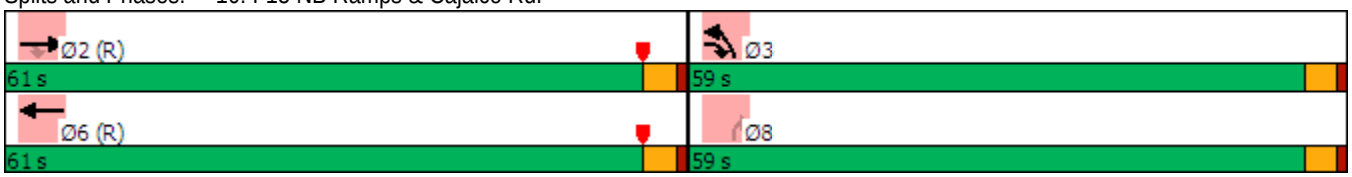


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	493	679	0	0	283	85	414	8	110	0	0	0
Future Volume (veh/h)	493	679	0	0	283	85	414	8	110	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
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	1870	1870	0	0	1870	1870	1900	1870	1900			
Adj Flow Rate, veh/h	519	715	0	0	298	89	436	8	116			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	602	966	0	0	837	246	564	10	150			
Arrive On Green	0.06	0.17	0.00	0.00	0.31	0.31	0.42	0.42	0.42			
Sat Flow, veh/h	3456	1870	0	0	2803	795	1353	25	360			
Grp Volume(v), veh/h	519	715	0	0	194	193	560	0	0			
Grp Sat Flow(s),veh/h/ln	1728	1870	0	0	1777	1727	1738	0	0			
Q Serve(g_s), s	17.9	43.5	0.0	0.0	10.1	10.5	33.3	0.0	0.0			
Cycle Q Clear(g_c), s	17.9	43.5	0.0	0.0	10.1	10.5	33.3	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.46	0.78		0.21			
Lane Grp Cap(c), veh/h	602	966	0	0	549	534	724	0	0			
V/C Ratio(X)	0.86	0.74	0.00	0.00	0.35	0.36	0.77	0.00	0.00			
Avail Cap(c_a), veh/h	749	966	0	0	549	534	724	0	0			
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.80	0.80	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	55.1	42.1	0.0	0.0	32.1	32.3	30.1	0.0	0.0			
Incr Delay (d2), s/veh	7.0	4.1	0.0	0.0	1.8	1.9	7.9	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	8.8	22.7	0.0	0.0	4.5	4.5	14.7	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.1	46.2	0.0	0.0	33.9	34.2	38.0	0.0	0.0			
LnGrp LOS	E	D	A	A	C	C	D	A	A			
Approach Vol, veh/h		1234			387			560				
Approach Delay, s/veh		52.9			34.0			38.0				
Approach LOS		D			C			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		66.0			24.9	41.1		54.0				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		62.0			26.0	32.0		50.0				
Max Q Clear Time (g_c+I1), s		45.5			19.9	12.5		35.3				
Green Ext Time (p_c), s		4.1			1.0	1.9		3.0				
Intersection Summary												
HCM 6th Ctrl Delay			45.7									
HCM 6th LOS			D									

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1137	631	0	1366	511	346
Future Volume (vph)	1137	631	0	1366	511	346
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		330	0		500	500
Storage Lanes		0	0		0	0
Taper Length (ft)			25		130	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	45	
Link Distance (ft)	293			191	332	
Travel Time (s)	4.4			2.9	5.0	
Confl. Peds. (#/hr)						5
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	0%	2%	2%	2%
Shared Lane Traffic (%)						
Turn Type	NA	pm+ov		NA	Prot	Perm
Protected Phases	2	3		6	3	
Permitted Phases		2				8
Detector Phase	2	3		6	3	8
Switch Phase						
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	23.7	8.5		30.7	8.5	8.5
Total Split (s)	61.0	59.0		61.0	59.0	59.0
Total Split (%)	50.8%	49.2%		50.8%	49.2%	49.2%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	Max		C-Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 95 (79%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	

Splits and Phases: 10: I-15 NB Ramps & Cajalco Rd.





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1137	631	0	1366	511	346
Future Volume (veh/h)	1137	631	0	1366	511	346
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	1184	657	0	1423	532	360
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	2425	1479	0	3056	1584	1279
Arrive On Green	0.47	0.47	0.00	0.47	0.46	0.46
Sat Flow, veh/h	5274	1585	0	6958	3456	2790
Grp Volume(v), veh/h	1184	657	0	1423	532	360
Grp Sat Flow(s),veh/h/ln	1702	1585	0	1609	1728	1395
Q Serve(g_s), s	19.0	5.7	0.0	17.9	11.8	9.6
Cycle Q Clear(g_c), s	19.0	5.7	0.0	17.9	11.8	9.6
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2425	1479	0	3056	1584	1279
V/C Ratio(X)	0.49	0.44	0.00	0.47	0.34	0.28
Avail Cap(c_a), veh/h	2425	1479	0	3056	1584	1279
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	0.5	0.0	21.2	20.8	20.2
Incr Delay (d2), s/veh	0.7	1.0	0.0	0.5	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	0.4	0.0	6.5	4.7	3.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.2	1.4	0.0	21.7	21.4	20.8
LnGrp LOS	C	A	A	C	C	C
Approach Vol, veh/h	1841			1423	892	
Approach Delay, s/veh	14.8			21.7	21.1	
Approach LOS	B			C	C	

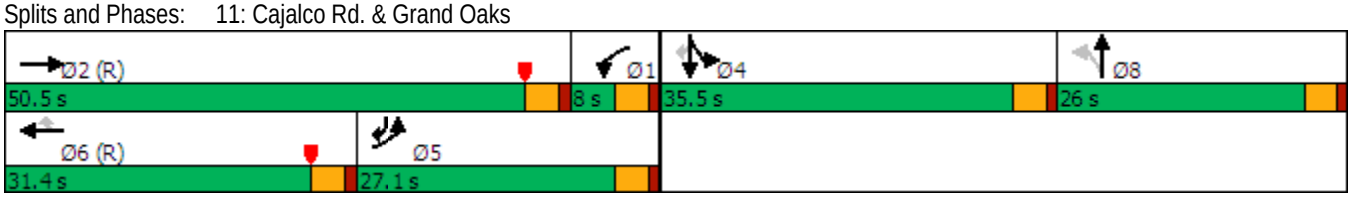
Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	61.0			61.0	59.0
Change Period (Y+Rc), s	4.0			4.0	4.0
Max Green Setting (Gmax), s	57.0			57.0	55.0
Max Q Clear Time (g_c+I1), s	21.0			19.9	13.8
Green Ext Time (p_c), s	11.9			8.4	4.6

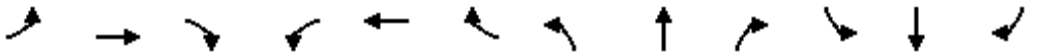
Intersection Summary	
HCM 6th Ctrl Delay	18.5
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	687	796	1	1	847	177	1	1	1	363	1	602
Future Volume (vph)	687	796	1	1	847	177	1	1	1	363	1	602
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	130		130	0		0	200		0
Storage Lanes	2		0	1		1	0		0	1		2
Taper Length (ft)	180			110			100			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		602			570			544			904	
Travel Time (s)		9.1			8.6			8.2			13.7	
Confl. Peds. (#/hr)						5				5		
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Split	NA	pm+ov
Protected Phases	5	2		1	6			8		4	4	5
Permitted Phases						6	8					4
Detector Phase	5	2		1	6	6	8	8		4	4	5
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	23.2		8.0	30.7	30.7	26.0	26.0		35.5	35.5	8.5
Total Split (s)	27.1	50.5		8.0	31.4	31.4	26.0	26.0		35.5	35.5	27.1
Total Split (%)	22.6%	42.1%		6.7%	26.2%	26.2%	21.7%	21.7%		29.6%	29.6%	22.6%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag	Lag	Lead		Lag	Lead	Lead						Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		Max	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 91 (76%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	

Splits and Phases: 11: Cajalco Rd. & Grand Oaks





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	687	796	1	1	847	177	1	1	1	363	1	602
Future Volume (veh/h)	687	796	1	1	847	177	1	1	1	363	1	602
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		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	701	812	1	1	864	181	1	1	1	370	1	614
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1288	2041	3	380	1166	360	2	2	2	466	1	1768
Arrive On Green	0.37	0.39	0.39	0.21	0.23	0.23	0.00	0.00	0.00	0.26	0.26	0.26
Sat Flow, veh/h	3456	5267	6	1781	5106	1575	579	579	579	1777	5	2774
Grp Volume(v), veh/h	701	525	288	1	864	181	3	0	0	371	0	614
Grp Sat Flow(s),veh/h/ln	1728	1702	1869	1781	1702	1575	1737	0	0	1782	0	1387
Q Serve(g_s), s	19.2	13.4	13.4	0.1	18.9	12.0	0.2	0.0	0.0	23.3	0.0	0.0
Cycle Q Clear(g_c), s	19.2	13.4	13.4	0.1	18.9	12.0	0.2	0.0	0.0	23.3	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.33		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	1288	1319	724	380	1166	360	6	0	0	468	0	1768
V/C Ratio(X)	0.54	0.40	0.40	0.00	0.74	0.50	0.54	0.00	0.00	0.79	0.00	0.35
Avail Cap(c_a), veh/h	1288	1319	724	380	1166	360	318	0	0	468	0	1768
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	1.00
Uniform Delay (d), s/veh	29.6	26.6	26.6	37.1	43.0	40.4	59.7	0.0	0.0	41.2	0.0	10.2
Incr Delay (d2), s/veh	0.5	0.9	1.6	0.0	4.3	5.0	64.2	0.0	0.0	13.0	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	5.4	6.1	0.0	8.1	5.0	0.2	0.0	0.0	11.5	0.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.1	27.5	28.2	37.1	47.3	45.3	123.9	0.0	0.0	54.2	0.0	10.8
LnGrp LOS	C	C	C	D	D	D	F	A	A	D	A	B
Approach Vol, veh/h		1514			1046			3			985	
Approach Delay, s/veh		28.8			46.9			123.9			27.1	
Approach LOS		C			D			F			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	29.6	50.5		35.5	48.7	31.4		4.4				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	4.0	46.5		31.5	23.1	27.4		22.0				
Max Q Clear Time (g_c+I1), s	2.1	15.4		25.3	21.2	20.9		2.2				
Green Ext Time (p_c), s	0.0	3.5		2.8	0.7	2.7		0.0				

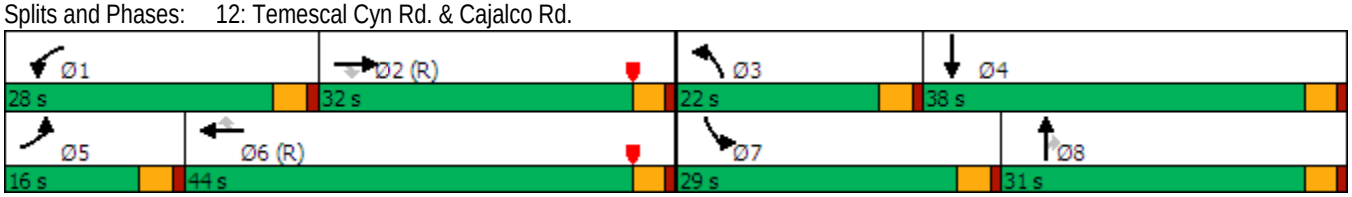
Intersection Summary			
HCM 6th Ctrl Delay		33.8	
HCM 6th LOS		C	

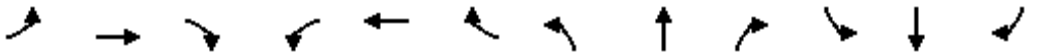
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	129	681	349	287	611	461	327	675	149	599	593	86
Future Volume (vph)	129	681	349	287	611	461	327	675	149	599	593	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	16	12	12	16	12	12	12
Storage Length (ft)	300		200	450		200	300		325	200		200
Storage Lanes	1		0	1		1	2		1	2		0
Taper Length (ft)	180			180			180			180		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		464			943			1167			1000	
Travel Time (s)		7.0			14.3			17.7			15.2	
Confl. Peds. (#/hr)			5			5						5
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	10.0	26.0	26.0	10.0	40.0	40.0	10.0	26.0	26.0	25.0	26.0	
Total Split (s)	16.0	32.0	32.0	28.0	44.0	44.0	22.0	31.0	31.0	29.0	38.0	
Total Split (%)	13.3%	26.7%	26.7%	23.3%	36.7%	36.7%	18.3%	25.8%	25.8%	24.2%	31.7%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	Max	None	Max	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 27 (23%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 105
Control Type: Actuated-Coordinated

Splits and Phases: 12: Temescal Cyn Rd. & Cajalco Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	681	349	287	611	461	327	675	149	599	593	86
Future Volume (veh/h)	129	681	349	287	611	461	327	675	149	599	593	86
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		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	1945	1870	1870	1945	1870	1870	1870
Adj Flow Rate, veh/h	132	695	356	293	623	470	334	689	152	611	605	88
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	158	945	419	321	1826	587	402	800	371	675	946	137
Arrive On Green	0.09	0.27	0.27	0.18	0.36	0.36	0.12	0.23	0.23	0.20	0.30	0.30
Sat Flow, veh/h	1781	3554	1576	1781	5106	1642	3456	3554	1648	3456	3112	452
Grp Volume(v), veh/h	132	695	356	293	623	470	334	689	152	611	345	348
Grp Sat Flow(s),veh/h/ln	1781	1777	1576	1781	1702	1642	1728	1777	1648	1728	1777	1786
Q Serve(g_s), s	8.8	21.4	25.7	19.4	10.7	30.9	11.3	22.4	9.4	20.7	20.1	20.2
Cycle Q Clear(g_c), s	8.8	21.4	25.7	19.4	10.7	30.9	11.3	22.4	9.4	20.7	20.1	20.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.25
Lane Grp Cap(c), veh/h	158	945	419	321	1826	587	402	800	371	675	540	543
V/C Ratio(X)	0.83	0.74	0.85	0.91	0.34	0.80	0.83	0.86	0.41	0.91	0.64	0.64
Avail Cap(c_a), veh/h	178	945	419	356	1826	587	518	800	371	720	540	543
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	40.2	41.8	48.2	28.2	34.7	51.9	44.7	39.7	47.2	36.1	36.1
Incr Delay (d2), s/veh	25.3	5.1	18.9	25.5	0.5	11.0	8.8	11.8	3.3	14.5	5.7	5.7
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	4.9	9.7	11.8	10.6	4.3	13.5	5.3	10.8	4.1	10.0	9.3	9.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.1	45.3	60.7	73.7	28.7	45.7	60.6	56.5	43.0	61.7	41.7	41.8
LnGrp LOS	E	D	E	E	C	D	E	E	D	E	D	D
Approach Vol, veh/h		1183			1386			1175			1304	
Approach Delay, s/veh		53.7			44.0			55.9			51.1	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.6	35.9	17.9	40.5	14.7	46.9	27.4	31.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	24.0	28.0	18.0	34.0	12.0	40.0	25.0	27.0
Max Q Clear Time (g_c+I1), s	21.4	27.7	13.3	22.2	10.8	32.9	22.7	24.4
Green Ext Time (p_c), s	0.3	0.2	0.6	2.2	0.0	3.0	0.7	1.1

Intersection Summary	
HCM 6th Ctrl Delay	50.9
HCM 6th LOS	D

Notes

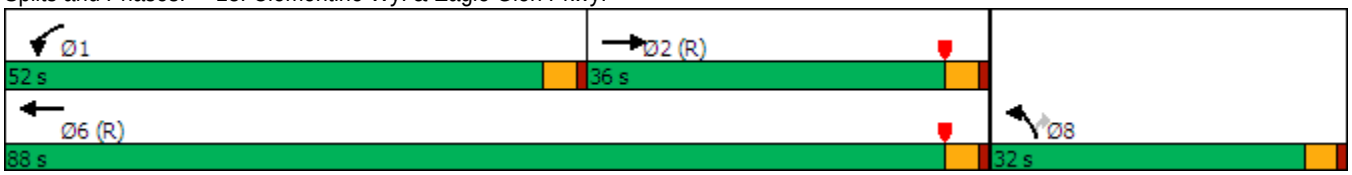
User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	447	10	359	510	10	236
Future Volume (vph)	447	10	359	510	10	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	300		150	0
Storage Lanes		0	1		1	1
Taper Length (ft)			60		90	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	45	
Link Distance (ft)	366			1267	734	
Travel Time (s)	5.5			19.2	11.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	NA		Prot	NA	Prot	Perm
Protected Phases	2		1	6	8	
Permitted Phases						8
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	26.0		8.0	26.0	26.0	26.0
Total Split (s)	36.0		52.0	88.0	32.0	32.0
Total Split (%)	30.0%		43.3%	73.3%	26.7%	26.7%
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	C-Max		None	C-Max	Max	Max

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 58 (48%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 13: Clementine Wy. & Eagle Glen Pkwy.

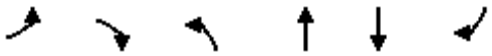




Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	447	10	359	510	10	236
Future Volume (veh/h)	447	10	359	510	10	236
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	471	11	378	537	11	248
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1542	36	414	2488	416	370
Arrive On Green	0.43	0.43	0.23	0.70	0.23	0.23
Sat Flow, veh/h	3643	83	1781	3647	1781	1585
Grp Volume(v), veh/h	236	246	378	537	11	248
Grp Sat Flow(s),veh/h/ln	1777	1855	1781	1777	1781	1585
Q Serve(g_s), s	10.4	10.4	24.8	6.4	0.6	17.1
Cycle Q Clear(g_c), s	10.4	10.4	24.8	6.4	0.6	17.1
Prop In Lane		0.04	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	772	806	414	2488	416	370
V/C Ratio(X)	0.31	0.31	0.91	0.22	0.03	0.67
Avail Cap(c_a), veh/h	772	806	713	2488	416	370
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.69	0.69	1.00	1.00
Uniform Delay (d), s/veh	22.1	22.1	44.9	6.4	35.5	41.8
Incr Delay (d2), s/veh	1.0	1.0	7.1	0.1	0.1	9.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	4.6	11.4	2.1	0.3	7.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	23.2	23.1	52.0	6.5	35.6	51.1
LnGrp LOS	C	C	D	A	D	D
Approach Vol, veh/h	482			915	259	
Approach Delay, s/veh	23.1			25.3	50.5	
Approach LOS	C			C	D	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	31.9	56.1				88.0	32.0
Change Period (Y+Rc), s	4.0	4.0				4.0	4.0
Max Green Setting (Gmax), s	48.0	32.0				84.0	28.0
Max Q Clear Time (g_c+I1), s	26.8	12.4				8.4	19.1
Green Ext Time (p_c), s	1.1	2.4				3.6	0.5

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



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	263	1	1	54	95	471
Future Volume (vph)	263	1	1	54	95	471
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			100
Storage Lanes	1	0	0			0
Taper Length (ft)	100		100			
Link Speed (mph)	45			45	45	
Link Distance (ft)	1253			542	608	
Travel Time (s)	19.0			8.2	9.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	6.2
Intersection LOS	A

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	278	58	596
Demand Flow Rate, veh/h	284	59	608
Vehicles Circulating, veh/h	102	283	1
Vehicles Exiting, veh/h	507	103	341
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.0	4.1	7.0
Approach LOS	A	A	A

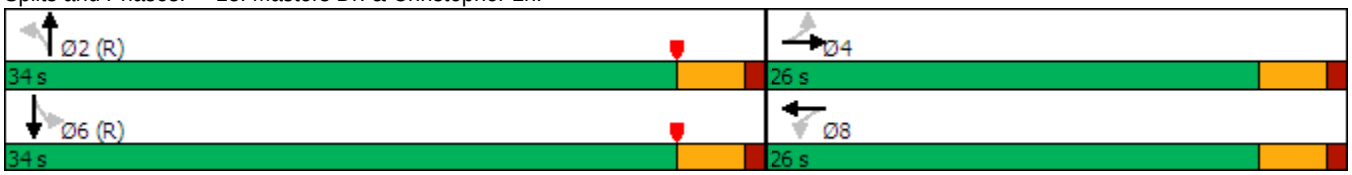
Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	284	59	608
Cap Entry Lane, veh/h	1244	1034	1378
Entry HV Adj Factor	0.979	0.981	0.980
Flow Entry, veh/h	278	58	596
Cap Entry, veh/h	1217	1014	1351
V/C Ratio	0.228	0.057	0.441
Control Delay, s/veh	5.0	4.1	7.0
LOS	A	A	A
95th %tile Queue, veh	1	0	2

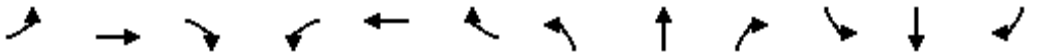
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	2	111	28	4	6	12	360	13	10	785	13
Future Volume (vph)	36	2	111	28	4	6	12	360	13	10	785	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		237			740			933			680	
Travel Time (s)		5.4			16.8			18.2			13.2	
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
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Total Split (s)	26.0	26.0		26.0	26.0		34.0	34.0		34.0	34.0	
Total Split (%)	43.3%	43.3%		43.3%	43.3%		56.7%	56.7%		56.7%	56.7%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 18: Masters Dr. & Christopher Ln.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	2	111	28	4	6	12	360	13	10	785	13
Future Volume (veh/h)	36	2	111	28	4	6	12	360	13	10	785	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	2	117	29	4	6	13	379	14	11	826	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	111	18	158	239	36	31	599	1311	48	774	1342	23
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.73	0.73	0.73	1.00	1.00	1.00
Sat Flow, veh/h	269	131	1170	992	268	229	655	1792	66	991	1834	31
Grp Volume(v), veh/h	157	0	0	39	0	0	13	0	393	11	0	840
Grp Sat Flow(s),veh/h/ln	1570	0	0	1489	0	0	655	0	1858	991	0	1865
Q Serve(g_s), s	3.5	0.0	0.0	0.0	0.0	0.0	0.3	0.0	4.3	0.1	0.0	0.0
Cycle Q Clear(g_c), s	5.7	0.0	0.0	1.2	0.0	0.0	0.3	0.0	4.3	4.4	0.0	0.0
Prop In Lane	0.24		0.75	0.74		0.15	1.00		0.04	1.00		0.02
Lane Grp Cap(c), veh/h	286	0	0	306	0	0	599	0	1360	774	0	1365
V/C Ratio(X)	0.55	0.00	0.00	0.13	0.00	0.00	0.02	0.00	0.29	0.01	0.00	0.62
Avail Cap(c_a), veh/h	643	0	0	620	0	0	599	0	1360	774	0	1365
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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.83	0.00	0.83
Uniform Delay (d), s/veh	24.9	0.0	0.0	23.0	0.0	0.0	2.2	0.0	2.7	0.2	0.0	0.0
Incr Delay (d2), s/veh	1.6	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.5	0.0	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.5	0.0	0.0	23.1	0.0	0.0	2.3	0.0	3.3	0.2	0.0	1.7
LnGrp LOS	C	A	A	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		157			39			406			851	
Approach Delay, s/veh		26.5			23.1			3.2			1.7	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		47.9		12.1		47.9		12.1				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		30.0		22.0		30.0		22.0				
Max Q Clear Time (g_c+I1), s		6.3		7.7		6.4		3.2				
Green Ext Time (p_c), s		2.5		0.7		6.6		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			5.4									
HCM 6th LOS			A									

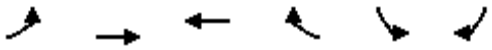
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	2	111	28	4	6	12	360	13	10	785	13
Future Volume (vph)	36	2	111	28	4	6	12	360	13	10	785	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	100			100			60			60		
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		237			740			933			680	
Travel Time (s)		5.4			16.8			18.2			13.2	
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
Shared Lane Traffic (%)												
Sign Control		Yield			Yield			Yield			Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	157	39	406	851
Demand Flow Rate, veh/h	160	40	414	868
Vehicles Circulating, veh/h	884	439	52	47
Vehicles Exiting, veh/h	31	27	992	432
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	10.6	4.6	5.7	11.3
Approach LOS	B	A	A	B

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	160	40	414	868
Cap Entry Lane, veh/h	560	882	1309	1315
Entry HV Adj Factor	0.981	0.973	0.982	0.981
Flow Entry, veh/h	157	39	406	851
Cap Entry, veh/h	549	858	1285	1290
V/C Ratio	0.286	0.045	0.316	0.660
Control Delay, s/veh	10.6	4.6	5.7	11.3
LOS	B	A	A	B
95th %tile Queue, veh	1	0	1	5



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	4	736	322	16	20	5
Future Volume (vph)	4	736	322	16	20	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	60				100	
Link Speed (mph)		35	35		30	
Link Distance (ft)		1212	796		251	
Travel Time (s)		23.6	15.5		5.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

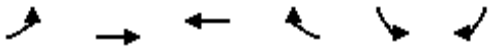
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	736	322	16	20	5
Future Vol, veh/h	4	736	322	16	20	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	120	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	775	339	17	21	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	356	0	-	0	1131	348
Stage 1	-	-	-	-	348	-
Stage 2	-	-	-	-	783	-
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	1203	-	-	-	225	695
Stage 1	-	-	-	-	715	-
Stage 2	-	-	-	-	450	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1203	-	-	-	224	695
Mov Cap-2 Maneuver	-	-	-	-	224	-
Stage 1	-	-	-	-	713	-
Stage 2	-	-	-	-	450	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	20.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1203	-	-	-	259
HCM Lane V/C Ratio	0.004	-	-	-	0.102
HCM Control Delay (s)	8	-	-	-	20.5
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.3



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	4	736	322	16	20	5
Future Volume (vph)	4	736	322	16	20	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	60				100	
Link Speed (mph)		35	35		30	
Link Distance (ft)		1212	796		251	
Travel Time (s)		23.6	15.5		5.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control		Yield	Yield		Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

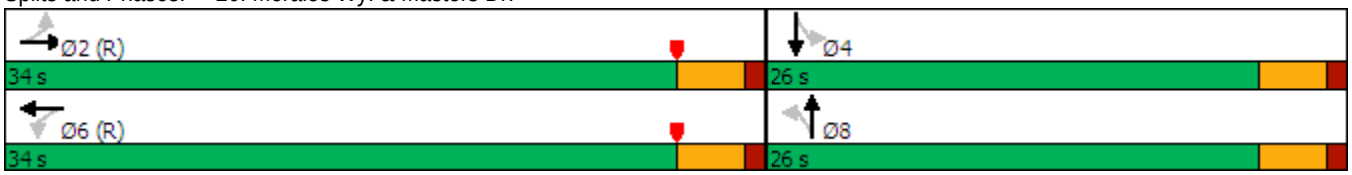
Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	779	356	26
Demand Flow Rate, veh/h	794	363	26
Vehicles Circulating, veh/h	21	4	346
Vehicles Exiting, veh/h	351	811	21
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	9.5	4.9	3.9
Approach LOS	A	A	A

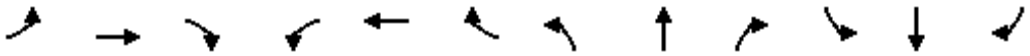
Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	794	363	26
Cap Entry Lane, veh/h	1351	1374	970
Entry HV Adj Factor	0.980	0.981	1.000
Flow Entry, veh/h	779	356	26
Cap Entry, veh/h	1324	1349	970
V/C Ratio	0.588	0.264	0.027
Control Delay, s/veh	9.5	4.9	3.9
LOS	A	A	A
95th %tile Queue, veh	4	1	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	579	162	47	281	4	58	3	43	3	1	3
Future Volume (vph)	3	579	162	47	281	4	58	3	43	3	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	60			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			30			45	
Link Distance (ft)		1243			906			626			709	
Travel Time (s)		24.2			17.6			14.2			10.7	
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
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Total Split (s)	34.0	34.0		34.0	34.0		26.0	26.0		26.0	26.0	
Total Split (%)	56.7%	56.7%		56.7%	56.7%		43.3%	43.3%		43.3%	43.3%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		Max	Max		Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: Morales Wy. & Masters Dr.

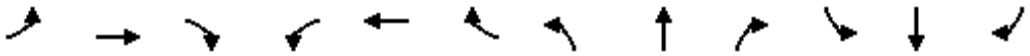




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	579	162	47	281	4	58	3	43	3	1	3
Future Volume (veh/h)	3	579	162	47	281	4	58	3	43	3	1	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		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	3	609	171	49	296	4	61	3	45	3	1	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	556	702	197	201	921	12	377	41	228	294	114	242
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.37	0.37	0.37	0.37	0.37	0.37
Sat Flow, veh/h	1079	1405	394	693	1841	25	774	111	622	569	310	659
Grp Volume(v), veh/h	3	0	780	49	0	300	109	0	0	7	0	0
Grp Sat Flow(s),veh/h/ln	1079	0	1799	693	0	1866	1507	0	0	1538	0	0
Q Serve(g_s), s	0.1	0.0	23.0	4.0	0.0	5.7	1.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.8	0.0	23.0	27.0	0.0	5.7	2.7	0.0	0.0	0.2	0.0	0.0
Prop In Lane	1.00		0.22	1.00		0.01	0.56		0.41	0.43		0.43
Lane Grp Cap(c), veh/h	556	0	900	201	0	933	646	0	0	650	0	0
V/C Ratio(X)	0.01	0.00	0.87	0.24	0.00	0.32	0.17	0.00	0.00	0.01	0.00	0.00
Avail Cap(c_a), veh/h	556	0	900	201	0	933	646	0	0	650	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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.7	0.0	13.2	25.1	0.0	8.9	12.9	0.0	0.0	12.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	11.0	2.9	0.0	0.9	0.6	0.0	0.0	0.0	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	0.0	0.0	9.9	0.8	0.0	2.1	1.0	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.7	0.0	24.3	28.0	0.0	9.8	13.4	0.0	0.0	12.1	0.0	0.0
LnGrp LOS	B	A	C	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		783			349			109			7	
Approach Delay, s/veh		24.2			12.4			13.4			12.1	
Approach LOS		C			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		34.0		26.0		34.0		26.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		30.0		22.0		30.0		22.0				
Max Q Clear Time (g_c+I1), s		25.0		2.2		29.0		4.7				
Green Ext Time (p_c), s		2.4		0.0		0.2		0.5				

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	579	162	47	281	4	58	3	43	3	1	3
Future Volume (vph)	3	579	162	47	281	4	58	3	43	3	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	60			60			100			100		
Link Speed (mph)		35			35			30			45	
Link Distance (ft)		1243			906			626			709	
Travel Time (s)		24.2			17.6			14.2			10.7	
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
Shared Lane Traffic (%)												
Sign Control		Yield			Yield			Yield			Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	783	349	109	7
Demand Flow Rate, veh/h	798	356	111	7
Vehicles Circulating, veh/h	54	68	627	414
Vehicles Exiting, veh/h	367	670	225	10
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	10.2	5.3	6.7	4.1
Approach LOS	B	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	798	356	111	7
Cap Entry Lane, veh/h	1306	1287	728	905
Entry HV Adj Factor	0.981	0.981	0.981	0.997
Flow Entry, veh/h	783	349	109	7
Cap Entry, veh/h	1281	1262	714	902
V/C Ratio	0.611	0.277	0.152	0.008
Control Delay, s/veh	10.2	5.3	6.7	4.1
LOS	B	A	A	A
95th %tile Queue, veh	4	1	1	0



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	34	87	301	17	184	533
Future Volume (vph)	34	87	301	17	184	533
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	200	
Storage Lanes	1	0		0	1	
Taper Length (ft)	100				60	
Link Speed (mph)	45		45			45
Link Distance (ft)	302		233			567
Travel Time (s)	4.6		3.5			8.6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	87	301	17	184	533
Future Vol, veh/h	34	87	301	17	184	533
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	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	92	317	18	194	561

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	995	168	0	0	335	0
Stage 1	326	-	-	-	-	-
Stage 2	669	-	-	-	-	-
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	242	847	-	-	1221	-
Stage 1	704	-	-	-	-	-
Stage 2	471	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	204	847	-	-	1221	-
Mov Cap-2 Maneuver	204	-	-	-	-	-
Stage 1	592	-	-	-	-	-
Stage 2	471	-	-	-	-	-

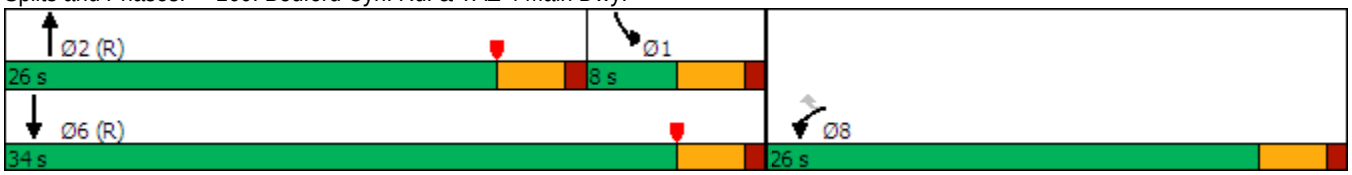
Approach	WB	NB	SB
HCM Control Delay, s	16.2	0	2.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	449	1221	-
HCM Lane V/C Ratio	-	-	0.284	0.159	-
HCM Control Delay (s)	-	-	16.2	8.5	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.2	0.6	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	64	212	360	28	281	652
Future Volume (vph)	64	212	360	28	281	652
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	200	
Storage Lanes	1	1		0	1	
Taper Length (ft)	100				60	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	45		45			45
Link Distance (ft)	264		567			343
Travel Time (s)	4.0		8.6			5.2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8				
Detector Phase	8	8	2		1	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0		4.0	4.0
Minimum Split (s)	26.0	26.0	26.0		8.0	26.0
Total Split (s)	26.0	26.0	26.0		8.0	34.0
Total Split (%)	43.3%	43.3%	43.3%		13.3%	56.7%
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 160: Bedford Cyn. Rd. & TAZ 4 Main Dwy.





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	64	212	360	28	281	652
Future Volume (veh/h)	64	212	360	28	281	652
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	67	223	379	29	296	686
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	317	282	1227	93	455	2447
Arrive On Green	0.18	0.18	0.37	0.37	0.26	0.69
Sat Flow, veh/h	1781	1585	3440	255	1781	3647
Grp Volume(v), veh/h	67	223	200	208	296	686
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1824	1781	1777
Q Serve(g_s), s	1.9	8.1	4.8	4.9	8.9	4.5
Cycle Q Clear(g_c), s	1.9	8.1	4.8	4.9	8.9	4.5
Prop In Lane	1.00	1.00		0.14	1.00	
Lane Grp Cap(c), veh/h	317	282	652	669	455	2447
V/C Ratio(X)	0.21	0.79	0.31	0.31	0.65	0.28
Avail Cap(c_a), veh/h	653	581	652	669	455	2447
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	21.1	23.6	13.6	13.6	20.0	3.6
Incr Delay (d2), s/veh	0.3	4.9	1.2	1.2	3.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	3.0	1.8	1.9	3.6	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.4	28.5	14.8	14.8	23.2	3.9
LnGrp LOS	C	C	B	B	C	A
Approach Vol, veh/h	290		408			982
Approach Delay, s/veh	26.9		14.8			9.7
Approach LOS	C		B			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	19.3	26.0			45.3	14.7
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0
Max Green Setting (Gmax), s	4.0	22.0			30.0	22.0
Max Q Clear Time (g_c+I1), s	10.9	6.9			6.5	10.1
Green Ext Time (p_c), s	0.0	1.8			4.4	0.7

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



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	73	569	3	0	934
Future Volume (vph)	0	73	569	3	0	934
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		45			45
Link Distance (ft)	221		343			351
Travel Time (s)	3.3		5.2			5.3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	73	569	3	0	934
Future Vol, veh/h	0	73	569	3	0	934
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	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	77	599	3	0	983

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	301	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	695	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	695	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	695	-
HCM Lane V/C Ratio	-	-	0.111	-
HCM Control Delay (s)	-	-	10.8	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.4	-

Intersection: 4: Bedford Cyn. Rd. & Foothill Bl./El Cerrito Rd.

Movement	EB	EB	EB	B53	B53	B53	WB	WB	WB	NB	NB	B56
Directions Served	T	T	R	T	T	T	L	T	T	L	R	T
Maximum Queue (ft)	366	402	116	212	242	215	189	231	204	394	185	277
Average Queue (ft)	311	398	64	174	211	148	171	175	140	390	185	160
95th Queue (ft)	430	415	129	348	353	354	206	267	232	404	188	307
Link Distance (ft)	256	256	256	239	239	239		234	234	319		606
Upstream Blk Time (%)	42	66		22	50	21		5	2	44		
Queuing Penalty (veh)	0	0		0	0	0		36	15	0		
Storage Bay Dist (ft)							135				125	
Storage Blk Time (%)							44	6	6	56	1	
Queuing Penalty (veh)							270	19	1	189	5	

Intersection: 6: Bedford Cyn. Rd. & Eagle Glen Pkwy/Cajalco Rd.

Movement	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	TR	L	L	T	T	R	L	T	R	L
Maximum Queue (ft)	150	256	276	157	68	53	65	32	49	96	245	80
Average Queue (ft)	116	213	235	140	47	37	47	26	29	70	219	50
95th Queue (ft)	219	407	406	185	111	71	90	52	62	126	291	94
Link Distance (ft)		684	684			629	629			249	249	
Upstream Blk Time (%)											10	
Queuing Penalty (veh)											39	
Storage Bay Dist (ft)	200			200	200			200	150			450
Storage Blk Time (%)		9		0								
Queuing Penalty (veh)		14		0								

Intersection: 6: Bedford Cyn. Rd. & Eagle Glen Pkwy/Cajalco Rd.

Movement	SB	SB
Directions Served	LT	R
Maximum Queue (ft)	147	90
Average Queue (ft)	112	69
95th Queue (ft)	183	142
Link Distance (ft)	626	626
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Cajalco Rd. & I-15 SB Ramps

Movement	EB	EB	EB	EB	EB	WB	WB	WB	SB	SB	SB	SB
Directions Served	L	L	T	T	T	T	T	R	L	L	R	R
Maximum Queue (ft)	169	187	48	69	211	99	153	45	94	230	92	76
Average Queue (ft)	127	143	29	44	156	82	86	34	78	213	67	63
95th Queue (ft)	196	202	68	99	277	127	145	51	141	257	120	99
Link Distance (ft)			629	629	629	191	191	191	191	191	191	191
Upstream Blk Time (%)							1			13		
Queuing Penalty (veh)							3			28		
Storage Bay Dist (ft)	290	290										
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 10: I-15 NB Ramps & Cajalco Rd.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	B208	B208	B208	B208
Directions Served	T	T	T	R	T	T	T	T	T	T	T	T
Maximum Queue (ft)	186	103	101	74	44	53	30	192	76	220	382	496
Average Queue (ft)	145	77	72	49	24	30	25	187	38	110	193	405
95th Queue (ft)	247	116	148	111	66	75	83	202	246	427	545	625
Link Distance (ft)	229	229	229	229	111	111	111	111	520	520	520	520
Upstream Blk Time (%)	2					0	0	68			0	1
Queuing Penalty (veh)	9					0	1	302			0	6
Storage Bay Dist (ft)												
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 10: I-15 NB Ramps & Cajalco Rd.

Movement	NB	NB	NB	NB
Directions Served	L	L	R	R
Maximum Queue (ft)	88	77	39	16
Average Queue (ft)	65	51	27	13
95th Queue (ft)	120	112	52	28
Link Distance (ft)	208	208	208	208
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 103: Bedford Cyn. Rd. & TAZ 4 N. Dwy. (RIRO)

Movement	WB	NB
Directions Served	R	TR
Maximum Queue (ft)	46	99
Average Queue (ft)	36	61
95th Queue (ft)	72	191
Link Distance (ft)	173	278
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 160: Bedford Cyn. Rd. & TAZ 4 Main Dwy.

Movement	WB	WB	NB	NB	SB	SB
Directions Served	L	R	T	TR	L	T
Maximum Queue (ft)	5	57	36	144	164	56
Average Queue (ft)	0	44	18	75	129	24
95th Queue (ft)	0	71	51	176	180	112
Link Distance (ft)	213	213	495	495		278
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)					200	
Storage Blk Time (%)					1	0
Queuing Penalty (veh)					1	0

Intersection: 170: Bedford Cyn. Rd. & TAZ 4 S. Dwy.

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	38	35
Average Queue (ft)	34	15
95th Queue (ft)	48	60
Link Distance (ft)	256	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		200
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 938

Intersection: 4: Bedford Cyn. Rd. & Foothill Bl./El Cerrito Rd.

Movement	EB	EB	EB	B53	B53	B53	WB	WB	WB	WB	NB	NB
Directions Served	T	T	R	T	T	T	L	T	T	R	L	R
Maximum Queue (ft)	321	403	99	255	265	256	162	179	181	49	217	168
Average Queue (ft)	301	399	82	246	261	252	126	134	148	48	170	149
95th Queue (ft)	412	412	216	269	281	252	204	256	239	185	260	199
Link Distance (ft)	256	256	256	239	239	239		234	234		319	
Upstream Blk Time (%)	22	49	0	15	79	24		1	0			
Queuing Penalty (veh)	0	0	0	0	0	0		6	1			
Storage Bay Dist (ft)							135			135		125
Storage Blk Time (%)							13	2	3		30	20
Queuing Penalty (veh)							55	6	0		60	48

Intersection: 6: Bedford Cyn. Rd. & Eagle Glen Pkwy/Cajalco Rd.

Movement	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	TR	L	L	T	T	R	L	T	R	L
Maximum Queue (ft)	207	223	197	259	319	640	508	15	92	101	234	165
Average Queue (ft)	154	180	147	259	316	587	445	10	90	87	190	124
95th Queue (ft)	223	217	229	259	329	722	824	27	112	136	301	208
Link Distance (ft)		684	684			629	629			249	249	
Upstream Blk Time (%)						9	2				9	
Queuing Penalty (veh)						91	16				31	
Storage Bay Dist (ft)	200			200	200			200	150			450
Storage Blk Time (%)	3	3		83	17	5	6					
Queuing Penalty (veh)	12	7		405	83	36	9					

Intersection: 6: Bedford Cyn. Rd. & Eagle Glen Pkwy/Cajalco Rd.

Movement	SB	SB
Directions Served	LT	R
Maximum Queue (ft)	231	62
Average Queue (ft)	173	40
95th Queue (ft)	323	84
Link Distance (ft)	626	626
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Cajalco Rd. & I-15 SB Ramps

Movement	EB	EB	EB	EB	EB	WB	WB	WB	B75	B75	SB	SB
Directions Served	L	L	T	T	T	T	T	R	T	T	L	L
Maximum Queue (ft)	179	199	85	71	58	267	188	77	66	6	193	240
Average Queue (ft)	155	177	52	53	53	245	176	63	25	0	152	192
95th Queue (ft)	202	221	116	97	95	290	237	99	70	0	219	288
Link Distance (ft)			629	629	629	191	191	191	981	981	191	191
Upstream Blk Time (%)						27	6				6	11
Queuing Penalty (veh)						128	30				22	44
Storage Bay Dist (ft)	290	290										
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 8: Cajalco Rd. & I-15 SB Ramps

Movement	SB	SB
Directions Served	R	R
Maximum Queue (ft)	239	186
Average Queue (ft)	205	157
95th Queue (ft)	290	210
Link Distance (ft)	191	191
Upstream Blk Time (%)	26	2
Queuing Penalty (veh)	102	8
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: I-15 NB Ramps & Cajalco Rd.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	B208	NB	NB	NB
Directions Served	T	T	T	R	T	T	T	T	T	L	L	R
Maximum Queue (ft)	197	67	62	39	133	117	110	163	31	152	139	150
Average Queue (ft)	179	52	46	23	107	87	84	131	29	106	106	94
95th Queue (ft)	256	103	103	73	168	139	151	226	113	141	163	175
Link Distance (ft)	229	229	229	229	111	111	111	111	520	208	208	208
Upstream Blk Time (%)	1				8	3	5	22		1	1	0
Queuing Penalty (veh)	5				31	11	18	81		3	2	1
Storage Bay Dist (ft)												
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 10: I-15 NB Ramps & Cajalco Rd.

Movement	NB
Directions Served	R
Maximum Queue (ft)	92
Average Queue (ft)	40
95th Queue (ft)	120
Link Distance (ft)	208
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 103: Bedford Cyn. Rd. & TAZ 4 N. Dwy. (RIRO)

Movement	WB	NB
Directions Served	R	TR
Maximum Queue (ft)	61	52
Average Queue (ft)	45	35
95th Queue (ft)	91	150
Link Distance (ft)	173	278
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 160: Bedford Cyn. Rd. & TAZ 4 Main Dwy.

Movement	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	R	T	TR	L	T	T
Maximum Queue (ft)	45	77	50	83	165	26	8
Average Queue (ft)	30	65	32	63	142	20	4
95th Queue (ft)	58	103	87	114	195	62	21
Link Distance (ft)	213	213	495	495		278	278
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)					200		
Storage Blk Time (%)					0		
Queuing Penalty (veh)					0		

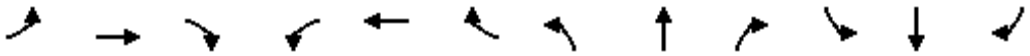
Intersection: 170: Bedford Cyn. Rd. & TAZ 4 S. Dwy.

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	53	53
Average Queue (ft)	40	32
95th Queue (ft)	80	57
Link Distance (ft)	256	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		200
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 1350

WITHOUT IMPROVEMENTS
(FOR FAIR SHARE ESTIMATES)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	190	78	124	104	165	128	263	262	191	133	6
Future Volume (vph)	8	190	78	124	104	165	128	263	262	191	133	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	135		0	130		200	100		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	100			90			60			65		
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		495			683			680			695	
Travel Time (s)		7.5			10.3			13.2			13.5	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	186.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	190	78	124	104	165	128	263	262	191	133	6
Future Vol, veh/h	8	190	78	124	104	165	128	263	262	191	133	6
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	253	104	165	139	220	171	351	349	255	177	8
Number of Lanes	1	1	0	1	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	3	2
HCM Control Delay	107.2	28.5	387.1	42.9
HCM LOS	F	D	F	E

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	50%	0%	71%	0%	100%	0%	0%	96%
Vol Right, %	0%	50%	0%	29%	0%	0%	100%	0%	4%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	128	525	8	268	124	104	165	191	139
LT Vol	128	0	8	0	124	0	0	191	0
Through Vol	0	263	0	190	0	104	0	0	133
RT Vol	0	262	0	78	0	0	165	0	6
Lane Flow Rate	171	700	11	357	165	139	220	255	185
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.523	1.981	0.034	1.069	0.512	0.41	0.608	0.795	0.552
Departure Headway (Hd)	11.461	10.57	13.288	12.534	13.104	12.571	11.825	13.192	12.628
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	317	350	271	293	278	288	308	278	287
Service Time	9.161	8.27	10.988	10.234	10.804	10.271	9.525	10.892	10.328
HCM Lane V/C Ratio	0.539	2	0.041	1.218	0.594	0.483	0.714	0.917	0.645
HCM Control Delay	26.1	475.1	16.5	109.9	28.8	23.7	31.3	52.5	29.8
HCM Lane LOS	D	F	C	F	D	C	D	F	D
HCM 95th-tile Q	2.9	47.1	0.1	12	2.7	1.9	3.7	6.2	3.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	21	33	21	12	38	9	273	18	52	205	24
Future Volume (vph)	44	21	33	21	12	38	9	273	18	52	205	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	110		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		655			663			936			638	
Travel Time (s)		12.8			12.9			18.2			12.4	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

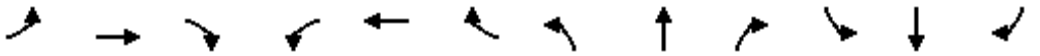
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	10.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	21	33	21	12	38	9	273	18	52	205	24
Future Vol, veh/h	44	21	33	21	12	38	9	273	18	52	205	24
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	46	22	35	22	13	40	9	287	19	55	216	25
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	9.5	9.1	12.2	10.5
HCM LOS	A	A	B	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	45%	30%	100%	0%
Vol Thru, %	0%	94%	21%	17%	0%	90%
Vol Right, %	0%	6%	34%	54%	0%	10%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	9	291	98	71	52	229
LT Vol	9	0	44	21	52	0
Through Vol	0	273	21	12	0	205
RT Vol	0	18	33	38	0	24
Lane Flow Rate	9	306	103	75	55	241
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.015	0.447	0.155	0.111	0.088	0.35
Departure Headway (Hd)	5.802	5.254	5.421	5.324	5.812	5.234
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	612	680	655	665	612	682
Service Time	3.58	3.032	3.512	3.422	3.592	3.014
HCM Lane V/C Ratio	0.015	0.45	0.157	0.113	0.09	0.353
HCM Control Delay	8.7	12.3	9.5	9.1	9.2	10.8
HCM Lane LOS	A	B	A	A	A	B
HCM 95th-tile Q	0	2.3	0.5	0.4	0.3	1.6



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	89	5	45	2	2	2	22	347	10	35	519	53
Future Volume (vph)	89	5	45	2	2	2	22	347	10	35	519	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	80		0	0		100
Storage Lanes	0		1	0		0	1		0	0		1
Taper Length (ft)	100			100			80			100		
Link Speed (mph)		45			45			30			45	
Link Distance (ft)		786			169			443			297	
Travel Time (s)		11.9			2.6			10.1			4.5	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	26.7
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	89	5	45	2	2	2	22	347	10	35	519	53
Future Vol, veh/h	89	5	45	2	2	2	22	347	10	35	519	53
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	94	5	47	2	2	2	23	365	11	37	546	56
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay	11.6	10.7	16.6	36.7
HCM LOS	B	B	C	E

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	95%	0%	33%	6%	0%
Vol Thru, %	0%	97%	5%	0%	33%	94%	0%
Vol Right, %	0%	3%	0%	100%	33%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	22	357	94	45	6	554	53
LT Vol	22	0	89	0	2	35	0
Through Vol	0	347	5	0	2	519	0
RT Vol	0	10	0	45	2	0	53
Lane Flow Rate	23	376	99	47	6	583	56
Geometry Grp	7	7	7	7	6	7	7
Degree of Util (X)	0.041	0.605	0.21	0.085	0.013	0.906	0.075
Departure Headway (Hd)	6.32	5.794	7.628	6.43	7.505	5.596	4.856
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	567	624	471	557	475	647	738
Service Time	4.056	3.53	5.375	4.176	5.576	3.326	2.587
HCM Lane V/C Ratio	0.041	0.603	0.21	0.084	0.013	0.901	0.076
HCM Control Delay	9.3	17.1	12.4	9.8	10.7	39.5	8
HCM Lane LOS	A	C	B	A	B	E	A
HCM 95th-tile Q	0.1	4.1	0.8	0.3	0	11.5	0.2

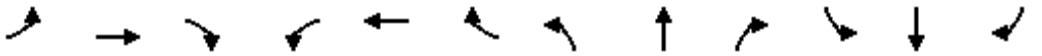
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1018	576	151	869	0	0	0	0	235	5	615
Future Volume (vph)	0	1018	576	151	869	0	0	0	0	235	5	615
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	90		0	0		0	0		525
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	100			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		305			387			1098			1308	
Travel Time (s)		4.6			5.9			16.6			19.8	
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
Shared Lane Traffic (%)												
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Detector Phase		2		1	6					4	4	4
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0					4.0	4.0	4.0
Minimum Split (s)		26.0		8.0	26.0					26.0	26.0	26.0
Total Split (s)		61.0		15.0	76.0					44.0	44.0	44.0
Total Split (%)		50.8%		12.5%	63.3%					36.7%	36.7%	36.7%
Yellow Time (s)		3.0		3.0	3.0					3.0	3.0	3.0
All-Red Time (s)		1.0		1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0						0.0	0.0
Total Lost Time (s)		4.0		4.0	4.0						4.0	4.0
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?		Yes		Yes								
Recall Mode		C-Max		None	C-Max					Max	Max	Max

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 28 (23%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 7: I-15 SB Ramps & El Cerrito Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1018	576	151	869	0	0	0	0	235	5	615
Future Volume (veh/h)	0	1018	576	151	869	0	0	0	0	235	5	615
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	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1072	606	159	915	0				247	5	647
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	2	2	2	2	0				2	2	2
Cap, veh/h	0	1060	570	163	2132	0				583	12	528
Arrive On Green	0.00	0.32	0.32	0.18	1.00	0.00				0.33	0.33	0.33
Sat Flow, veh/h	0	2324	1200	1781	3647	0				1748	35	1585
Grp Volume(v), veh/h	0	843	835	159	915	0				252	0	647
Grp Sat Flow(s),veh/h/ln	0	1777	1654	1781	1777	0				1783	0	1585
Q Serve(g_s), s	0.0	56.9	57.0	10.6	0.0	0.0				13.2	0.0	40.0
Cycle Q Clear(g_c), s	0.0	56.9	57.0	10.6	0.0	0.0				13.2	0.0	40.0
Prop In Lane	0.00		0.73	1.00		0.00				0.98		1.00
Lane Grp Cap(c), veh/h	0	844	786	163	2132	0				594	0	528
V/C Ratio(X)	0.00	1.00	1.06	0.97	0.43	0.00				0.42	0.00	1.22
Avail Cap(c_a), veh/h	0	844	786	163	2132	0				594	0	528
HCM Platoon Ratio	1.00	0.67	0.67	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.25	0.25	0.27	0.27	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	40.9	40.9	48.9	0.0	0.0				31.1	0.0	40.0
Incr Delay (d2), s/veh	0.0	15.1	36.0	29.9	0.2	0.0				2.2	0.0	117.1
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	28.6	31.3	5.5	0.1	0.0				5.8	0.0	31.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	56.0	76.9	78.8	0.2	0.0				33.3	0.0	157.1
LnGrp LOS	A	E	F	E	A	A				C	A	F
Approach Vol, veh/h		1678			1074						899	
Approach Delay, s/veh		66.4			11.8						122.4	
Approach LOS		E			B						F	

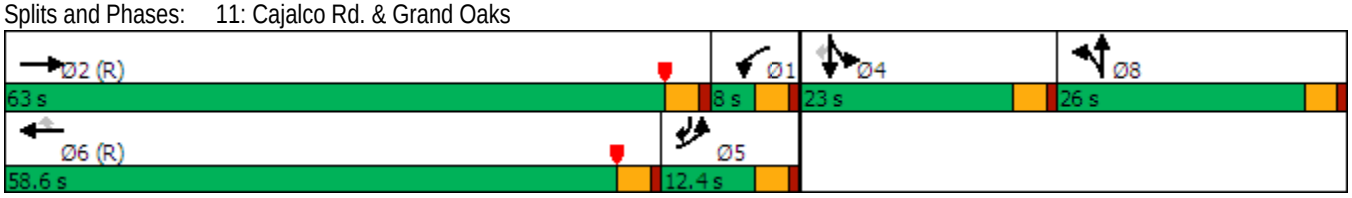
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.0	61.0		44.0		76.0
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s	11.0	57.0		40.0		72.0
Max Q Clear Time (g_c+I1), s	12.6	59.0		42.0		2.0
Green Ext Time (p_c), s	0.0	0.0		0.0		7.2

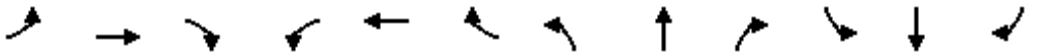
Intersection Summary	
HCM 6th Ctrl Delay	64.1
HCM 6th LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	213	573	1	1	1543	111	1	1	1	68	1	137
Future Volume (vph)	213	573	1	1	1543	111	1	1	1	68	1	137
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	130		130	0		0	200		0
Storage Lanes	2		0	1		1	0		0	1		2
Taper Length (ft)	180			110			100			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		627			570			544			904	
Travel Time (s)		9.5			8.6			8.2			13.7	
Confl. Peds. (#/hr)						5				5		
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split	NA	pm+ov
Protected Phases	5	2		1	6		8	8		4	4	5
Permitted Phases						6						4
Detector Phase	5	2		1	6	6	8	8		4	4	5
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	23.2		8.0	30.7	30.7	26.0	26.0		23.0	23.0	8.5
Total Split (s)	12.4	63.0		8.0	58.6	58.6	26.0	26.0		23.0	23.0	12.4
Total Split (%)	10.3%	52.5%		6.7%	48.8%	48.8%	21.7%	21.7%		19.2%	19.2%	10.3%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag	Lag	Lead		Lag	Lead	Lead						Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		Max	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	

Splits and Phases: 11: Cajalco Rd. & Grand Oaks





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	213	573	1	1	1543	111	1	1	1	68	1	137
Future Volume (veh/h)	213	573	1	1	1543	111	1	1	1	68	1	137
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		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	224	603	1	1	1624	117	1	1	1	72	1	144
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	864	1790	3	380	1617	719	2	2	2	278	4	1133
Arrive On Green	0.25	0.49	0.49	0.21	0.45	0.45	0.00	0.00	0.00	0.16	0.16	0.16
Sat Flow, veh/h	3456	3640	6	1781	3554	1580	579	579	579	1758	24	2746
Grp Volume(v), veh/h	224	294	310	1	1624	117	3	0	0	73	0	144
Grp Sat Flow(s),veh/h/ln	1728	1777	1869	1781	1777	1580	1737	0	0	1782	0	1373
Q Serve(g_s), s	6.2	12.1	12.1	0.1	54.6	5.2	0.2	0.0	0.0	4.3	0.0	0.0
Cycle Q Clear(g_c), s	6.2	12.1	12.1	0.1	54.6	5.2	0.2	0.0	0.0	4.3	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.33		0.33	0.99		1.00
Lane Grp Cap(c), veh/h	864	874	919	380	1617	719	6	0	0	282	0	1133
V/C Ratio(X)	0.26	0.34	0.34	0.00	1.00	0.16	0.54	0.00	0.00	0.26	0.00	0.13
Avail Cap(c_a), veh/h	864	874	919	380	1617	719	318	0	0	282	0	1133
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	1.00
Uniform Delay (d), s/veh	36.1	18.6	18.6	37.1	32.7	19.2	59.7	0.0	0.0	44.3	0.0	22.1
Incr Delay (d2), s/veh	0.2	1.0	1.0	0.0	23.4	0.5	64.2	0.0	0.0	2.2	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	5.0	5.2	0.0	26.9	1.9	0.2	0.0	0.0	2.0	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.2	19.6	19.6	37.1	56.1	19.7	123.9	0.0	0.0	46.5	0.0	22.4
LnGrp LOS	D	B	B	D	F	B	F	A	A	D	A	C
Approach Vol, veh/h		828			1742			3			217	
Approach Delay, s/veh		24.1			53.7			123.9			30.5	
Approach LOS		C			D			F			C	

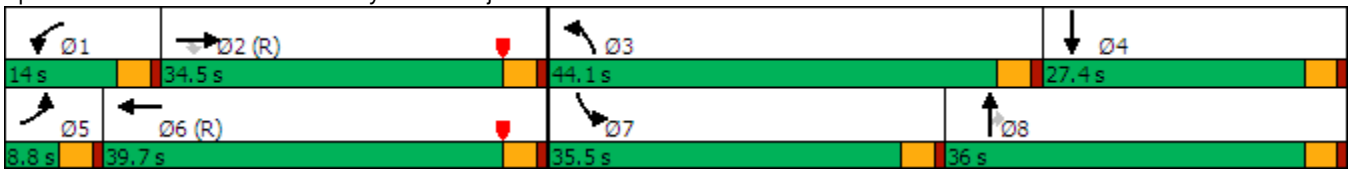
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	29.6	63.0		23.0	34.0	58.6		4.4				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	4.0	59.0		19.0	8.4	54.6		22.0				
Max Q Clear Time (g_c+I1), s	2.1	14.1		6.3	8.2	56.6		2.2				
Green Ext Time (p_c), s	0.0	2.3		0.8	0.0	0.0		0.0				

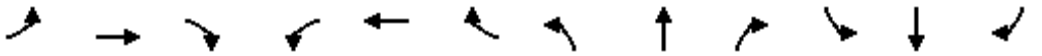
Intersection Summary		
HCM 6th Ctrl Delay		43.2
HCM 6th LOS		D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	384	215	104	591	621	984	858	379	233	138	79
Future Volume (vph)	41	384	215	104	591	621	984	858	379	233	138	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	16	12	12	16	12	12	12
Storage Length (ft)	300		200	100		200	160		160	185		200
Storage Lanes	1		0	1		0	2		1	1		0
Taper Length (ft)	180			115			90			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		464			939			1196			475	
Travel Time (s)		7.0			14.2			18.1			7.2	
Confl. Peds. (#/hr)			5			5						5
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.5	26.0	26.0	8.5	30.7		8.5	26.0	26.0	35.5	26.0	
Total Split (s)	8.8	34.5	34.5	14.0	39.7		44.1	36.0	36.0	35.5	27.4	
Total Split (%)	7.3%	28.8%	28.8%	11.7%	33.1%		36.8%	30.0%	30.0%	29.6%	22.8%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	Max	Max	None	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 10 (8%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Temescal Cyn Rd. & Cajalco Rd.

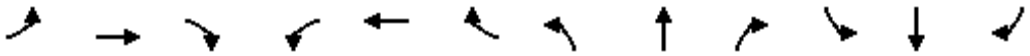




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	384	215	104	591	621	984	858	379	233	138	79
Future Volume (veh/h)	41	384	215	104	591	621	984	858	379	233	138	79
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1945	1870	1870	1945	1870	1870	1870
Adj Flow Rate, veh/h	42	396	222	107	609	640	1014	885	391	240	142	81
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	54	526	443	132	1106	513	1094	1270	589	274	434	233
Arrive On Green	0.03	0.28	0.28	0.07	0.32	0.32	0.32	0.36	0.36	0.15	0.20	0.20
Sat Flow, veh/h	1781	1870	1577	1781	3404	1578	3456	3554	1648	1781	2225	1196
Grp Volume(v), veh/h	42	396	222	107	609	640	1014	885	391	240	112	111
Grp Sat Flow(s),veh/h/ln	1781	1870	1577	1781	1702	1578	1728	1777	1648	1781	1777	1644
Q Serve(g_s), s	2.8	23.2	14.1	7.1	17.7	39.0	34.1	25.6	24.0	15.8	6.5	7.0
Cycle Q Clear(g_c), s	2.8	23.2	14.1	7.1	17.7	39.0	34.1	25.6	24.0	15.8	6.5	7.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.73
Lane Grp Cap(c), veh/h	54	526	443	132	1106	513	1094	1270	589	274	346	321
V/C Ratio(X)	0.78	0.75	0.50	0.81	0.55	1.25	0.93	0.70	0.66	0.87	0.32	0.35
Avail Cap(c_a), veh/h	71	526	443	148	1106	513	1155	1270	589	468	346	321
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	39.3	36.1	54.7	33.3	40.5	39.7	33.0	32.5	49.6	41.5	41.7
Incr Delay (d2), s/veh	32.0	9.6	4.0	25.6	2.0	127.3	12.3	3.2	5.8	9.3	2.5	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	1.7	11.6	5.8	4.0	7.3	32.5	15.7	11.1	10.1	7.5	3.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	89.8	48.9	40.1	80.4	35.3	167.8	52.0	36.2	38.3	58.9	43.9	44.7
LnGrp LOS	F	D	D	F	D	F	D	D	D	E	D	D
Approach Vol, veh/h		660			1356			2290			463	
Approach Delay, s/veh		48.5			101.4			43.5			51.9	
Approach LOS		D			F			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	37.7	42.0	27.4	7.6	43.0	22.5	46.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	30.5	40.1	23.4	4.8	35.7	31.5	32.0
Max Q Clear Time (g_c+I1), s	9.1	25.2	36.1	9.0	4.8	41.0	17.8	27.6
Green Ext Time (p_c), s	0.0	1.3	1.9	0.6	0.0	0.0	0.7	2.4

Intersection Summary	
HCM 6th Ctrl Delay	61.5
HCM 6th LOS	E



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	11	25	11	6	19	90	618	85	11	315	9
Future Volume (vph)	17	11	25	11	6	19	90	618	85	11	315	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		237			740			929			680	
Travel Time (s)		5.4			16.8			18.1			13.2	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

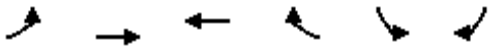
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	43.7
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	11	25	11	6	19	90	618	85	11	315	9
Future Vol, veh/h	17	11	25	11	6	19	90	618	85	11	315	9
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	12	26	12	6	20	95	651	89	12	332	9
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	10.2	10	59.9	14.3
HCM LOS	B	A	F	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	32%	31%	100%	0%
Vol Thru, %	0%	88%	21%	17%	0%	97%
Vol Right, %	0%	12%	47%	53%	0%	3%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	90	703	53	36	11	324
LT Vol	90	0	17	11	11	0
Through Vol	0	618	11	6	0	315
RT Vol	0	85	25	19	0	9
Lane Flow Rate	95	740	56	38	12	341
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.149	1.039	0.099	0.067	0.02	0.528
Departure Headway (Hd)	5.643	5.054	6.513	6.542	6.197	5.671
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	630	710	553	551	581	641
Service Time	3.423	2.834	4.513	4.542	3.897	3.371
HCM Lane V/C Ratio	0.151	1.042	0.101	0.069	0.021	0.532
HCM Control Delay	9.4	66.4	10.2	10	9	14.5
HCM Lane LOS	A	F	B	A	A	B
HCM 95th-tile Q	0.5	18.3	0.3	0.2	0.1	3.1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	7	290	566	7	15	24
Future Volume (vph)	7	290	566	7	15	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	60				100	
Link Speed (mph)		35	35		30	
Link Distance (ft)		1222	796		251	
Travel Time (s)		23.8	15.5		5.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control		Stop	Stop		Stop	

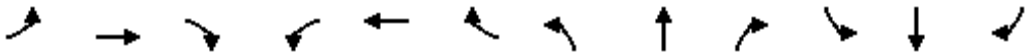
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	16.8
Intersection LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	290	566	7	15	24
Future Vol, veh/h	7	290	566	7	15	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	305	596	7	16	25
Number of Lanes	1	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	11.5	20	9.1
HCM LOS	B	C	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	38%
Vol Thru, %	0%	100%	99%	0%
Vol Right, %	0%	0%	1%	62%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	7	290	573	39
LT Vol	7	0	0	15
Through Vol	0	290	566	0
RT Vol	0	0	7	24
Lane Flow Rate	7	305	603	41
Geometry Grp	7	7	5	2
Degree of Util (X)	0.011	0.43	0.754	0.065
Departure Headway (Hd)	5.574	5.07	4.499	5.657
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	642	711	802	629
Service Time	3.308	2.804	2.526	3.725
HCM Lane V/C Ratio	0.011	0.429	0.752	0.065
HCM Control Delay	8.4	11.6	20	9.1
HCM Lane LOS	A	B	C	A
HCM 95th-tile Q	0	2.2	7.1	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	210	89	39	339	4	182	2	79	5	1	5
Future Volume (vph)	3	210	89	39	339	4	182	2	79	5	1	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	60			60			100			100		
Link Speed (mph)		35			35			30			45	
Link Distance (ft)		1243			910			626			548	
Travel Time (s)		24.2			17.7			14.2			8.3	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

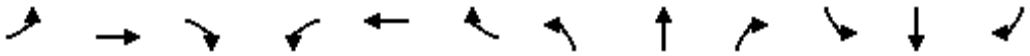
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	18.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	210	89	39	339	4	182	2	79	5	1	5
Future Vol, veh/h	3	210	89	39	339	4	182	2	79	5	1	5
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	250	106	46	404	5	217	2	94	6	1	6
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	17.5	20.7	16.1	10.2
HCM LOS	C	C	C	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	69%	100%	0%	100%	0%	45%
Vol Thru, %	1%	0%	70%	0%	99%	9%
Vol Right, %	30%	0%	30%	0%	1%	45%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	263	3	299	39	343	11
LT Vol	182	3	0	39	0	5
Through Vol	2	0	210	0	339	1
RT Vol	79	0	89	0	4	5
Lane Flow Rate	313	4	356	46	408	13
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.533	0.007	0.6	0.086	0.696	0.025
Departure Headway (Hd)	6.132	6.795	6.073	6.65	6.133	7.004
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	585	524	591	537	588	514
Service Time	4.205	4.567	3.845	4.417	3.899	5.004
HCM Lane V/C Ratio	0.535	0.008	0.602	0.086	0.694	0.025
HCM Control Delay	16.1	9.6	17.6	10	21.9	10.2
HCM Lane LOS	C	A	C	A	C	B
HCM 95th-tile Q	3.1	0	4	0.3	5.5	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	108	333	239	135	28	105	151	146	38	236	2
Future Volume (vph)	4	108	333	239	135	28	105	151	146	38	236	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	135		0	130		200	100		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	100			90			60			65		
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		495			683			680			695	
Travel Time (s)		7.5			10.3			13.2			13.5	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

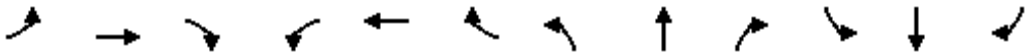
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	57.6
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	108	333	239	135	28	105	151	146	38	236	2
Future Vol, veh/h	4	108	333	239	135	28	105	151	146	38	236	2
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	114	351	252	142	29	111	159	154	40	248	2
Number of Lanes	1	1	0	1	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	3	2
HCM Control Delay	122.9	27.4	34.2	30.3
HCM LOS	F	D	D	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	51%	0%	24%	0%	100%	0%	0%	99%
Vol Right, %	0%	49%	0%	76%	0%	0%	100%	0%	1%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	105	297	4	441	239	135	28	38	238
LT Vol	105	0	4	0	239	0	0	38	0
Through Vol	0	151	0	108	0	135	0	0	236
RT Vol	0	146	0	333	0	0	28	0	2
Lane Flow Rate	111	313	4	464	252	142	29	40	251
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.304	0.787	0.012	1.156	0.695	0.373	0.072	0.114	0.681
Departure Headway (Hd)	10.513	9.632	10.042	8.967	10.534	10.009	9.275	10.937	10.408
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	344	378	355	404	345	362	388	330	351
Service Time	8.213	7.332	7.832	6.756	8.234	7.709	6.975	8.637	8.108
HCM Lane V/C Ratio	0.323	0.828	0.011	1.149	0.73	0.392	0.075	0.121	0.715
HCM Control Delay	17.7	40	13	123.9	34.1	18.5	12.7	15	32.7
HCM Lane LOS	C	E	B	F	D	C	B	B	D
HCM 95th-tile Q	1.3	6.6	0	17.6	5	1.7	0.2	0.4	4.8



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	7	37	18	22	152	49	221	152	22	481	92
Future Volume (vph)	32	7	37	18	22	152	49	221	152	22	481	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	110		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		655			663			936			638	
Travel Time (s)		12.8			12.9			18.2			12.4	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

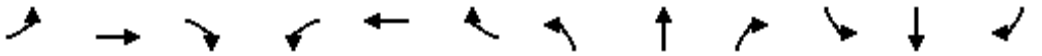
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	37.7
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	7	37	18	22	152	49	221	152	22	481	92
Future Vol, veh/h	32	7	37	18	22	152	49	221	152	22	481	92
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	7	39	19	23	160	52	233	160	23	506	97
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	11.8	13.5	19.3	61.9
HCM LOS	B	B	C	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	42%	9%	100%	0%
Vol Thru, %	0%	59%	9%	11%	0%	84%
Vol Right, %	0%	41%	49%	79%	0%	16%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	49	373	76	192	22	573
LT Vol	49	0	32	18	22	0
Through Vol	0	221	7	22	0	481
RT Vol	0	152	37	152	0	92
Lane Flow Rate	52	393	80	202	23	603
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.099	0.666	0.16	0.367	0.043	1.01
Departure Headway (Hd)	7.023	6.22	7.395	6.667	6.652	6.03
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	513	585	488	544	534	597
Service Time	4.723	3.92	5.395	4.667	4.448	3.824
HCM Lane V/C Ratio	0.101	0.672	0.164	0.371	0.043	1.01
HCM Control Delay	10.5	20.4	11.8	13.5	9.8	63.9
HCM Lane LOS	B	C	B	B	A	F
HCM 95th-tile Q	0.3	5	0.6	1.7	0.1	15.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	1	32	2	2	6	44	247	11	8	582	101
Future Volume (vph)	56	1	32	2	2	6	44	247	11	8	582	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	80		0	0		100
Storage Lanes	0		1	0		0	1		0	0		1
Taper Length (ft)	100			100			80			100		
Link Speed (mph)		45			45			30			45	
Link Distance (ft)		786			169			443			297	
Travel Time (s)		11.9			2.6			10.1			4.5	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	24.7
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	56	1	32	2	2	6	44	247	11	8	582	101
Future Vol, veh/h	56	1	32	2	2	6	44	247	11	8	582	101
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	59	1	34	2	2	6	46	260	12	8	613	106
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay	10.6	10.1	12	32.2
HCM LOS	B	B	B	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	98%	0%	20%	1%	0%
Vol Thru, %	0%	96%	2%	0%	20%	99%	0%
Vol Right, %	0%	4%	0%	100%	60%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	44	258	57	32	10	590	101
LT Vol	44	0	56	0	2	8	0
Through Vol	0	247	1	0	2	582	0
RT Vol	0	11	0	32	6	0	101
Lane Flow Rate	46	272	60	34	11	621	106
Geometry Grp	7	7	7	7	6	7	7
Degree of Util (X)	0.079	0.424	0.125	0.059	0.02	0.896	0.132
Departure Headway (Hd)	6.158	5.622	7.513	6.3	6.912	5.191	4.48
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	585	644	479	571	520	689	790
Service Time	3.858	3.322	5.224	4.011	4.929	2.978	2.266
HCM Lane V/C Ratio	0.079	0.422	0.125	0.06	0.021	0.901	0.134
HCM Control Delay	9.4	12.4	11.3	9.4	10.1	36.3	8
HCM Lane LOS	A	B	B	A	B	E	A
HCM 95th-tile Q	0.3	2.1	0.4	0.2	0.1	11.3	0.5

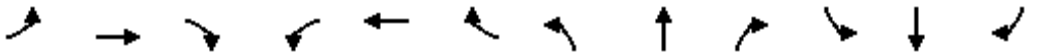
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1017	888	130	567	0	0	0	0	155	39	492
Future Volume (vph)	0	1017	888	130	567	0	0	0	0	155	39	492
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	90		0	0		0	0		525
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	100			60			100			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		305			387			1098			1308	
Travel Time (s)		4.6			5.9			16.6			19.8	
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
Shared Lane Traffic (%)												
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Detector Phase		2		1	6					4	4	4
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0					4.0	4.0	4.0
Minimum Split (s)		26.0		8.0	26.0					26.0	26.0	26.0
Total Split (s)		76.0		15.0	91.0					29.0	29.0	29.0
Total Split (%)		63.3%		12.5%	75.8%					24.2%	24.2%	24.2%
Yellow Time (s)		3.0		3.0	3.0					3.0	3.0	3.0
All-Red Time (s)		1.0		1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0						0.0	0.0
Total Lost Time (s)		4.0		4.0	4.0						4.0	4.0
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?		Yes		Yes								
Recall Mode		C-Max		None	C-Max					Max	Max	Max

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 28 (23%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 7: I-15 SB Ramps & El Cerrito Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1017	888	130	567	0	0	0	0	155	39	492
Future Volume (veh/h)	0	1017	888	130	567	0	0	0	0	155	39	492
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	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1048	915	134	585	0				160	40	507
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	2	2	2	2	0				2	2	2
Cap, veh/h	0	1160	881	158	2576	0				300	75	330
Arrive On Green	0.00	0.80	0.80	0.18	1.00	0.00				0.21	0.21	0.21
Sat Flow, veh/h	0	2017	1461	1781	3647	0				1439	360	1585
Grp Volume(v), veh/h	0	956	1007	134	585	0				200	0	507
Grp Sat Flow(s),veh/h/ln	0	1777	1607	1781	1777	0				1798	0	1585
Q Serve(g_s), s	0.0	45.0	72.4	8.7	0.0	0.0				11.9	0.0	25.0
Cycle Q Clear(g_c), s	0.0	45.0	72.4	8.7	0.0	0.0				11.9	0.0	25.0
Prop In Lane	0.00		0.91	1.00		0.00				0.80		1.00
Lane Grp Cap(c), veh/h	0	1072	969	158	2576	0				375	0	330
V/C Ratio(X)	0.00	0.89	1.04	0.85	0.23	0.00				0.53	0.00	1.54
Avail Cap(c_a), veh/h	0	1072	969	163	2576	0				375	0	330
HCM Platoon Ratio	1.00	1.33	1.33	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.09	0.09	0.93	0.93	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	9.2	11.9	48.6	0.0	0.0				42.3	0.0	47.5
Incr Delay (d2), s/veh	0.0	1.2	21.0	29.9	0.2	0.0				5.4	0.0	255.6
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	6.7	14.8	4.8	0.1	0.0				5.7	0.0	33.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.4	32.9	78.5	0.2	0.0				47.7	0.0	303.1
LnGrp LOS	A	B	F	E	A	A				D	A	F
Approach Vol, veh/h		1963			719						707	
Approach Delay, s/veh		21.9			14.8						230.9	
Approach LOS		C			B						F	

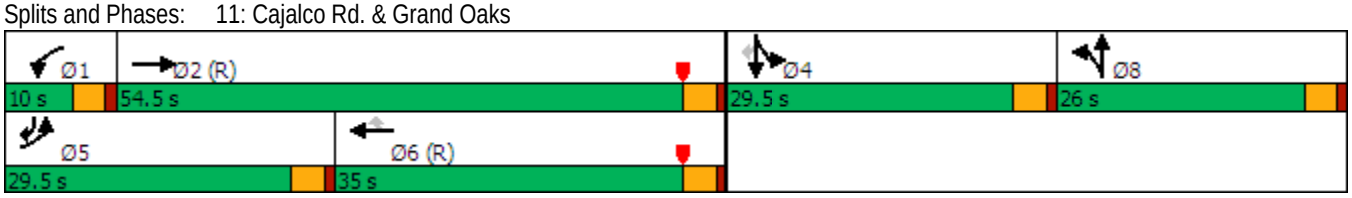
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	14.6	76.4		29.0		91.0						
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0						
Max Green Setting (Gmax), s	11.0	72.0		25.0		87.0						
Max Q Clear Time (g_c+I1), s	10.7	74.4		27.0		2.0						
Green Ext Time (p_c), s	0.0	0.0		0.0		4.0						

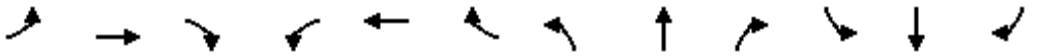
Intersection Summary												
HCM 6th Ctrl Delay			64.0									
HCM 6th LOS			E									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	687	796	1	1	847	177	1	1	1	363	1	602
Future Volume (vph)	687	796	1	1	847	177	1	1	1	363	1	602
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	130		130	0		0	200		0
Storage Lanes	2		0	1		1	0		0	1		2
Taper Length (ft)	180			110			100			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		627			570			544			904	
Travel Time (s)		9.5			8.6			8.2			13.7	
Confl. Peds. (#/hr)						5				5		
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split	NA	pm+ov
Protected Phases	5	2		1	6		8	8		4	4	5
Permitted Phases						6						4
Detector Phase	5	2		1	6	6	8	8		4	4	5
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	23.2		8.0	30.7	30.7	26.0	26.0		8.0	8.0	8.5
Total Split (s)	29.5	54.5		10.0	35.0	35.0	26.0	26.0		29.5	29.5	29.5
Total Split (%)	24.6%	45.4%		8.3%	29.2%	29.2%	21.7%	21.7%		24.6%	24.6%	24.6%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		Max	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 43 (36%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	

Splits and Phases: 11: Cajalco Rd. & Grand Oaks





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	687	796	1	1	847	177	1	1	1	363	1	602
Future Volume (veh/h)	687	796	1	1	847	177	1	1	1	363	1	602
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		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	701	812	1	1	864	181	1	1	1	370	1	614
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	734	2367	3	2	1558	693	2	2	2	378	1	1179
Arrive On Green	0.21	0.65	0.65	0.00	0.44	0.44	0.00	0.00	0.00	0.21	0.21	0.21
Sat Flow, veh/h	3456	3642	4	1781	3554	1580	579	579	579	1777	5	2757
Grp Volume(v), veh/h	701	396	417	1	864	181	3	0	0	371	0	614
Grp Sat Flow(s),veh/h/ln	1728	1777	1870	1781	1777	1580	1737	0	0	1782	0	1378
Q Serve(g_s), s	24.0	12.1	12.1	0.1	21.6	8.7	0.2	0.0	0.0	24.9	0.0	19.8
Cycle Q Clear(g_c), s	24.0	12.1	12.1	0.1	21.6	8.7	0.2	0.0	0.0	24.9	0.0	19.8
Prop In Lane	1.00		0.00	1.00		1.00	0.33		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	734	1155	1215	2	1558	693	6	0	0	379	0	1179
V/C Ratio(X)	0.95	0.34	0.34	0.51	0.55	0.26	0.54	0.00	0.00	0.98	0.00	0.52
Avail Cap(c_a), veh/h	734	1155	1215	89	1558	693	318	0	0	379	0	1179
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	1.00
Uniform Delay (d), s/veh	46.7	9.5	9.5	59.9	25.0	21.4	59.7	0.0	0.0	47.0	0.0	25.5
Incr Delay (d2), s/veh	22.7	0.8	0.8	131.7	1.4	0.9	64.2	0.0	0.0	41.5	0.0	1.6
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	12.3	4.4	4.6	0.1	9.0	3.3	0.2	0.0	0.0	15.0	0.0	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.4	10.3	10.2	191.6	26.4	22.3	123.9	0.0	0.0	88.5	0.0	27.2
LnGrp LOS	E	B	B	F	C	C	F	A	A	F	A	C
Approach Vol, veh/h		1514			1046			3			985	
Approach Delay, s/veh		37.6			25.9			123.9			50.3	
Approach LOS		D			C			F			D	

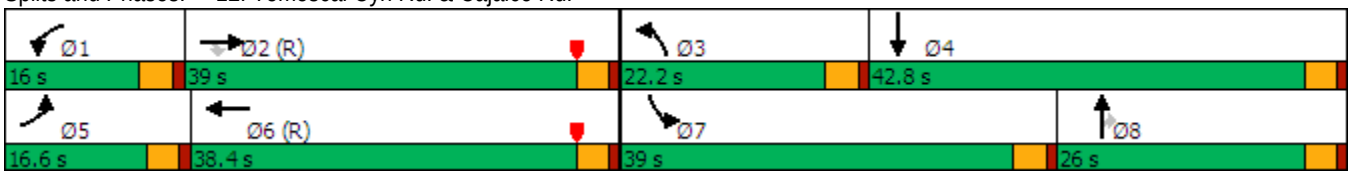
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.1	82.0		29.5	29.5	56.6		4.4				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	6.0	50.5		25.5	25.5	31.0		22.0				
Max Q Clear Time (g_c+I1), s	2.1	14.1		26.9	26.0	23.6		2.2				
Green Ext Time (p_c), s	0.0	3.3		0.0	0.0	2.9		0.0				

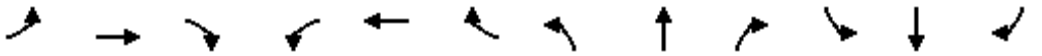
Intersection Summary			
HCM 6th Ctrl Delay		37.7	
HCM 6th LOS		D	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	129	681	349	287	611	461	327	675	149	599	593	86
Future Volume (vph)	129	681	349	287	611	461	327	675	149	599	593	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	16	12	12	16	12	12	12
Storage Length (ft)	300		200	100		200	160		160	185		200
Storage Lanes	1		0	1		0	2		1	1		0
Taper Length (ft)	180			115			90			100		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		464			939			1196			475	
Travel Time (s)		7.0			14.2			18.1			7.2	
Confl. Peds. (#/hr)			5			5						5
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.5	26.0	26.0	8.5	30.7		8.5	26.0	26.0	35.5	26.0	
Total Split (s)	16.6	39.0	39.0	16.0	38.4		22.2	26.0	26.0	39.0	42.8	
Total Split (%)	13.8%	32.5%	32.5%	13.3%	32.0%		18.5%	21.7%	21.7%	32.5%	35.7%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	Max	Max	None	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 10 (8%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Temescal Cyn Rd. & Cajalco Rd.

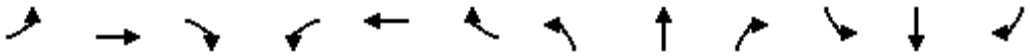




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	681	349	287	611	461	327	675	149	599	593	86
Future Volume (veh/h)	129	681	349	287	611	461	327	675	149	599	593	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		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	1945	1870	1870	1945	1870	1870	1870
Adj Flow Rate, veh/h	132	695	356	293	623	470	334	689	152	611	605	88
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	159	546	460	178	1030	477	402	652	302	520	1116	162
Arrive On Green	0.09	0.29	0.29	0.10	0.30	0.30	0.12	0.18	0.18	0.29	0.36	0.36
Sat Flow, veh/h	1781	1870	1577	1781	3404	1577	3456	3554	1648	1781	3112	452
Grp Volume(v), veh/h	132	695	356	293	623	470	334	689	152	611	345	348
Grp Sat Flow(s),veh/h/ln	1781	1870	1577	1781	1702	1577	1728	1777	1648	1781	1777	1787
Q Serve(g_s), s	8.7	35.0	24.8	12.0	18.7	35.5	11.3	22.0	10.0	35.0	18.5	18.6
Cycle Q Clear(g_c), s	8.7	35.0	24.8	12.0	18.7	35.5	11.3	22.0	10.0	35.0	18.5	18.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.25
Lane Grp Cap(c), veh/h	159	546	460	178	1030	477	402	652	302	520	637	641
V/C Ratio(X)	0.83	1.27	0.77	1.64	0.60	0.98	0.83	1.06	0.50	1.18	0.54	0.54
Avail Cap(c_a), veh/h	187	546	460	178	1030	477	524	652	302	520	637	641
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	42.5	38.9	54.0	35.7	41.6	51.9	49.0	44.1	42.5	30.6	30.7
Incr Delay (d2), s/veh	23.2	137.1	12.0	314.0	2.6	37.6	8.5	51.5	5.9	97.9	3.3	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	36.2	10.7	20.8	7.9	18.2	5.3	14.1	4.5	28.8	8.2	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.0	179.6	50.9	368.0	38.3	79.1	60.4	100.5	50.0	140.4	33.9	33.9
LnGrp LOS	E	F	D	F	D	E	E	F	D	F	C	C
Approach Vol, veh/h		1183			1386			1175			1304	
Approach Delay, s/veh		129.4			121.9			82.5			83.8	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	39.0	18.0	47.0	14.7	40.3	39.0	26.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	35.0	18.2	38.8	12.6	34.4	35.0	22.0
Max Q Clear Time (g_c+I1), s	14.0	37.0	13.3	20.6	10.7	37.5	37.0	24.0
Green Ext Time (p_c), s	0.0	0.0	0.6	2.5	0.1	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	104.7
HCM 6th LOS	F



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	2	111	28	4	6	12	360	13	10	785	13
Future Volume (vph)	36	2	111	28	4	6	12	360	13	10	785	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			60			60		
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		237			740			929			680	
Travel Time (s)		5.4			16.8			18.1			13.2	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

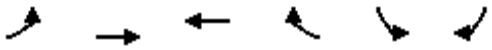
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	111.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	36	2	111	28	4	6	12	360	13	10	785	13
Future Vol, veh/h	36	2	111	28	4	6	12	360	13	10	785	13
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	2	117	29	4	6	13	379	14	11	826	14
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	12.7	11.7	19.4	178.2
HCM LOS	B	B	C	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	24%	74%	100%	0%
Vol Thru, %	0%	97%	1%	11%	0%	98%
Vol Right, %	0%	3%	74%	16%	0%	2%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	12	373	149	38	10	798
LT Vol	12	0	36	28	10	0
Through Vol	0	360	2	4	0	785
RT Vol	0	13	111	6	0	13
Lane Flow Rate	13	393	157	40	11	840
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.023	0.646	0.278	0.08	0.018	1.337
Departure Headway (Hd)	6.822	6.287	6.992	7.966	6.246	5.728
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	528	577	518	452	574	638
Service Time	4.522	3.987	4.992	5.966	3.971	3.453
HCM Lane V/C Ratio	0.025	0.681	0.303	0.088	0.019	1.317
HCM Control Delay	9.7	19.7	12.7	11.7	9.1	180.3
HCM Lane LOS	A	C	B	B	A	F
HCM 95th-tile Q	0.1	4.6	1.1	0.3	0.1	35.3



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	4	736	322	16	20	5
Future Volume (vph)	4	736	322	16	20	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	60				100	
Link Speed (mph)		35	35		30	
Link Distance (ft)		1222	796		251	
Travel Time (s)		23.8	15.5		5.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control		Stop	Stop		Stop	

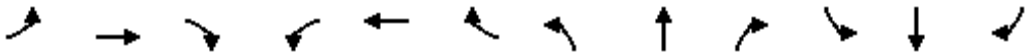
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	49.7
Intersection LOS	E

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	736	322	16	20	5
Future Vol, veh/h	4	736	322	16	20	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	775	339	17	21	5
Number of Lanes	1	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	68	12.5	9.9
HCM LOS	F	B	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	80%
Vol Thru, %	0%	100%	95%	0%
Vol Right, %	0%	0%	5%	20%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	4	736	338	25
LT Vol	4	0	0	20
Through Vol	0	736	322	0
RT Vol	0	0	16	5
Lane Flow Rate	4	775	356	26
Geometry Grp	7	7	5	2
Degree of Util (X)	0.006	1.05	0.483	0.047
Departure Headway (Hd)	5.38	4.877	4.89	6.611
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	666	744	729	545
Service Time	3.106	2.604	2.981	4.611
HCM Lane V/C Ratio	0.006	1.042	0.488	0.048
HCM Control Delay	8.1	68.3	12.5	9.9
HCM Lane LOS	A	F	B	A
HCM 95th-tile Q	0	19.4	2.7	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	579	162	47	281	4	58	3	43	3	1	3
Future Volume (vph)	3	579	162	47	281	4	58	3	43	3	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	60			60			100			100		
Link Speed (mph)		35			35			30			45	
Link Distance (ft)		1243			910			626			548	
Travel Time (s)		24.2			17.7			14.2			8.3	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	58.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	579	162	47	281	4	58	3	43	3	1	3
Future Vol, veh/h	3	579	162	47	281	4	58	3	43	3	1	3
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	609	171	49	296	4	61	3	45	3	1	3
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	86.1	12.6	11.1	10
HCM LOS	F	B	B	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	56%	100%	0%	100%	0%	43%
Vol Thru, %	3%	0%	78%	0%	99%	14%
Vol Right, %	41%	0%	22%	0%	1%	43%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	104	3	741	47	285	7
LT Vol	58	3	0	47	0	3
Through Vol	3	0	579	0	281	1
RT Vol	43	0	162	0	4	3
Lane Flow Rate	109	3	780	49	300	7
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.191	0.005	1.102	0.082	0.458	0.013
Departure Headway (Hd)	6.55	5.745	5.087	6.196	5.68	6.887
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	552	619	710	582	639	523
Service Time	4.55	3.52	2.861	3.896	3.38	4.887
HCM Lane V/C Ratio	0.197	0.005	1.099	0.084	0.469	0.013
HCM Control Delay	11.1	8.5	86.4	9.4	13.1	10
HCM Lane LOS	B	A	F	A	B	A
HCM 95th-tile Q	0.7	0	22	0.3	2.4	0

APPENDIX 6.3:

HORIZON YEAR 2035 CONDITIONS
TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

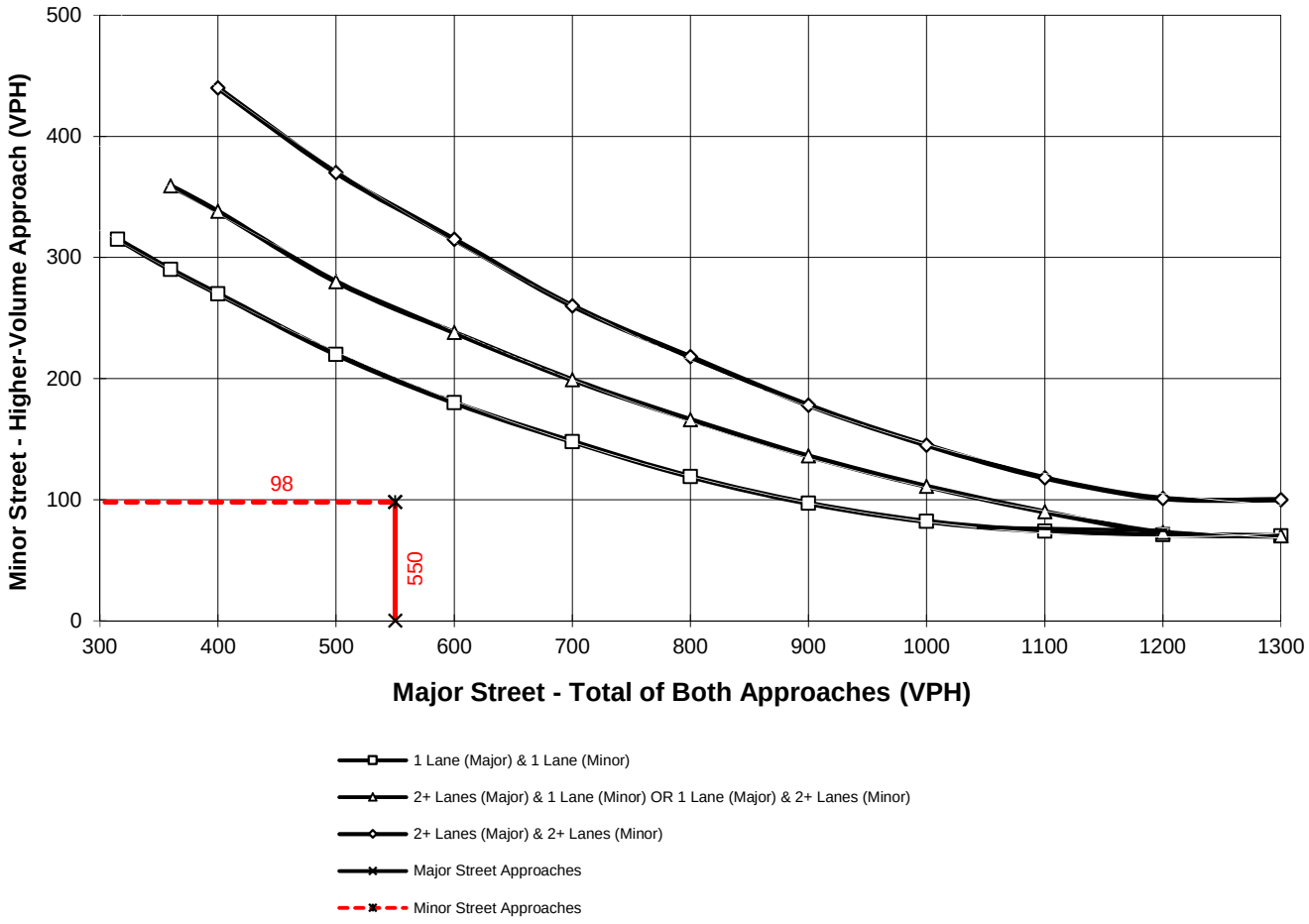
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Horizon Year 2035 Without Project (Nov2018 Study) AM Peak Hour Warrants**

Major Street Name = **Masters Dr.**
Total of Both Approaches (VPH) = **550**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Bennett Av.**
High Volume Approach (VPH) = **98**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #2

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

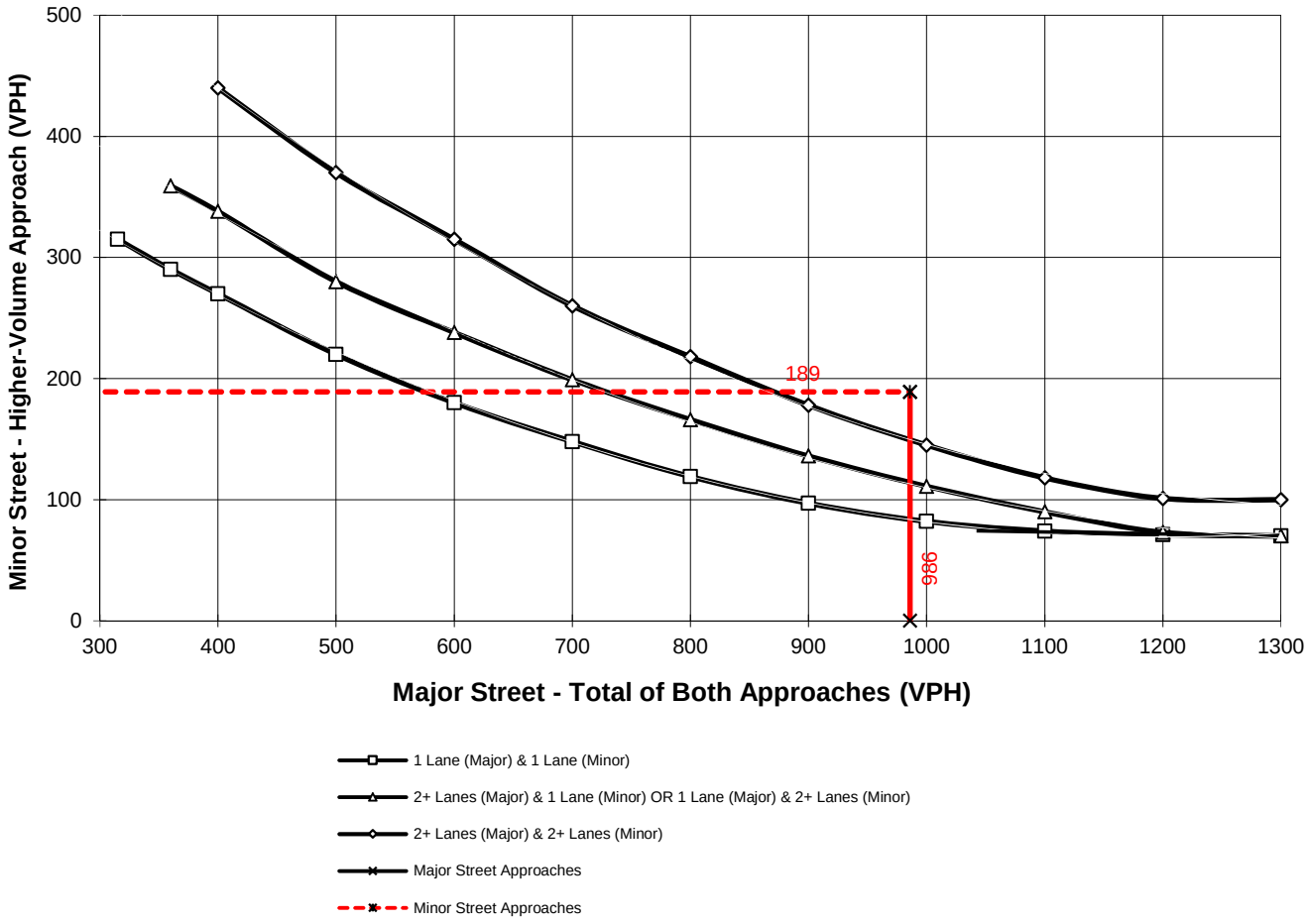
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Horizon Year 2035 Without Project (Nov2018 Study) PM Peak Hour Warrants**

Major Street Name = **Masters Dr.**
Total of Both Approaches (VPH) = **986**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Bennett Av.**
High Volume Approach (VPH) = **189**
Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #2

URBAN CROSSROADS

R:\UXRjobs_12100-12500\12554\Warrants\04 2035NP\02R_PM.xls\Fig 4C-4 (Rural Peak)

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

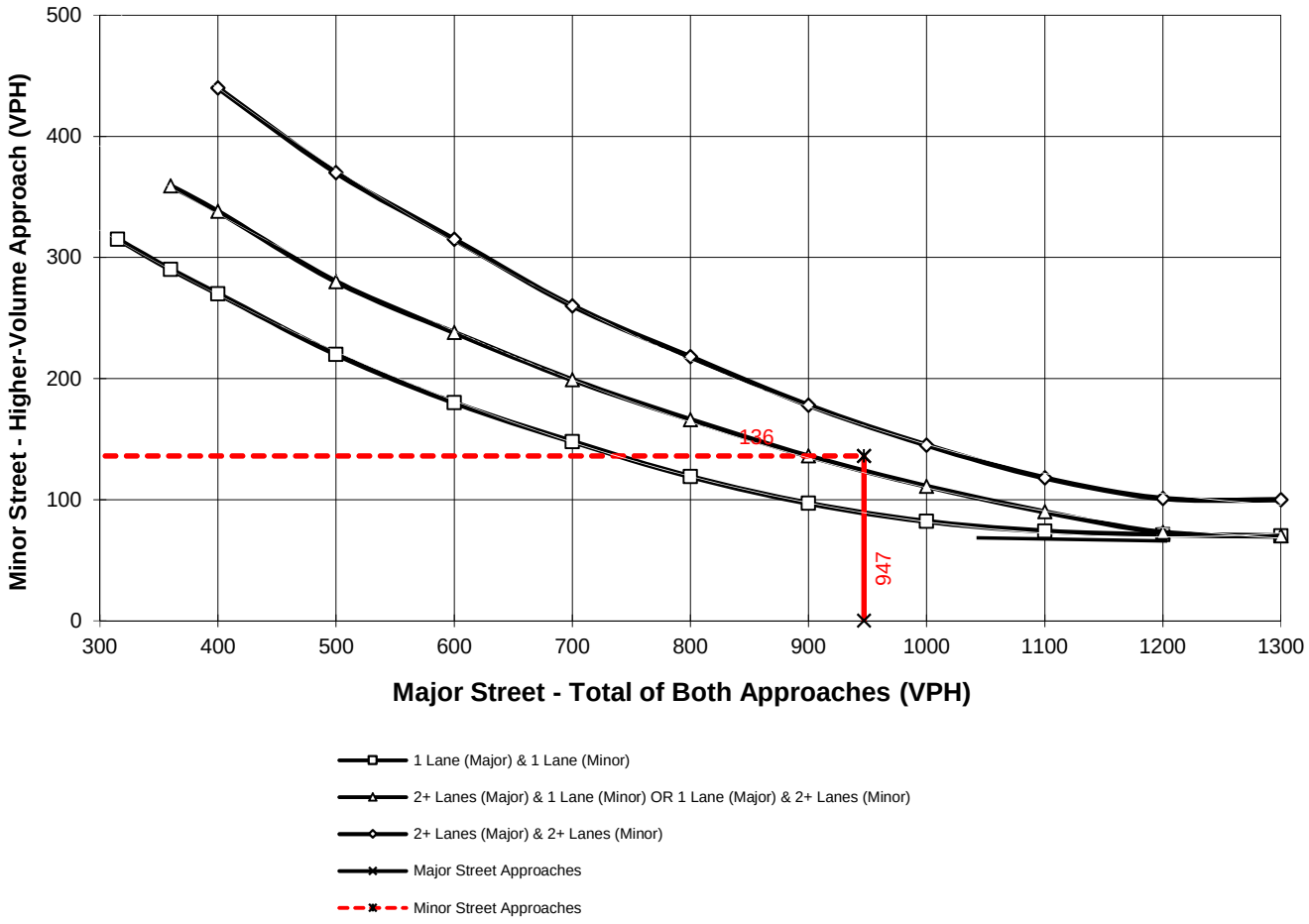
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Horizon Year 2035 Without Project (Nov2018 Study) AM Peak Hour Warrants**

Major Street Name = **Bedford Cyn. Rd.** Total of Both Approaches (VPH) = **947**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Georgetown Dr.** High Volume Approach (VPH) = **136**
Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #5

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

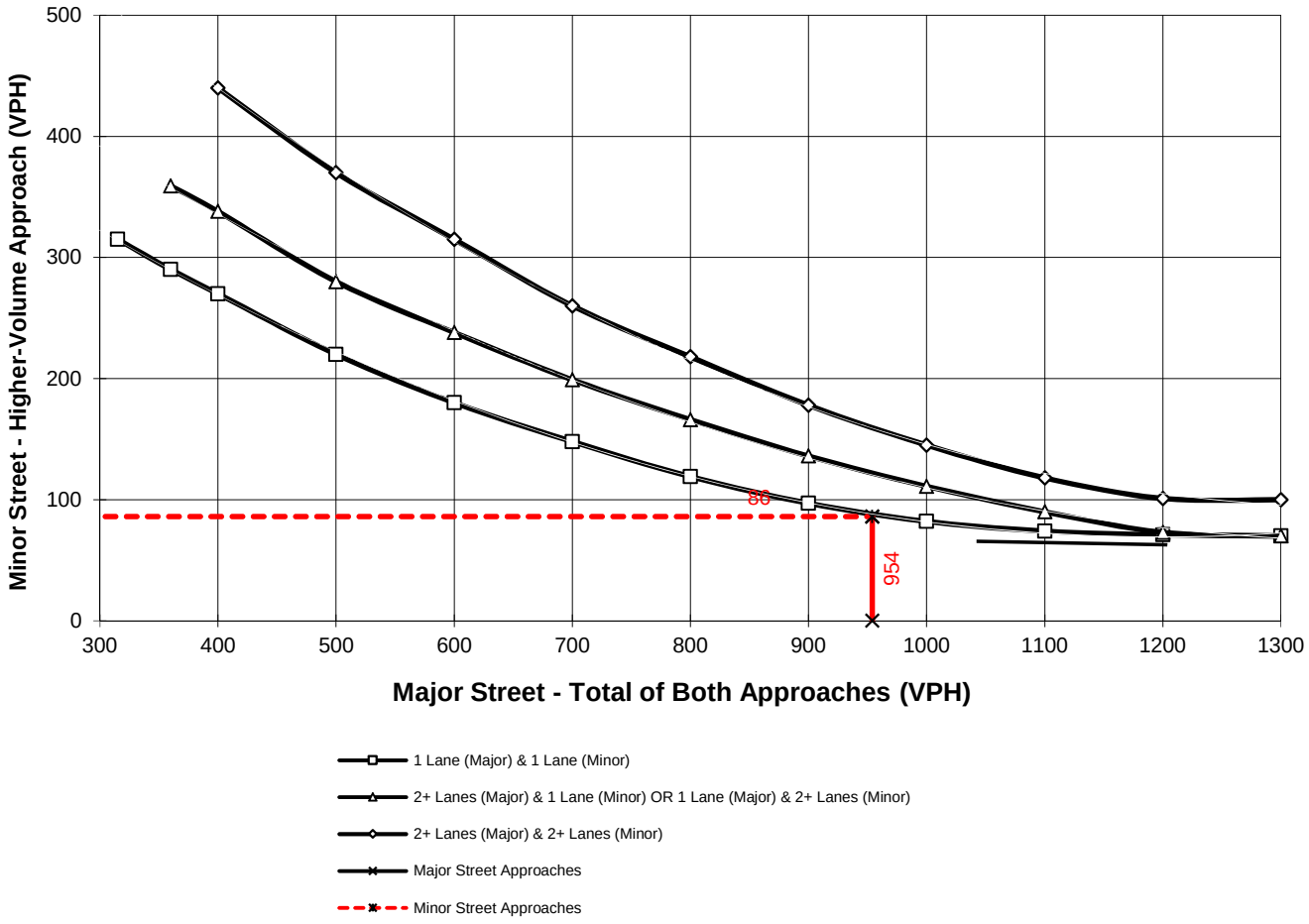
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Horizon Year 2035 Without Project (Nov2018 Study) PM Peak Hour Warrants**

Major Street Name = **Bedford Cyn. Rd.** Total of Both Approaches (VPH) = **954**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Georgetown Dr.** High Volume Approach (VPH) = **86**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #5

URBAN CROSSROADS

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

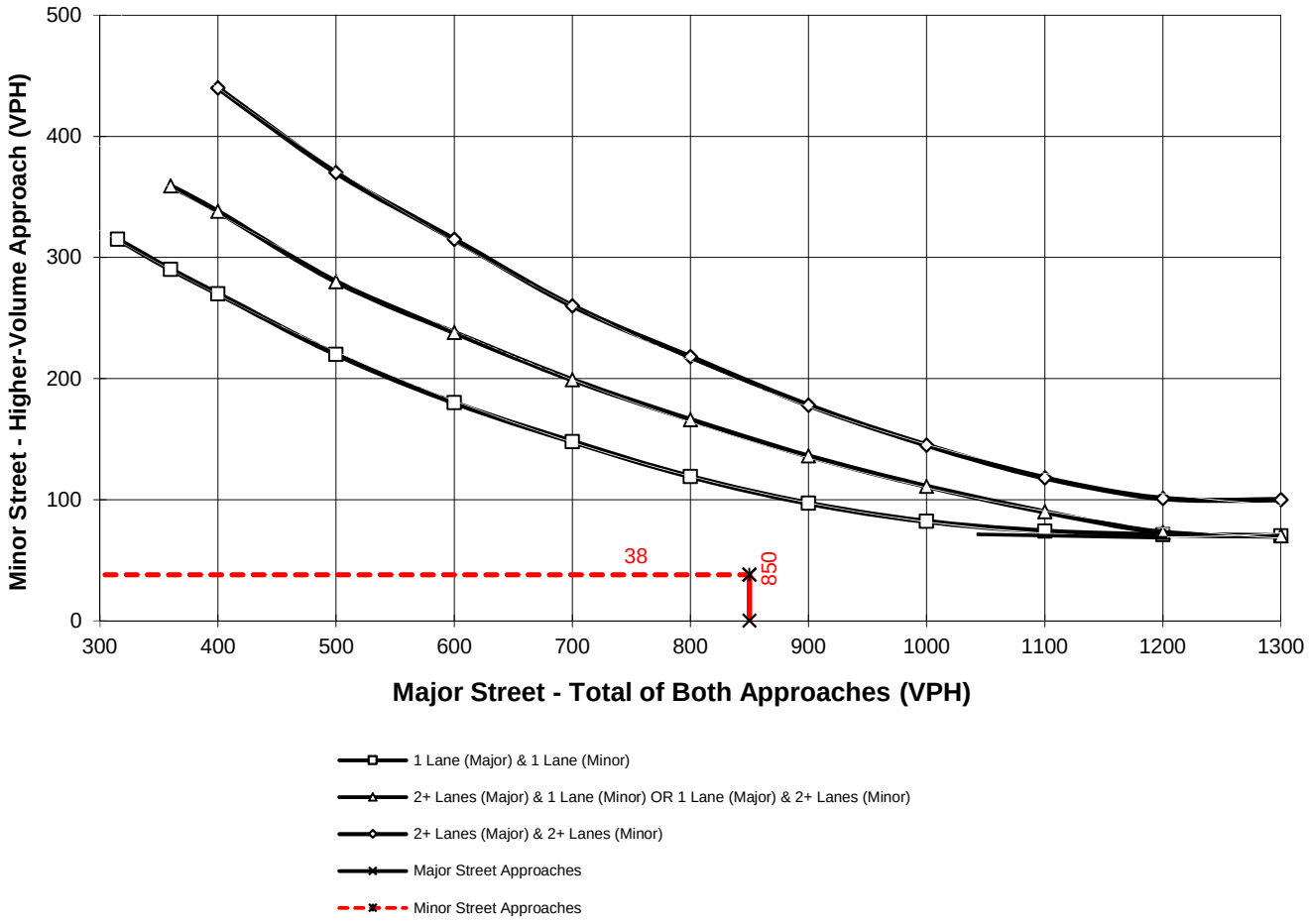
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Horizon Year 2035 Without Project (Nov2018 Study) AM Peak Hour Warrants**

Major Street Name = **Masters Dr.**
Total of Both Approaches (VPH) = **850**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Via Castilla St.**
High Volume Approach (VPH) = **38**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #19

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

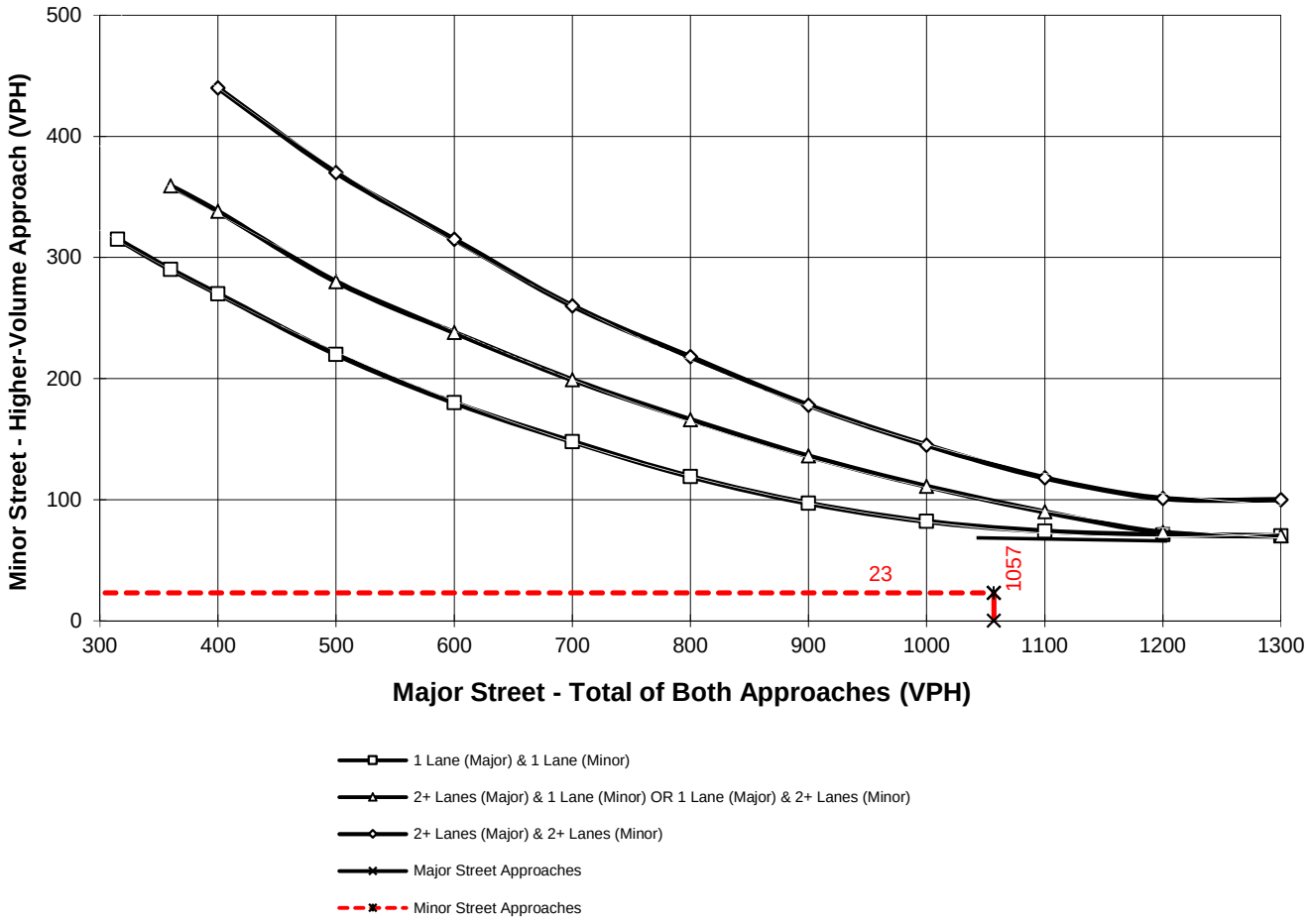
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Horizon Year 2035 Without Project (Nov2018 Study) PM Peak Hour Warrants**

Major Street Name = **Masters Dr.**
Total of Both Approaches (VPH) = **1,057**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Via Castilla St.**
High Volume Approach (VPH) = **23**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #19

URBAN CROSSROADS

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

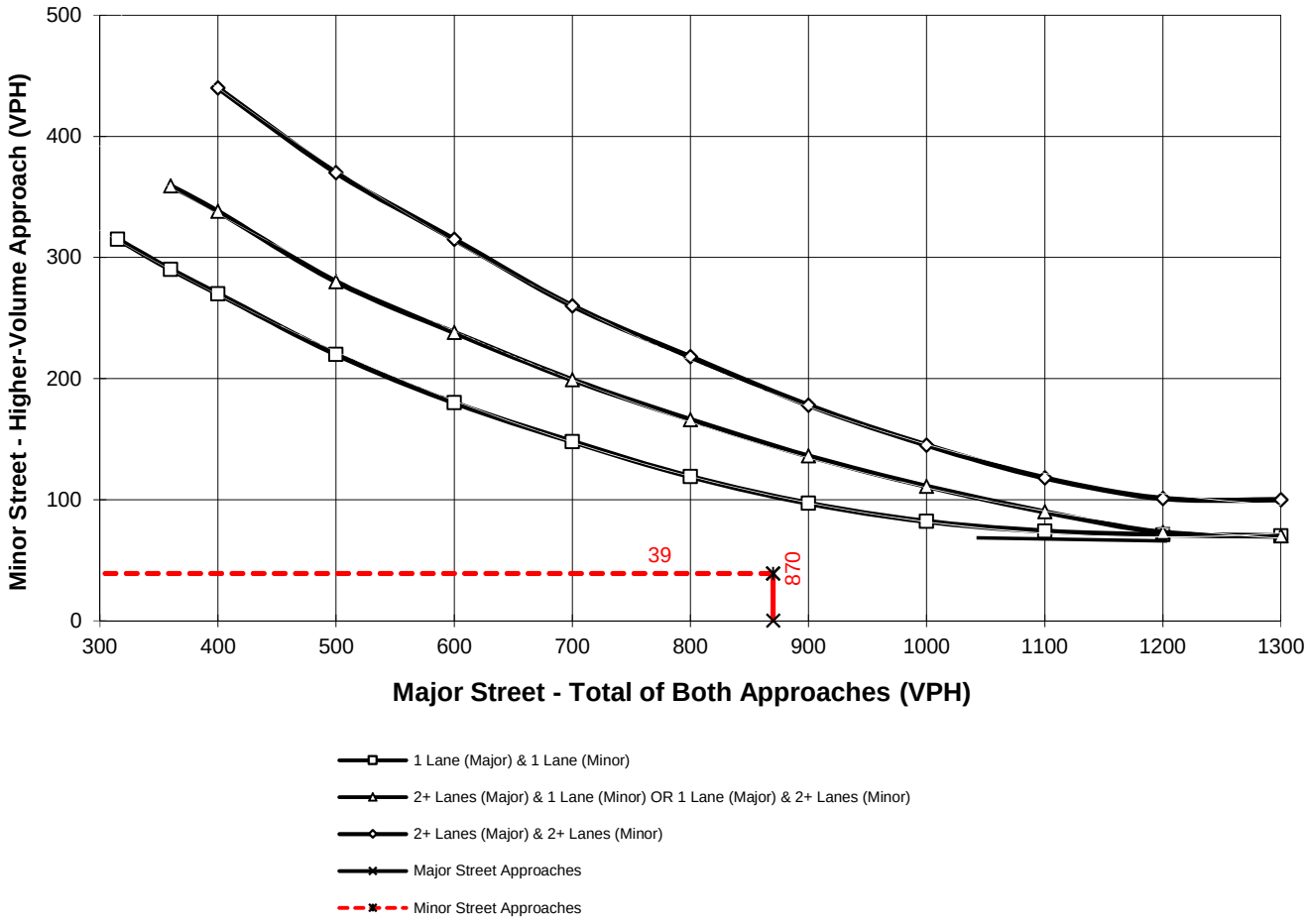
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Horizon Year 2035 With Project AM Peak Hour Warrants**

Major Street Name = **Masters Dr.**
Total of Both Approaches (VPH) = **870**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Via Castilla St.**
High Volume Approach (VPH) = **39**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #19

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

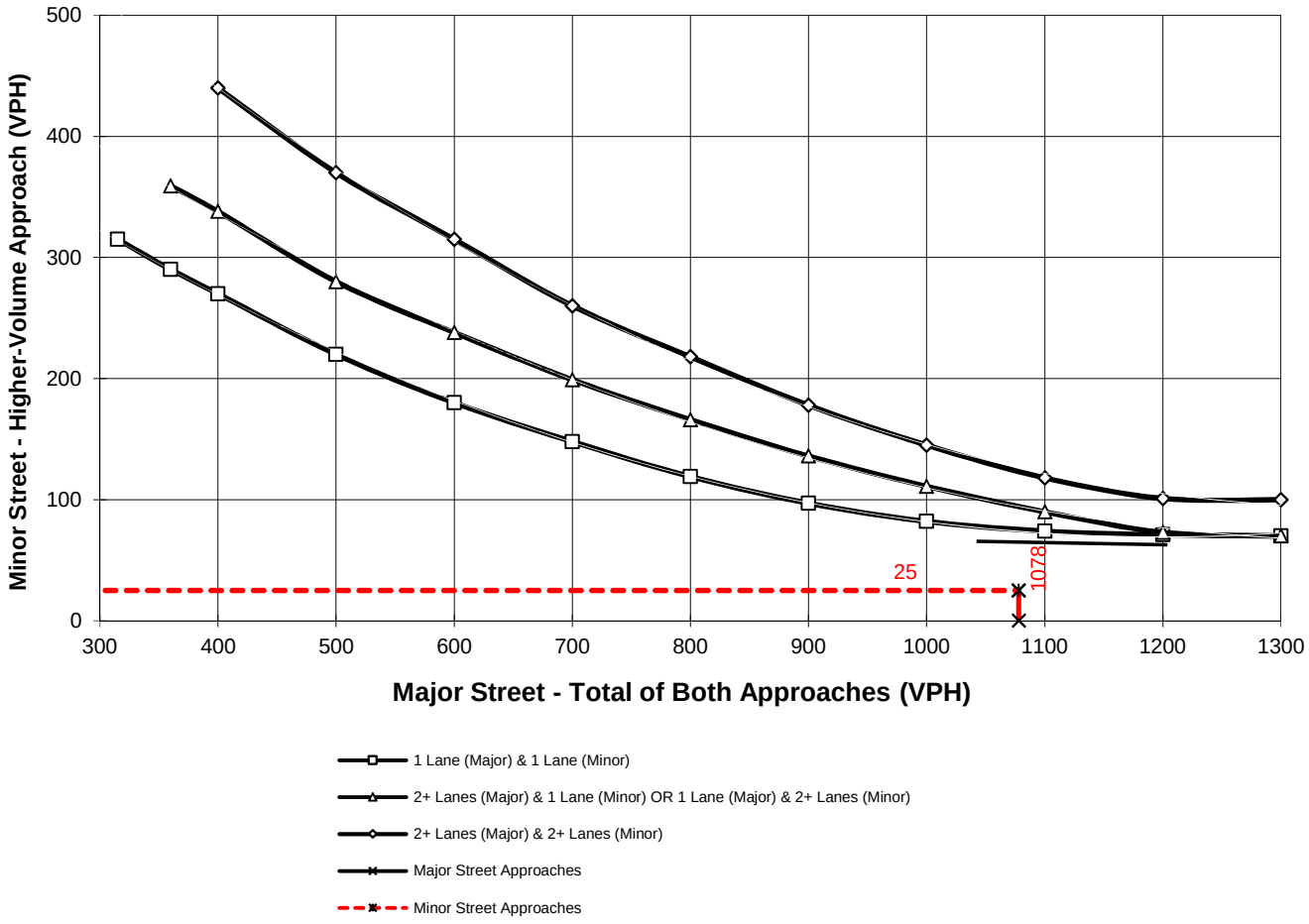
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Horizon Year 2035 With Project PM Peak Hour Warrants**

Major Street Name = **Masters Dr.** Total of Both Approaches (VPH) = **1,078**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Via Castilla St.** High Volume Approach (VPH) = **25**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #19

URBAN CROSSROADS

R:\UXRjobs_12100-12500\12554\Warrants\05 2035WP\19R_PM.xls\Fig 4C-4 (Rural Peak)

APPENDIX 7.1:

PROJECT EMPLOYMENT ESTIMATES

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Proposed Tem and Perm Jobs, Bedford Marketplace

Location	Tenant Prospect - Use	Size	Proposed Temp Jobs	Proposed Perm Jobs	Total Jobs Temp & Perm
MAJORS					
Major A	Fitness	38,000	50	30	80
Major B	Market	35,000	60	80	140
Major C	Drug Store	11,125	25	15	40
	Major Sub-Total	**84,125**	**135**	**125**	**260**
PADS					
Pad A	**Auto Spa - GL**	**3,600**	8	10	18
Pad B	**Fuel Facility - GL**	**4,000**	10	20	30
Pad C	Drive-Thru Coffee	2,200	12	18	30
Pad D	**Financial - GL**	**3,562**	4	12	16
Pad E	Credit Union	3,000	6	8	14
Pad F - Split	QSR	3,000	12	16	28
Pad F - Split	QSR	2,826	8	24	32
Pad G	Day Care	9,990	9	23	32
	Pad Sub-Total	**32,178**	**69**	**131**	**200**
SHOPS					
Shops 1	In-Line Shops	4,875	6	10	16
	Shops Sub-Total	**4,875**	**6**	**10**	**16**
RR - PADS					
RR - Pad A	**Sit-Down RR - GL**	**7,700**	10	25	35
RR - Pad B	**Sit-Down RR - GL**	**5,500**	12	16	28
	Restaurants Sub-Total	**13,200**	**22**	**41**	**63**
HOTEL					
Hotel	TBD - Sale	135 R	8	35	43
	Hotel Sub-Total	**135 R**	**8**	**35**	**43**
	SF Total Jobs	**134,373**	**232**	**307**	**539**
	Hotel Jobs		**8**	**35**	**43**
	SF + Hotel Total Jobs		**240**	**342**	**582**

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