

ONPOINT OCEANSIDE TRANSPORTATION IMPACT STUDY

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EXECUTIVE SUMMARY

The project is proposing to construct a gas station, car wash, and multiple restaurants and retail sites on an empty lot in the City of Oceanside. The project site is located south of State Route 76 (SR 76), north of Mission Avenue, and west of Foussat Road. The project is proposing to construct two access driveways; a right-in driveway on Foussat Road on the east side of the site and a new right-in right-out (RIRO) driveway on the south side of the site. The project would also take access from the west side through Via de la Valle.

The proposed site would consist of a gas station (12 fueling stations) with a 3,000-sf food mart, a car wash, retail sites totaling 7,980 sf, fast food restaurants totaling 2,500 sf, and a 2,320-sf high turnover restaurant. The mix of land uses on the site was calculated to generate 5,068 new daily trips, 213 AM peak-hour trips (109 in, 105 out), and 273 PM peak-hour trips (139 in, 134 out) after pass-by trip reductions were applied to peak hours.

A total of six scenarios was analyzed as part of the project:

1. Existing Conditions
2. Existing with Project Buildout Conditions
3. Opening Day Baseline Conditions
4. Opening Day with Project
5. Horizon Year (2030) Baseline Conditions
6. Horizon Year (2030) with Project Conditions

Intersection Analysis

Table E-1 displays the intersection delay and LOS at all the study intersections for the different scenarios analyzed.

Direct Impacts:

The proposed project was not found to result in any direct intersection impacts.

Cumulative Impacts:

The proposed project was found to have cumulative impacts at SR 76 and Airport Road, SR 76 and Foussat Road, and at the intersection of El Camino Real and Mission Avenue. The cumulative impacts along SR 76 at Airport Road and Foussat Road can be mitigated by paying fair share towards the widening of SR 76. Per the SR 76 Transportation Concept Report (February 2016) published by Caltrans, there are no plans to expand SR 76 to six lanes. The project applicant will pay their fair share for the widening of SR 76 to have an additional travel lane in each direction between Benet Road and Foussat Road and a second northbound right-turn lane at Foussat Road per the Oceanside General Plan Circulation Element (September 2012). A portion of the fair share will include the 30% design and capital cost estimate. This will mitigate the cumulative impacts at the intersections along SR 76 at Airport Road and Foussat Road.

The cumulative impact at El Camino Real and Mission Avenue can be mitigated by paying fair share towards restriping the northbound shared left-thru lane to a thru lane, modifying the traffic signal so that the north-south direction would provide protected left-turn phasing instead of split service, and extending the northbound left-turn pocket to 525 feet. The project applicant will design and construct the extension of the

northbound left-turn pocket to 525 feet at the intersection of El Camino Real and Mission Avenue. This will mitigate the cumulative impact at this location.

Roadway Segment Analysis

Table E-2 displays the daily traffic volumes and LOS at all the study roadway segments for the different scenarios analyzed.

Direct Impacts:

The proposed project was not found to result in any direct roadway segment impacts.

Cumulative Impacts:

The proposed project was found to have cumulative impacts at SR 76 from Benet Road to Douglas Drive. The cumulative impacts along SR 76 can be mitigated by paying fair share towards the proposed intersection mitigations at SR 76 at Airport Road and Foussat Road. Per the SR 76 Transportation Concept Report (February 2016) published by Caltrans, there are no plans to expand SR 76 to six lanes. The project applicant will pay their fair share for the widening of SR 76 to have an additional travel lane in each direction between Benet Road and Foussat Road and a second northbound right-turn lane at Foussat Road per the Oceanside General Plan Circulation Element (September 2012). A portion of the fair share will include the 30% design and capital cost estimate. This will mitigate the cumulative impacts at the roadway segments.

Table E-1 Summary of Peak-Hour Intersection LOS Analysis

Intersection		Peak Hour	Existing Conditions		Existing with Project Conditions		Opening Day Conditions		Opening Day with Project Conditions		Horizon Year Conditions		Horizon Year with Project Conditions	
			Delay (a)	LOS (b)	Delay (a)	LOS (b)	Delay (a)	LOS (b)	Delay (a)	LOS (b)	Delay (a)	LOS (b)	Delay (a)	LOS (b)
1	Airport Rd & SR 76	AM	54.6	D	54.0	D	61.8	E	62.1	E	155.0	F	151.6	F
		PM	45.8	D	50.1	D	52.7	D	55.0	D	127.4	F	135.1	F
2	Foussat Rd & SR 76	AM	77.5	E	74.5	E	88.7	F	85.7	F	187.2	F	181.4	F
		PM	41.8	D	49.0	D	45.5	D	55.0	D	82.8	F	94.4	F
3	Airport Rd & Mission Ave	AM	19.4	B	15.0	B	20.9	C	21.1	C	19.1	B	14.3	B
		PM	11.6	B	11.6	B	12.4	B	12.4	B	14.5	B	14.6	B
4	Roymar Rd & Mission Ave	AM	9.4	A	21.1	C	15.5	B	25.6	C	16.5	B	26.6	C
		PM	14.5	B	37.3	D	23.9	C	44.5	D	23.8	C	41.9	D
5	Foussat Rd & Mission Ave	AM	15.8	B	15.8	B	15.7	B	15.9	B	18.7	B	19.7	B
		PM	18.4	B	15.6	B	15.7	B	18.3	B	20.9	C	21.3	C
6	Copperwood Wy & Mission Ave	AM	6.4	A	6.2	A	6.2	A	6.1	A	6.2	A	6.1	A
		PM	8.1	A	8.0	A	8.0	A	7.9	A	8.6	A	8.5	A
7	Frontier Dr & Mission Ave	AM	10.9	B	10.9	B	10.9	B	10.9	B	11.8	B	11.9	B
		PM	4.6	A	4.5	A	4.5	A	4.5	A	4.6	A	4.6	A
8	Mission Ave & Fireside St	AM	6.3	A	6.2	A	6.2	A	6.2	A	10.1	B	10.2	B
		PM	15.8	B	15.6	B	15.6	B	15.5	B	16.7	B	16.7	B
9	El Camino Real & Mission Ave	AM	40.7	D	41.2	D	41.5	D	42.0	D	55.4	E	56.2	E
		PM	59.0	E	59.6	E	60.6	E	61.2	E	90.5	F	93.7	F
10	Douglas Dr & Mission Ave	AM	18.5	B	18.5	B	18.8	B	18.8	B	44.7	D	45.2	D
		PM	19.4	B	19.4	B	19.9	B	19.9	B	117.0	F	117.3	F
11	Roymar Rd & Via de la Valle	AM	9.0	A	9.7	A	9.0	A	9.7	A	9.1	A	9.7	A
		PM	9.1	A	10.0	B	9.1	A	10.0	B	9.2	A	10.1	B
12	Mission Ave & Project Dwy 1	AM	Intersection does not exist in this scenario.		15.0	C	Intersection does not exist in this scenario.		15.6	C	Intersection does not exist in this scenario.		18.2	C
		PM			13.1	B			13.7	B			15.4	C

Notes:

Bold values indicate intersections operating at LOS E or F. **Bold and shaded** values indicate project significant impact.

- (a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.
- (b) LOS calculations are based on the methodology outlined in the 6th Edition Highway Capacity Manual and performed using Synchro 10.

Table E-2 Summary of Roadway Segment Analysis

Roadway Segment	Roadway Classification	LOS E Capacity	Existing Conditions		Existing with Project Conditions		Opening Day Conditions		Opening Day with Project Conditions		Horizon Year Conditions		Horizon Year with Project Conditions	
			ADT	LOS	ADT	LOS	ADT	LOS	ADT	LOS	ADT	LOS	ADT	LOS
State Route 76 (SR 76)														
between Benet Rd and Airport Rd	4-Lane Expressway	60,000	49,715	C	50,982	D	51,563	D	52,830	D	64,633	F	65,900	F
between Airport Rd and Foussat Rd	4-Lane Expressway	60,000	48,509	C	49,776	C	49,912	C	51,179	D	64,633	F	65,900	F
between Foussat Rd and Douglas Dr	4-Lane Expressway	60,000	50,264	D	51,531	D	52,361	D	53,628	D	58,533	E	59,800	E
Mission Avenue														
between Airport Rd and Roymar Rd	4-Lane Major	40,000	21,751	C	22,765	C	23,143	C	24,157	C	26,186	C	27,200	C
between Roymar Rd and Foussat Rd	4-Lane Major	40,000	22,848	C	25,382	C	24,406	C	26,940	C	24,666	C	27,200	C
between Foussat Rd and Frontier Dr	4-Lane Major	40,000	22,841	C	23,855	C	23,395	C	24,409	C	28,386	C	29,400	C
between Frontier Dr and Fireside St	4-Lane Major	40,000	23,694	C	24,708	C	24,280	C	25,294	C	28,386	C	29,400	C
between Fireside St and El Camino Real	4-Lane Major	40,000	23,046	C	24,060	C	23,632	C	24,646	C	28,386	C	29,400	C
between El Camino Real and Douglas Dr	4-Lane Major	40,000	17,820	A	18,073	A	18,578	A	18,831	A	29,147	C	29,400	C
Foussat Road														
between SR 76 and Mission Ave	4-In Secondary	25,000	5,821	A	7,975	A	6,534	A	8,688	A	6,559	A	8,713	A
Roymar Road														
between Via de la Valle and Mission Ave	2-In Collector	10,000	1,258	A	2,525	A	1,258	A	2,525	A	1,418	A	2,685	A
Via de la Valle														
east of Roymar Rd	2-In Collector	10,000	296	A	1,563	A	296	A	1,563	A	334	A	1,601	A

Notes:

Bold values indicate intersections operating at LOS E or F. **Bold and shaded** values indicate project significant impact.

(a) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

1 INTRODUCTION

The following transportation impact study has been prepared to determine and evaluate potential traffic impacts associated with the OnPoint Oceanside project and to recommend mitigation measures for any impacts due to the project.

1.1 PROJECT DESCRIPTION

The project is proposing to construct a gas station, car wash, and multiple restaurants and retail sites on an empty lot in the City of Oceanside. The project site is located south of State Route 76 (SR 76), north of Mission Avenue, and west of Foussat Road. The project is proposing to construct two access driveways; a right-in driveway on Foussat Road on the east side of the site and a new right-in right-out (RIRO) driveway on the south side of the site. The project would also take access from the west side through Via de la Valle. **Figure 1-1** shows the preliminary site plan for the proposed project. **Figure 1-2** shows the location of the project site in its regional context.

1.2 ANALYSIS SCENARIOS

A total of six scenarios will be analyzed as part of the project, which are listed below:

Existing Conditions

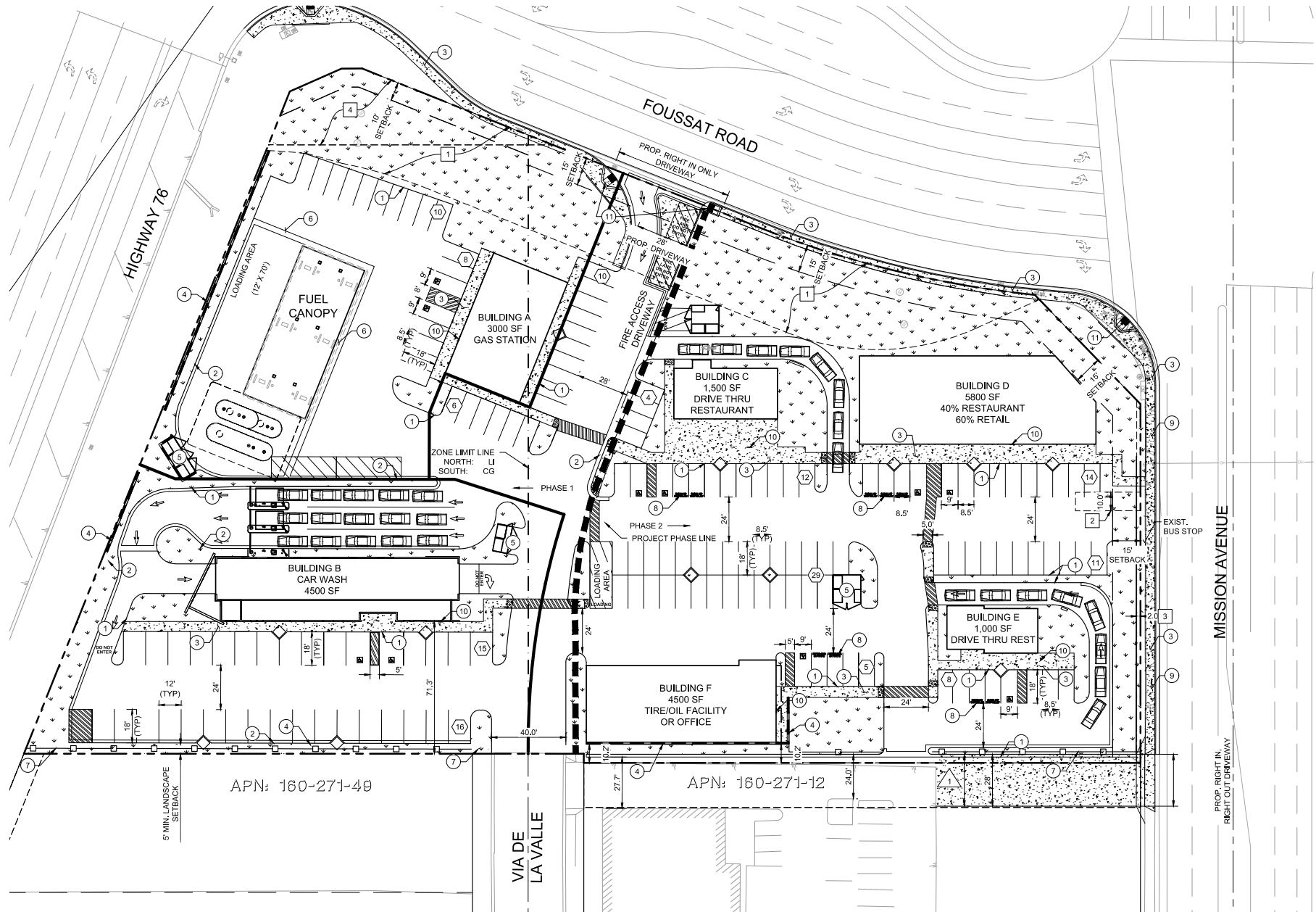
- 1) Existing Conditions: Represents the traffic conditions of the existing street network.
- 2) Existing with Project Buildout Conditions: Represents the existing traffic conditions with the proposed project. Project impacts under this scenario are considered direct impacts.

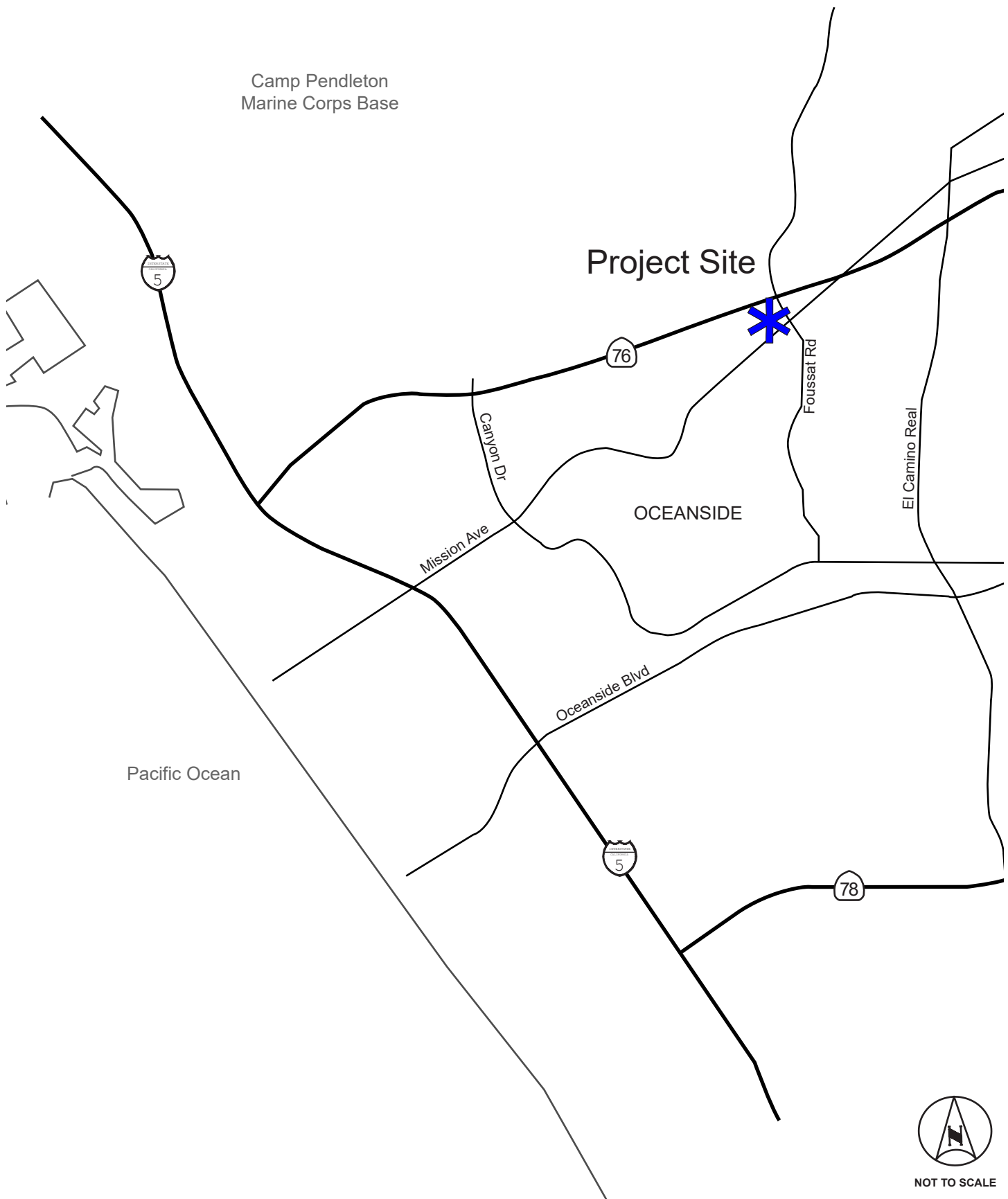
Opening Day Conditions

- 3) Opening Day Baseline Conditions: Represents the traffic conditions of the street network assumed to be in place under Opening Day conditions.
- 4) Opening Day with Project Conditions: Represents the Opening Day traffic conditions with the proposed project in place. Comparison of this scenario to the Opening Day Baseline Conditions scenario determines direct impacts.

Horizon Year Conditions (2030)

- 5) Horizon Year Baseline Conditions: Represents the traffic conditions of the street network assumed to be in place under Horizon Year (2030) conditions.
- 6) Horizon Year with Project Conditions: Represents the Horizon Year traffic conditions with the proposed project in place. Comparison of this scenario to the Horizon Year Baseline Conditions scenario determines cumulative impacts.





2 METHODOLOGY

The following section describes the methodology used to forecast traffic data, determine study intersections, perform capacity analysis, and determine significant impacts.

2.1 STUDY AREA

The study area was determined based on the project's trip assignment and conversations with City of Oceanside staff. The study area reflects the main access routes to and from the project site. The twelve (12) intersections identified for evaluation are shown in **Table 2-1**. The Project Driveway 2 on Foussat Road would be a right-in entrance only and would not have any conflicting movements, therefore this intersection was not included for evaluation.

Table 2-1 Study Intersections

#	Intersection	Traffic Control
1	Airport Road & State Route 76 (SR 76)	Traffic Signal
2	Foussat Road & State Route 76 (SR 76)	Traffic Signal
3	Airport Road & Mission Avenue	Traffic Signal
4	Royamar Road & Mission Avenue	Traffic Signal
5	Foussat Road & Mission Avenue	Traffic Signal
6	Copperwood Way & Mission Avenue	Traffic Signal
7	Frontier Drive & Mission Avenue	Traffic Signal
8	Fireside Street & Mission Avenue	Traffic Signal
9	El Camino Real & Mission Avenue	Traffic Signal
10	Douglas Drive & Mission Avenue	Traffic Signal
11	Royamar Road & Via de la Valle	Two-Way Stop Controlled
12	Project Driveway 1 & Mission Avenue	One-Way Stop Controlled

The twelve (12) roadway segments identified for evaluation include:

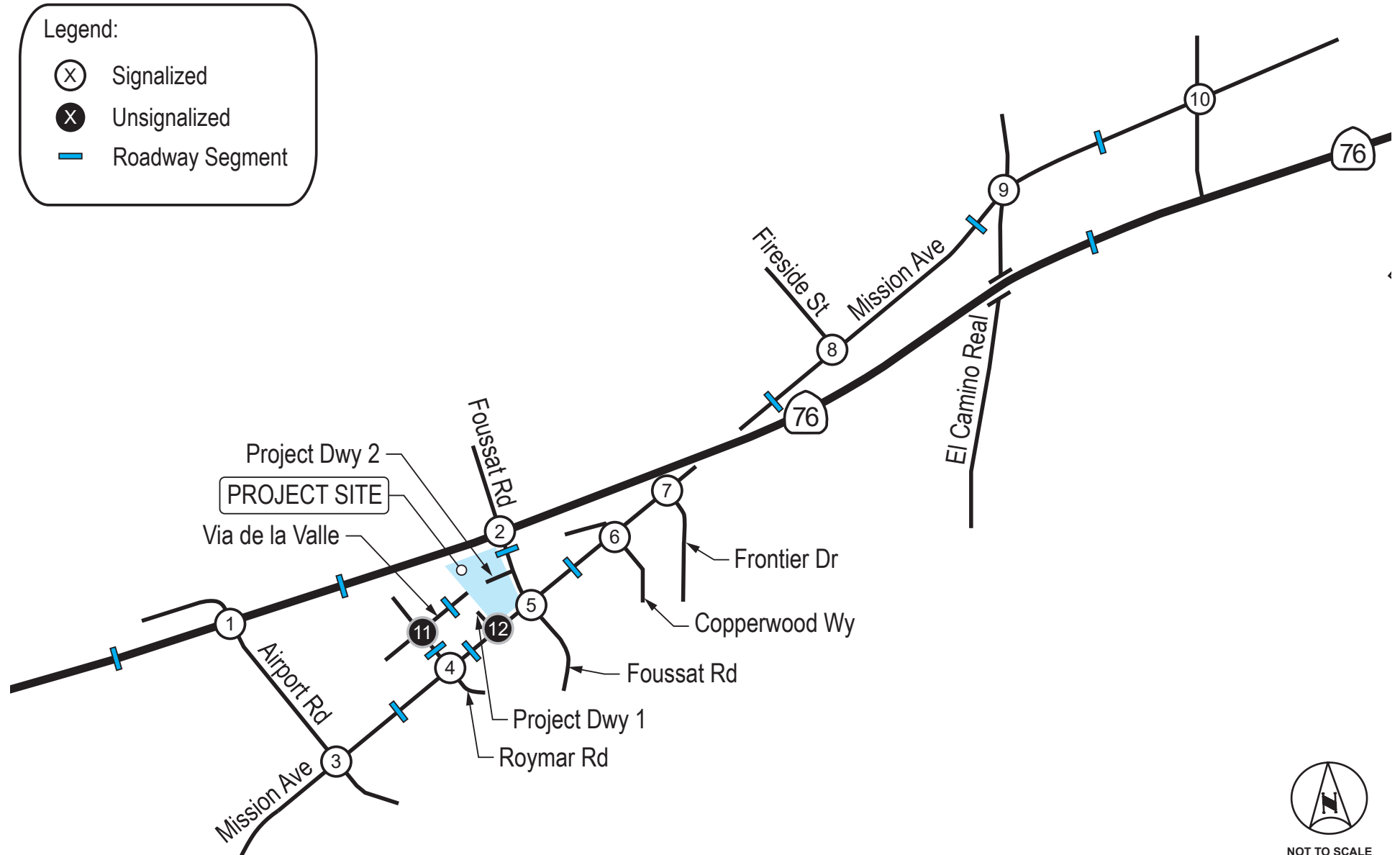
1. **State Route 76 (SR 76)** between Benet Road and Airport Road;
2. **State Route 76 (SR 76)** between Airport Road and Foussat Road;
3. **State Route 76 (SR 76)** between Foussat Road and Douglas Drive;
4. **Mission Avenue** between Airport Road and Roymar Road;
5. **Mission Avenue** between Roymar Road and Foussat Road;
6. **Mission Avenue** between Foussat Road and Frontier Drive;
7. **Mission Avenue** between Frontier Drive and Fireside Street;
8. **Mission Avenue** between Fireside Street and El Camino Real;
9. **Mission Avenue** between El Camino Real and Douglas Drive;
10. **Foussat Road** between State Route 76 (SR 76) and Mission Avenue;
11. **Roymar Road** between Via de la Valle and Mission Avenue; and
12. **Via de la Valle** east of Roymar Road.

The study area is illustrated in **Figure 2-1**.

2.2 TRAFFIC VOLUME FORECASTING

To estimate the Horizon Year turning movement volumes at the study intersections, the existing turning movements at each respective study intersection were factored up based on the projected ADT volumes along each segment, which were extracted from the City of Oceanside 2012 Circulation Element (*CE Figure 3.7*). Each respective movement was derived using an iterative approach that balances the inflows and outflows for each approach. The input values include the existing turning movement volumes and future year peak-hour approach and departure volumes along each leg of the intersection. The future peak-hour approach volumes would be estimated by applying the existing peak-hour factor (K-factor) and directional distributional percentage (D-factor) to the future ADT volumes along each approach. A more detailed description of the methodology used to forecast turning movement volumes is contained in National Cooperative Highway Research Program (NCHRP) 255 Highway Traffic Data for Urbanized Area Project Planning and Design, Chapter 8. An Excel model computes the forecast turning volumes from existing turning movement volumes and forecasted approach and departure volumes by the techniques described in NCHRP 255. As a conservative approach, if a turning movement volume produced by this model was less than the existing count for that movement, manual adjustments were made to assure that all forecast horizon year volumes would be equal or greater than the existing turning movement counts. A copy of the excel calculation worksheets are included in **Appendix A**.

Opening Day Baseline intersection and roadway segment volumes were developed by adding cumulative project volumes to the study intersections and roadways. The cumulative projects and traffic assignments were provided by the City of Oceanside and are included in **Appendix B**.



2.3 ANALYSIS PROCESS

The SANTEC/ITE Guidelines for Traffic Impact Studies [TIS] in the San Diego Region (2000) provides guidelines for preparing a traffic impact analysis. The analysis process includes determining the operations at the study intersections for the AM and PM peak periods and operations along the roadway segments. Intersection analyses were measured and quantified using Synchro 10 software using the 6th Edition Highway Capacity Manual (HCM) methodology. Roadway segments were measured and quantified by the applicable roadway classifications' planning-level capacity and ADT volume. Analysis results were compared to the SANTEC standards for significance to determine if the project has significant impacts.

2.3.1 SIGNALIZED AND UNSIGNALIZED INTERSECTIONS

To analyze the operations of both signalized and unsignalized intersections, Synchro 10 (Trafficware) was used for the analysis. Synchro 10 uses the methodologies outlined in the 6th Edition Highway Capacity Manual (HCM). The existing intersection peak-hour factor (PHF) was used for Existing and Opening Day scenarios. For the Horizon Year scenario, a PHF of 0.92 was used unless existing PHF was higher.

The 6th Edition Highway Capacity Manual (HCM) published by the Transportation Research Board establishes a system whereby highway facilities are rated for their ability to process traffic volumes. The terminology "level of service" is used to provide a "qualitative" evaluation based on certain "quantitative" calculations, which are related to empirical values.

Level of service (LOS) is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and loss of travel time. Specifically, LOS criteria for signalized intersections are stated in terms of the average control delay per vehicle for the peak 15-minute period within the hour analyzed. The average control delay includes initial deceleration delay, queue move-up time, and final acceleration time in addition to the stop delay.

LOS for unsignalized intersections is determined by the computed or measured control delay and is defined for each movement. At an all-way stop control intersection, the delay reported is the average control delay of all movements at the intersection. At a one-way or two-way stop control intersection, the delay reported represents the worst movement, which is typically the left-turn from the minor street approach.

The criteria for the various levels of service designations for signalized and unsignalized intersections are given in **Table 2-2**. Within the City of Oceanside, all intersections are considered deficient if they operate at LOS E or F.

Table 2-2 Level of Service (LOS) Criteria for Intersections

LOS	Signalized (Control Delay) (sec/veh) ^(a)	Unsignalized (Control Delay) (sec/veh) ^(b)	Description
A	≤10.0	≤10.0	Operations with very low delay and most vehicles do not stop.
B	>10.0 and ≤20.0	>10.0 and ≤15.0	Operations with good progression but with some restricted movement.
C	>20.0 and ≤35.0	>15.0 and ≤25.0	Operations where a significant number of vehicles are stopping with some backup and light congestion.
D	>35.0 and ≤55.0	>25.0 and ≤35.0	Operations where congestion is noticeable, longer delays occur, and many vehicles stop. The proportion of vehicles not stopping declines.
E	>55.0 and ≤80.0	>35.0 and ≤50.0	Operations where there is significant delay, extensive queuing, and poor progression.
F	>80.0	>50.0	Operations that are unacceptable to most drivers, when the arrival rates exceed the capacity of the intersection.

Source:

(a) 6th Edition Highway Capacity Manual, Chapter 19, Page 16, Exhibit 19-8

(b) 6th Edition Highway Capacity Manual, Chapter 20, Page 6, Exhibit 20-2

2.3.2 ROADWAY SEGMENTS

In order to establish planning-level capacities on study area roadway segments, **Table 2-3** has been developed by the City of Oceanside and is used as a reference. The segment traffic volumes under LOS E as shown in this table are considered at capacity because at LOS E the v/c Ratio is equal to 1.0.

Table 2-3 City of Oceanside Roadway Classification LOS & Capacity

Road Class	Lanes	A	B	C	D	E
Expressway	6	30,000	42,000	60,000	70,000	80,000
Expressway	4	25,000	35,000	50,000	55,000	60,000
Prime Arterial	6	25,000	35,000	50,000	55,000	60,000
6-Lane Major Arterial	6	20,000	28,000	40,000	45,000	50,000
5-Lane Major Arterial	5	17,500	24,500	35,000	40,000	45,000
Major Arterial	4	15,000	21,000	30,000	35,000	40,000
Collector	4	10,000	14,000	20,000	25,000	30,000
Secondary Collector (4-lane with TWLTL)	4	10,000	14,000	20,000	25,000	30,000
Secondary Collector (4-lane without TWLTL)	4	9,000	13,000	18,000	22,000	25,000
Collector (with TWLTL) (Commercial)	2	5,000	7,000	10,000	13,000	15,000
Collector (Residential)	2	4,000	5,500	7,500	9,000	10,000
Local Street	2	—	—	2,200	—	—

Source: City of Oceanside Circulation Element (2012), Table 3-3, Page 27.

2.4 SIGNIFICANCE DETERMINATION

The acceptable threshold standards to determine the significance of project impacts to intersections and roadway segments are outlined in the SANTEC/ITE Guidelines. The measurement of effectiveness (MOE) for intersections is based on allowable increases in delay measured in seconds while MOE for roadway segments are based on allowable increase to the volume-to-capacity (v/c) ratio.

At intersections that are expected to operate at LOS E or F without the project, the allowable increase in delay is two seconds with the addition of the project. If vehicle trips from a project cause the delay at an intersection to increase by more than the allowable threshold, this would be considered a significant project impact that requires mitigation. Also, if the project causes an intersection that was operating at an acceptable LOS to operate at LOS E or F, this would be considered a significant project impact that requires mitigation.

For roadway segments that are forecasted to operate at LOS E or F with the project, the allowable increase in v/c ratio is 0.02. If vehicle trips from a project cause the v/c ratio to increase by more than the allowable threshold, this would be considered a significant project traffic impact that requires mitigation. Also, if the project causes a street segment that was operating at an acceptable LOS to operate at LOS E or F, this would be considered a significant impact that requires mitigation.

Two classes of impacts are measured for significance: Direct Impacts and Cumulative Impacts. Direct traffic impacts are those projected to occur at the time the proposed study development becomes operational. During this time, other developments not presently operational but which are anticipated to be operational during the Opening Day scenario are included. Cumulative traffic impacts are those projected to occur at some point after the proposed study development becomes operational, such as during subsequent phases of the project, and when additional proposed developments in the area become operational (short-term cumulative) or when the affected community plan area reaches full planned build out (long-term cumulative). The project applicant would be responsible for mitigating direct impacts by improving operation to better than pre-project conditions. The project applicant would provide their fair share contribution toward installing improvements to mitigate cumulative impacts. A fair share contribution is based on the project's proportionate traffic contribution to future increased traffic volumes on a facility.

Table 2-4 shows the criteria for determining levels of significance for the different facilities in the study area.

Table 2-4 Significance Criteria for Facilities in Study Area

Facility	Measures of Effectiveness (MOE)	Significance Threshold ^(a)
Intersection	Seconds of Delay	>2.0 seconds at LOS E or F
Roadway Segment	ADT, v/c Ratio	>0.02 at LOS E or F

Notes: If a project adds any increment of delay to cause the operations of an intersection to go from LOS D to either LOS E or LOS F, then the project is considered to cause a significant impact.

(a) Significance threshold applies only when the type of facility operates at LOS E or F.

3 EXISTING CONDITIONS

This section summarizes the existing roadway circulation network, daily and peak-hour traffic volumes, and operations at the study intersections and roadway segments.

3.1 ROAD NETWORK

State Route 76 (SR 76) functions as an east-west four-lane expressway within the study area. SR 76 is owned and operated by Caltrans and has a posted speed limit of 55 miles per hour (mph). SR 76 does not provide sidewalk, bike lanes, or parking in both travel directions.

Mission Avenue functions as an east-west four-lane major arterial roadway within the study area. Mission Avenue is owned and operated by the City of Oceanside and the posted speed limit is 45 miles per hour. Mission Avenue is divided by a raised median and provides sidewalk and bike lanes in each travel direction. On-street parking is not allowed on Mission Avenue.

Foussat Road is a two-lane collector operating in the north-south direction through the City of Oceanside. Foussat Road within the study area expands to five thru-lanes with additional turn lanes as it approaches SR 76.

Roymar Road is a two-lane collector providing access to several industrial uses. On-street parking and sidewalk are provided in both direction and the assumed speed limit is 25 mph.

Via de la Valle is currently a 500-feet long roadway serving industrial and retail uses via Roymar Road. The road currently dead-ends to the east but would provide access to the proposed project. Sidewalk and on-street parking are present on both sides of the street. Existing traffic signal timing was provided by Caltrans and City of Oceanside and utilized in the Existing Condition and Opening Day scenarios. Oceanside traffic signal timing sheets are included in **Appendix C**.

Figure 3-1 shows the geometrics of the study intersections under Existing Conditions.

3.2 TRAFFIC VOLUMES

Existing AM (7:00 to 9:00 AM) and PM (4:00 to 6:00 PM) and 24-hour roadway machine counts peak-hour turning movement counts were conducted by Field Data Services of Arizona in April 2018. **Appendix D** contains the existing peak-hour traffic volume data at the study intersections and the existing ADT volume data for the roadway segments.

Figure 3-2 illustrates the Existing Conditions peak hour traffic volumes for the study intersections.

3.3 INTERSECTION ANALYSIS

Table 3-1 displays the LOS analysis results for the study intersections under Existing Conditions. As shown in the table, all study intersections operate at LOS D or better during both peak periods except at the following locations:

- SR 76 & Foussat Road (LOS E, AM peak period);
- El Camino Real & Mission Avenue (LOS E, PM peak period).

Appendix E contains the peak-hour intersections LOS calculation worksheets.

Table 3-1 Existing Conditions Peak-Hour Intersection LOS Analysis Summary

	Intersection	Peak Hour	Existing Conditions	
			Delay (a)	LOS (b)
1	Airport Rd & SR 76	AM	54.6	D
		PM	45.8	D
2	Foussat Rd & SR 76	AM	77.5	E
		PM	41.8	D
3	Airport Rd & Mission Ave	AM	19.4	B
		PM	11.6	B
4	Roymar Rd & Mission Ave	AM	9.4	A
		PM	14.5	B
5	Foussat Rd & Mission Ave	AM	15.8	B
		PM	18.4	B
6	Copperwood Wy & Mission Ave	AM	6.4	A
		PM	8.1	A
7	Frontier Dr & Mission Ave	AM	10.9	B
		PM	4.6	A
8	Mission Ave & Fireside St	AM	6.3	A
		PM	15.8	B
9	El Camino Real & Mission Ave	AM	40.7	D
		PM	59.0	E
10	Douglas Dr & Mission Ave	AM	18.5	B
		PM	19.4	B
11	Roymar Rd & Via de la Valle	AM	9.0	A
		PM	9.1	A
12	Mission Ave & Project Dwy 1	AM	Intersection does not exist in this scenario.	
		PM		

Notes:

Bold values indicate intersections operating at LOS E or F. **Bold and shaded** values indicate project significant impact.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the 6th Edition Highway Capacity Manual and performed using Synchro 10.

3.4 ROADWAY SEGMENT ANALYSIS

Table 3-2 displays the LOS analysis results for the study intersections under Existing Conditions. As shown in the table, the roadway segments would all operate at acceptable LOS D or better.

Table 3-2 Existing Conditions Roadway Segment Analysis Summary

Roadway Segment	Roadway Classification	LOS E Capacity	Existing Conditions		
			ADT	V/C Ratio	LOS
State Route 76 (SR 76)					
between Benet Rd and Airport Rd	4-Lane Expressway	60,000	49,715	0.829	C
between Airport Rd and Foussat Rd	4-Lane Expressway	60,000	48,509	0.808	C
between Foussat Rd and Douglas Dr	4-Lane Expressway	60,000	50,264	0.838	D
Mission Avenue					
between Airport Rd and Roymar Rd	4-Lane Major	40,000	21,751	0.544	C
between Roymar Rd and Foussat Rd	4-Lane Major	40,000	22,848	0.571	C
between Foussat Rd and Frontier Dr	4-Lane Major	40,000	22,841	0.571	C
between Frontier Dr and Fireside St	4-Lane Major	40,000	23,694	0.592	C
between Fireside St and El Camino Real	4-Lane Major	40,000	23,046	0.576	C
between El Camino Real and Douglas Dr	4-Lane Major	40,000	17,820	0.446	A
Foussat Road					
between SR 76 and Mission Ave	4-In Secondary	25,000	5,821	0.233	A
Roymar Road					
between Via de la Valle and Mission Ave	2-In Collector	10,000	1,258	0.126	A
Via de la Valle					
east of Roymar Rd	2-In Collector	10,000	296	0.030	A

Notes:

Bold values indicate intersections operating at LOS E or F. **Bold and shaded** values indicate project significant impact.

- (a) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

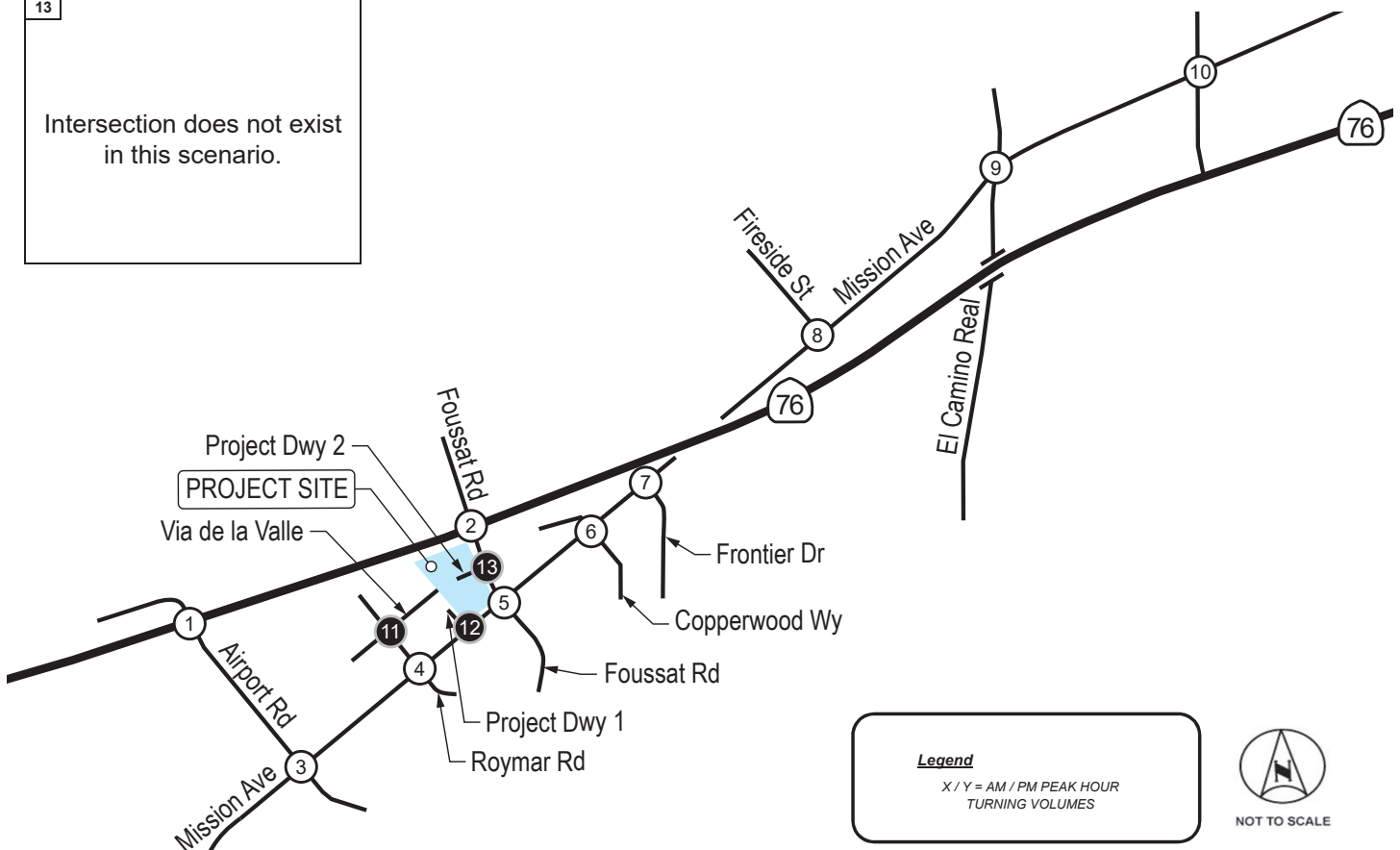
Airport Rd / SR 76	Foussat Rd / SR 76	Airport Rd / Mission Ave	Roymar Rd / Mission Ave
Foussat Rd / Mission Ave	Copperwood Wy / Mission Ave	Frontier Dr / Mission Ave	Fireside St / Mission Ave
El Camino Real / Mission Ave	Douglas Dr / Mission Ave	Roymar Rd / Via de la Valle	Project Dwy 1 / Mission Ave

Legend:

- Signalized
- Unsignalized
- Right-turn overlap

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1 11 / 40 31 / 69 38 / 39 Airport Rd 25 / 25 2049 / 1306 30 / 74 SR 76 24 / 23 1296 / 2068 37 / 46 Airport Rd 60 / 68 27 / 93 86 / 84	2 38 / 64 20 / 84 52 / 58 Foussat Rd 34 / 86 2038 / 1298 52 / 109 SR 76 29 / 104 1371 / 2013 44 / 84 Foussat Rd 37 / 62 26 / 47 51 / 92	3 16 / 35 17 / 11 32 / 33 Airport Rd 69 / 38 1022 / 832 7 / 15 Mission Ave 25 / 28 549 / 1229 6 / 11 Airport Rd 13 / 15 20 / 10 19 / 17	4 10 / 22 19 / 22 Roymar Rd 19 / 17 1070 / 810 46 / 43 Mission Ave 17 / 21 554 / 1235 22 / 33 Roymar Rd 22 / 37 46 / 104
5 65 / 80 70 / 121 32 / 61 Foussat Rd 30 / 39 1036 / 731 22 / 30 Mission Ave 44 / 51 521 / 1267 38 / 57 Foussat Rd 37 / 40 79 / 94 35 / 29	6 7 / 7 0 / 1 4 / 5 Copperwood Wy 8 / 7 1016 / 678 91 / 55 Mission Ave 7 / 4 468 / 1250 90 / 91 Copperwood Wy 47 / 96 6 / 2 41 / 108	7 1079 / 725 63 / 45 Mission Ave Frontier Dr 39 / 28 43 / 41	8 54 / 113 31 / 50 Fireside St 9 / 97 1081 / 642 Mission Ave 17 / 234 510 / 1010 Fireside St
9 406 / 288 730 / 414 86 / 165 El Camino Real 22 / 101 473 / 264 148 / 118 Mission Ave 142 / 367 264 / 579 111 / 141 El Camino Real 142 / 215 212 / 693 89 / 243	10 64 / 79 97 / 101 19 / 22 Douglas Dr 33 / 32 595 / 415 27 / 31 Mission Ave 52 / 65 369 / 955 55 / 50 Douglas Dr 50 / 58 102 / 89 21 / 23	11 16 / 35 4 / 6 Roymar Rd 5 / 3 15 / 9 Via de la Valle 26 / 27 9 / 13 Roymar Rd	12 Intersection does not exist in this scenario.
13 Intersection does not exist in this scenario.			



4 PROJECT TRAFFIC

The following section describes the trip generation, distribution, and assignment related to the proposed project.

4.1 TRIP GENERATION

Trip generation and pass-by rates for the project site were estimated using traffic generation rates from SANDAG's *Not So Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (April 2002). Pass-by trips are vehicle trips that are already on the road, which stop at a site (typically commercial/retail uses) along its route. Pass-by trips are not considered new trips generated by the site but should be accounted for in the analysis at the project site driveways. The utilized pass-by rates are listed below:

- 10% - Specialty Retail (PM only)
- 50% - Gas Stations
- 40% - Fast Food Restaurants
- 20% - Sit Down Restaurants (PM only)

The proposed site would consist of a gas station (12 fueling stations) with a 3,000-sf food mart, a car wash, retail sites totaling 7,980 sf, fast food restaurants totaling 2,500 sf, and a 2,320-sf high turnover restaurant. The mix of land uses on the site was calculated to generate 5,068 new daily trips, 213 AM peak-hour trips (109 in, 105 out), and 273 PM peak-hour trips (139 in, 134 out) after pass-by trip reductions were applied. **Table 4-1** summarizes the trip generation for the proposed site before and after pass-by trip reduction.

4.2 TRIP DISTRIBUTION

Traffic trip distribution for the proposed project was based on input from the City of Oceanside, proposed access locations, and the existing roadway network within the study area. The following is a general description of the estimated trip distribution for the site.

- 25% to/from the west via SR 76
- 20% to/from the west via Mission Avenue
- 25% to/from the east via SR 76
- 20% to/from the east via Mission Avenue
- 5% to/from the north via Foussat Road
- 5% to/from the south via Foussat Road

Figure 4-1 illustrates the estimated traffic distribution for the proposed project. **Figure 4-2** illustrates the estimated traffic distribution for the pass-by trips for the proposed project.

4.3 TRIP ASSIGNMENT

Based on the expected project trip distributions, daily, AM, and PM peak-hour project trips were assigned to the roadway network and through the study intersections. The trip assignment for the proposed project is presented in **Figure 4-3**. The pass-by assignment for the proposed project is presented in **Figure 4-4**.

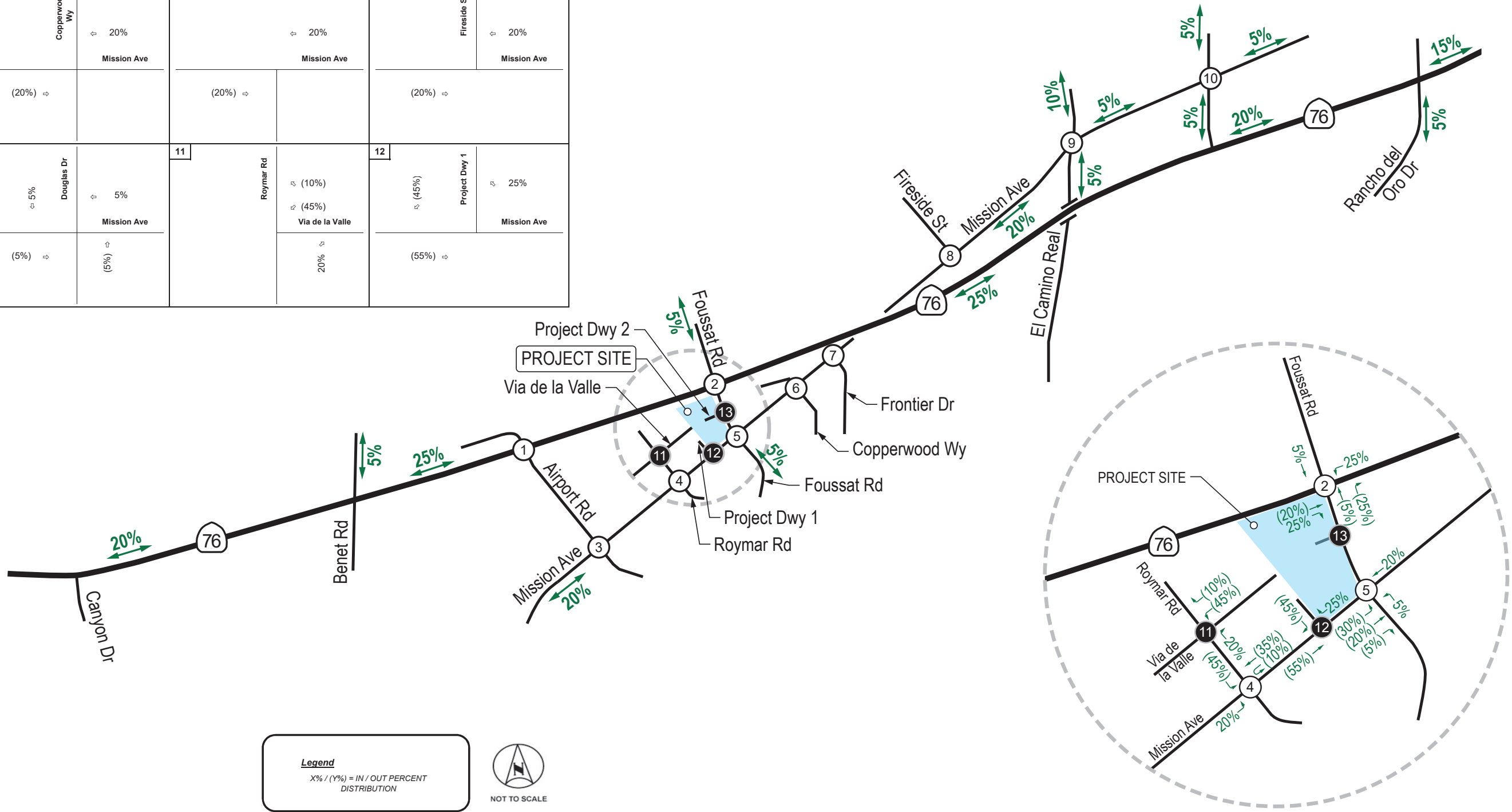
Table 4-1 Trip Generation Summary

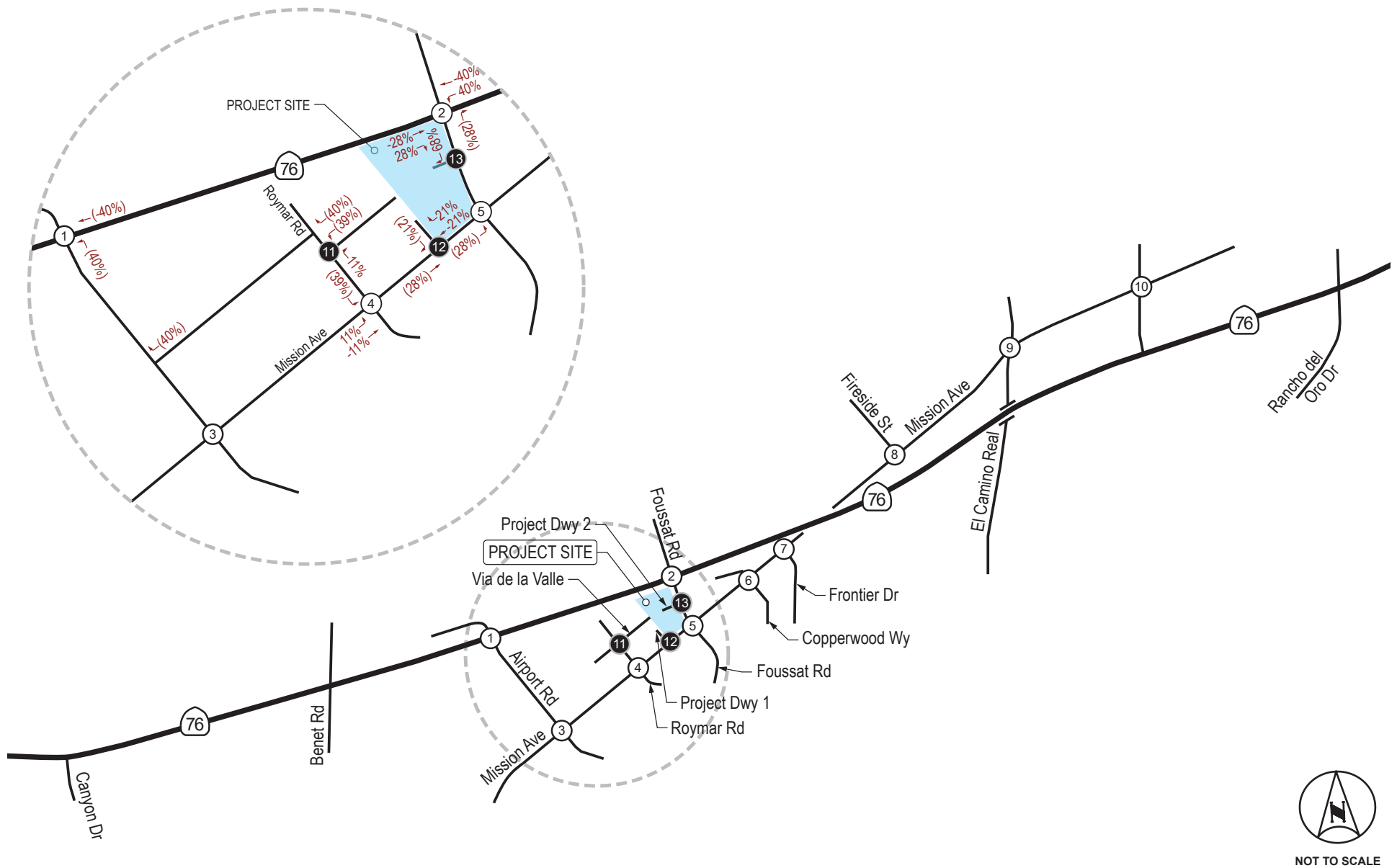
Land Use	SANDAG Land Use	Units ¹	Trip Rate ²	Daily Trips	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Proposed										
Building A: Gas Station + 3,000 sf Food Mart	Gas Station with/Food Mart	12 vfs	160 / vfs	1,920	67	67	134	77	77	154
Building B: Car Wash	Automatic	1.00 site	900 / site	900	18	18	36	41	40	81
Building C: Drive Thru Restaurant	Fast Food (w/drive-through)	1.50 ksf	650 / ksf	975	34	34	68	34	34	68
Building D: Restaurant	Sit-down, high turnover	2.32 ksf	160 / ksf	371	15	15	30	18	12	30
Building D: Retail	Specialty Retail/Strip Commercial	3.48 ksf	40 / ksf	139	3	1	4	6	7	13
Building E: Drive Thru Restaurant	Fast Food (w/drive-through)	1.00 ksf	650 / ksf	650	23	23	46	23	23	46
Building F: Tire/Oil Facility	Tire Store	4.50 ksf	25 / ksf	113	5	3	8	6	6	12
Proposed Total				5,068	165	161	326	205	199	404
Pass-by										
Specialty Retail (10%)								-1	-1	-3
Gas Station (50%)					-34	-34	-67	-39	-39	-77
Fast Food (40%)					-23	-23	-46	-23	-23	-46
Sit-down Restaurant (20%)								-4	-2	-6
Pass-by Sub-Total					-56	-56	-113	-66	-65	-131
Net Trip Generation				5,068	109	105	213	139	134	273

Notes:

1. ksf = Thousand Square Feet; vfs = vehicle fueling stations
2. Trip rates referenced from the Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, SANDAG, April 2002

1	Airport Rd		2	5% Foussat Rd	25% SR 76	3	Airport Rd	(15%) (20%) Mission Ave	4	(45%) Roymar Rd	(35%) (10%) Mission Ave
	25%	(25%)		25%	(5%) (25%)		20%		20%		
5	Foussat Rd	20% Mission Ave	6	Copperwood Wy	20% Mission Ave	7		20% Mission Ave	8	Fireside St	20% Mission Ave
	(30%) (20%) (5%)	5%		(20%)			(20%)		(20%)		
9	El Camino Real	5% Mission Ave	10	5% Douglas Dr	5% Mission Ave	11	Roymar Rd	(10%) (45%) Via de la Valle	12	Project Dwy 1	25% Mission Ave
	(10%) (5%) (5%)	5%		(5%)	(5%)		20%		(45%)		(55%)
13	Foussat Rd										
	55% Project Dwy 2										
		(30%)									





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1		2		3		4	
Airport Rd		Foussat Rd		Airport Rd		Roymar Rd	
SR 76		5 / 7		16 / 20 21 / 27		47 / 60	
27 / 35		27 / 35		22 / 28		22 / 28	
Airport Rd		5 / 7 26 / 34		Mission Ave		Mission Ave	
26 / 34		5 / 7 26 / 34		22 / 28		37 / 47 10 / 13	
5		6		7		8	
Foussat Rd		Copperwood Wy		Mission Ave		Fireside St	
22 / 28		22 / 28		22 / 28		22 / 28	
Mission Ave		Mission Ave		Mission Ave		Mission Ave	
31 / 40 21 / 27 5 / 7		21 / 27		21 / 27		21 / 27	
5 / 7		5 / 7		Frontier Dr		5 / 7	
9		10		11		12	
El Camino Real		Douglas Dr		Roymar Rd		Project Dwy 1	
11 / 14		5 / 7		10 / 13 47 / 60		47 / 60	
Mission Ave		Mission Ave		Via de la Valle		Mission Ave	
10 / 13 5 / 7 5 / 7		5 / 7		22 / 28		58 / 74	
5 / 7		5 / 7		22 / 28		27 / 35	
13							
Foussat Rd							
60 / 76							
Project Dwy 2							
31 / 40							

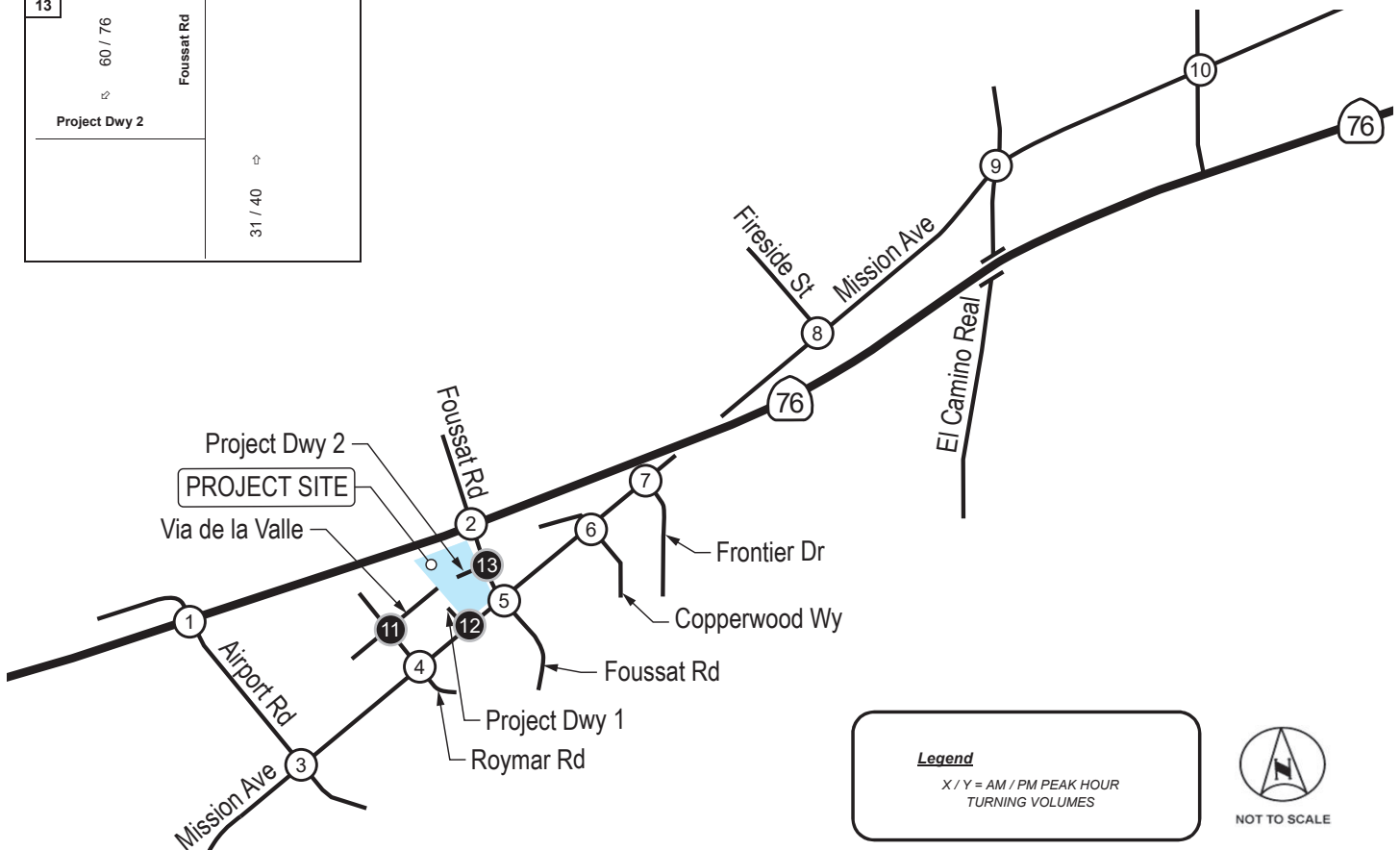
9

10

76

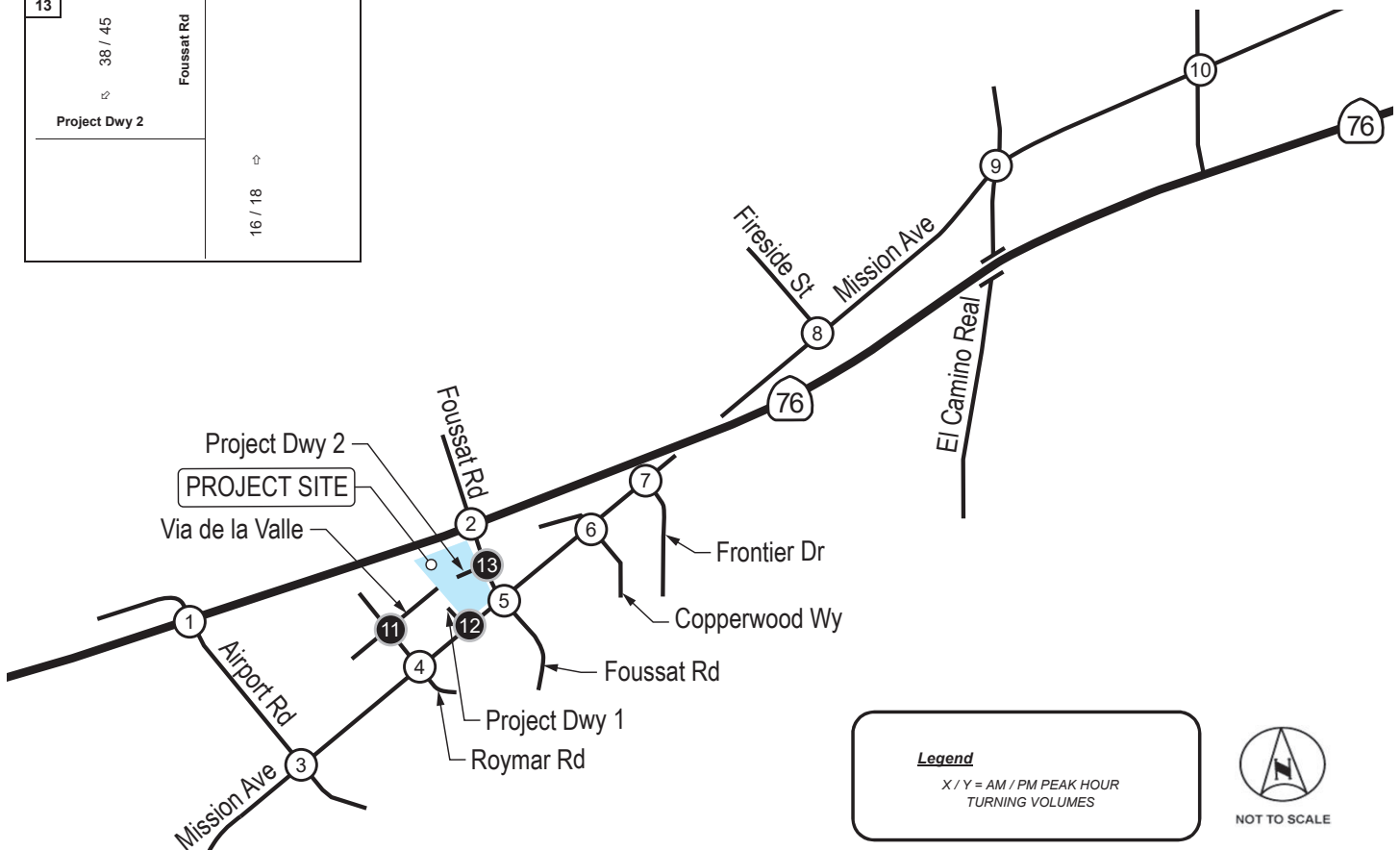
Fireside St

Frontier Ave



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1	Airport Rd ↑ -23 / -26 SR 76	2	Foussat Rd ↑ -23 / -26 23 / 26 SR 76	3	Airport Rd Mission Ave	4	22 / 25 Roymar Rd Mission Ave
	Airport Rd 23 / 26		-16 / -19 16 / 19				6 / 7 -6 / -7
5	Foussat Rd Mission Ave	6	Copperwood Wy Mission Ave	7	Frontier Dr Mission Ave	8	Fireside St Mission Ave
	16 / 18						
9	El Camino Real Mission Ave	10	Douglas Dr Mission Ave	11	Roymar Rd 23 / 26 22 / 25 Via de la Valle	12	12 / 14 Project Dwy 1 12 / 14 -12 / -14 Mission Ave
					6 / 7		16 / 18
13	38 / 45 Foussat Rd Project Dwy 2						
							16 / 18



5 EXISTING WITH PROJECT CONDITIONS

This section provides a description of the Existing Conditions with the addition of the proposed project.

5.1 ROAD NETWORK

As a project feature at the intersection of Foussat Road and Mission Avenue, the eastbound U-turn restriction and southbound right-turn overlap phase will be removed. With the exception of the right-in driveway on Foussat Road and the right-in right-out (RIRO) access driveway on Mission Avenue, no other changes to the roadway network were assumed with the proposed project.

5.2 TRAFFIC VOLUMES

Traffic volumes under Existing with Project Conditions were estimated by adding the project trips to the existing traffic volumes. **Figure 5-1** illustrates the Existing with Project Conditions traffic volumes.

5.3 INTERSECTION ANALYSIS

Table 5-1 displays the LOS analysis results for the study intersections under Existing Conditions with the proposed project. As shown in the table, all study intersections would continue to operate at acceptable LOS D or better except at the following intersections.

- SR 76 & Foussat Road (LOS E, AM peak period, without and with project)
- El Camino Real & Mission Avenue (LOS E, PM peak period, without and with project)

At these intersection, the change in delay due to the addition of project traffic does not exceed 2 seconds, therefore there are no significant impacts under Existing Conditions.

Many intersections show a decrease in delay with the addition of the proposed project. These intersections are busy intersections and the proposed project adds traffic primarily to movements with a lower delay than other movements, this brings the average intersection delay down as a result of the increase volume.

Appendix E contains the peak-hour intersections LOS calculation worksheets under Existing Conditions.

5.4 ROADWAY SEGMENT ANALYSIS

Table 5-2 displays the roadway segment analysis under Existing Conditions with the proposed project. As shown in the table, all roadway segments would continue to operate at LOS D or better with the addition of the project.

Table 5-1 Existing with Project Peak-Hour Intersection LOS Summary

Intersection		Peak Hour	Existing Conditions		Existing with Project Conditions	
			Delay (a)	LOS (b)	Delay (a)	LOS (b)
1	Airport Rd & SR 76	AM	54.6	D	54.0	D
		PM	45.8	D	50.1	D
2	Foussat Rd & SR 76	AM	77.5	E	74.5	E
		PM	41.8	D	49.0	D
3	Airport Rd & Mission Ave	AM	19.4	B	15.0	B
		PM	11.6	B	11.6	B
4	Roymar Rd & Mission Ave	AM	9.4	A	21.1	C
		PM	14.5	B	37.3	D
5	Foussat Rd & Mission Ave	AM	15.8	B	15.8	B
		PM	18.4	B	15.6	B
6	Copperwood Wy & Mission Ave	AM	6.4	A	6.2	A
		PM	8.1	A	8.0	A
7	Frontier Dr & Mission Ave	AM	10.9	B	10.9	B
		PM	4.6	A	4.5	A
8	Mission Ave & Fireside St	AM	6.3	A	6.2	A
		PM	15.8	B	15.6	B
9	El Camino Real & Mission Ave	AM	40.7	D	41.2	D
		PM	59.0	E	59.6	E
10	Douglas Dr & Mission Ave	AM	18.5	B	18.5	B
		PM	19.4	B	19.4	B
11	Roymar Rd & Via de la Valle	AM	9.0	A	9.7	A
		PM	9.1	A	10.0	B
12	Mission Ave & Project Dwy 1	AM	Intersection does not exist in this scenario.		15.0	C
		PM			13.1	B

Notes:

Bold values indicate intersections operating at LOS E or F. **Bold and shaded** values indicate project significant impact.

- (a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.
- (b) LOS calculations are based on the methodology outlined in the 6th Edition Highway Capacity Manual and performed using Synchro 10.

Table 5-2 Existing with Project Roadway Segment Analysis Summary

Roadway Segment	Roadway Classification	LOS E Capacity	Existing Conditions			Existing with Project Conditions		
			ADT	V/C Ratio	LOS	ADT	V/C Ratio	LOS
State Route 76 (SR 76)								
between Benet Rd and Airport Rd	4-Lane Expressway	60,000	49,715	0.829	C	50,982	0.85	D
between Airport Rd and Foussat Rd	4-Lane Expressway	60,000	48,509	0.808	C	49,776	0.83	C
between Foussat Rd and Douglas Dr	4-Lane Expressway	60,000	50,264	0.838	D	51,531	0.859	D
Mission Avenue								
between Airport Rd and Roymar Rd	4-Lane Major	40,000	21,751	0.544	C	22,765	0.569	C
between Roymar Rd and Foussat Rd	4-Lane Major	40,000	22,848	0.571	C	25,382	0.635	C
between Foussat Rd and Frontier Dr	4-Lane Major	40,000	22,841	0.571	C	23,855	0.596	C
between Frontier Dr and Fireside St	4-Lane Major	40,000	23,694	0.592	C	24,708	0.618	C
between Fireside St and El Camino Real	4-Lane Major	40,000	23,046	0.576	C	24,060	0.602	C
between El Camino Real and Douglas Dr	4-Lane Major	40,000	17,820	0.446	A	18,073	0.452	A
Foussat Road								
between SR 76 and Mission Ave	4-In Secondary	25,000	5,821	0.233	A	7,975	0.319	A
Roymar Road								
between Via de la Valle and Mission Ave	2-In Collector	10,000	1,258	0.126	A	2,525	0.253	A
Via de la Valle								
east of Roymar Rd	2-In Collector	10,000	296	0.030	A	1,563	0.156	A

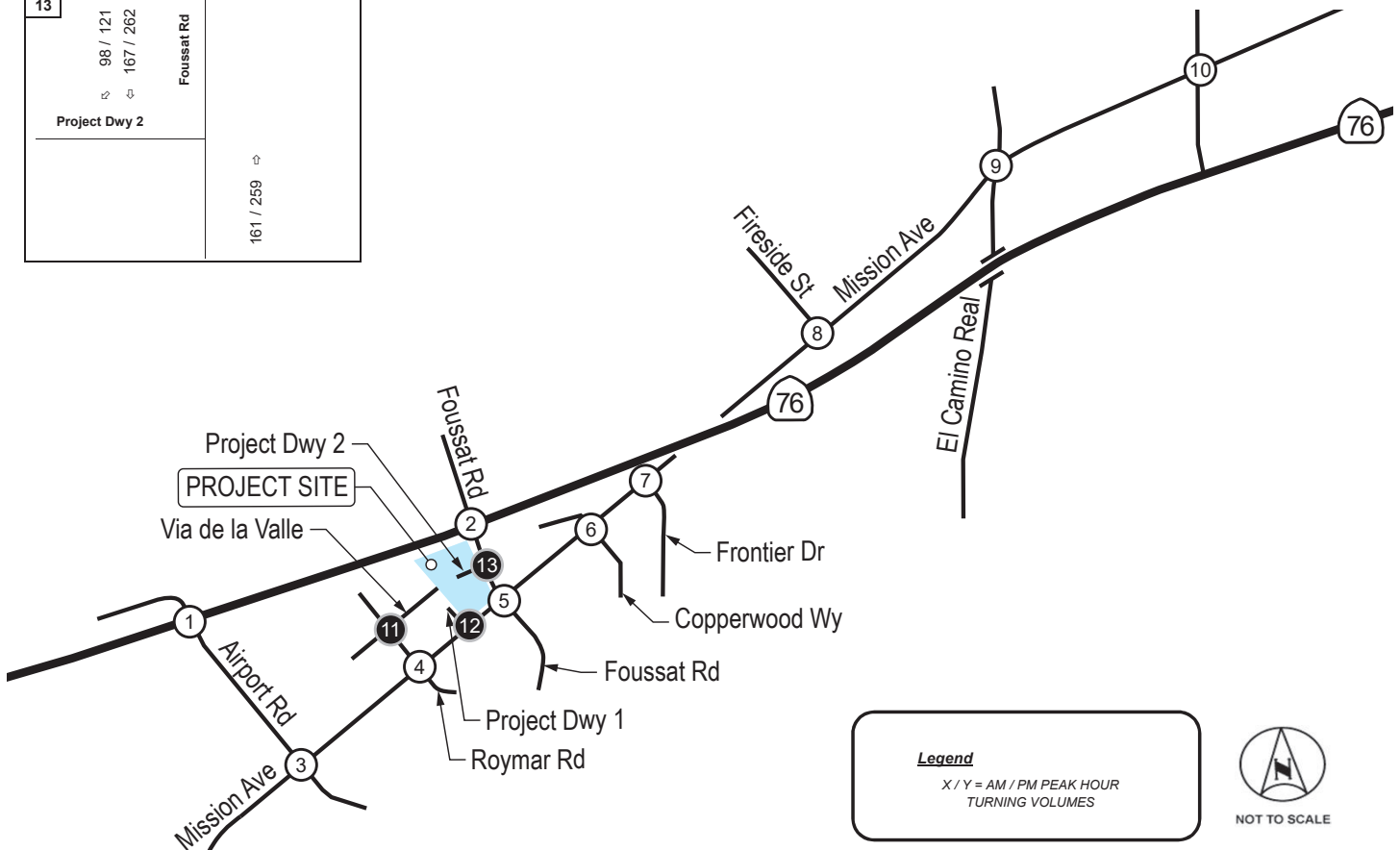
Notes:

Bold values indicate intersections operating at LOS E or F. **Bold and shaded** values indicate project significant impact.

(a) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

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1 11 / 40 31 / 69 38 / 39 Airport Rd 25 / 25 2026 / 1280 30 / 74 SR 76 24 / 23 1323 / 2103 37 / 46 109 / 128 27 / 93 86 / 84	2 38 / 64 25 / 91 52 / 58 Foussat Rd 34 / 86 2015 / 1272 102 / 170 SR 76 29 / 104 1355 / 1994 87 / 138 37 / 62 31 / 54 93 / 144	3 16 / 35 17 / 11 32 / 33 Airport Rd 85 / 58 1043 / 859 7 / 15 Mission Ave 25 / 28 571 / 1257 6 / 11 13 / 15 20 / 10 19 / 17	4 10 / 22 88 / 107 Roymar Rd 19 / 17 1107 / 857 56 / 56 Mission Ave 45 / 56 548 / 1228 22 / 33 22 / 37 46 / 104
5 65 / 80 70 / 121 32 / 61 Foussat Rd 30 / 39 1058 / 759 22 / 30 Mission Ave 91 / 109 542 / 1294 43 / 64 42 / 47 79 / 94 35 / 29	6 7 / 7 0 / 1 4 / 5 Copperwood Wy 8 / 7 1038 / 706 91 / 55 Mission Ave 7 / 4 489 / 1277 90 / 91 47 / 96 6 / 2 41 / 108	7 1101 / 753 63 / 45 Mission Ave 481 / 1242 45 / 45 Frontier Dr 39 / 28 43 / 41	8 54 / 113 31 / 50 Fireside St 9 / 97 1103 / 670 Mission Ave 17 / 234 531 / 1037
9 417 / 302 730 / 414 86 / 165 El Camino Real 22 / 101 478 / 271 148 / 118 Mission Ave 152 / 380 269 / 586 116 / 148 147 / 222 212 / 693 89 / 243	10 64 / 79 102 / 108 19 / 22 Douglas Dr 33 / 32 600 / 422 27 / 31 Mission Ave 52 / 65 374 / 962 55 / 50 50 / 58 107 / 96 21 / 23	11 16 / 35 4 / 6 Roymar Rd 38 / 42 84 / 94 Via de la Valle 26 / 27 37 / 48	12 59 / 74 Project Dwy 1 39 / 49 1123 / 856 Mission Ave 677 / 1467
13 98 / 121 167 / 262 Project Dwy 2 Foussat Rd 161 / 259			



6 OPENING DAY CONDITIONS

This section provides a description of Opening Day conditions with the addition of the proposed project.

6.1 ROAD NETWORK

No changes to the roadway network were assumed under this condition except the project changes described in Section 5.1.

6.2 CUMULATIVE PROJECTS

The cumulative projects to be included as part of this scenario were provided by the City of Oceanside and are listed below:

- Airport Road Office Building
- El Corazon
- Mission Cove
- Pacific Cove
- Villa Stora
- Villas as San Luis Rey Mission

The cumulative project trip information from their respective studies and the total cumulative project trip assignment information is provided in **Appendix B**.

6.3 TRAFFIC VOLUMES

Opening Day Baseline intersection and roadway segment volumes were developed by adding cumulative project volumes to the existing volumes at the study intersections and roadways. **Figure 6-1** illustrates the Opening Day Baseline Condition peak hour traffic volumes.

To determine the traffic volumes under the Opening Day with Project scenario, the net project trips were added to the Opening Day Baseline volumes within the study area. Opening Day with Project peak hour traffic volumes are shown in **Figure 6-2**.

6.4 INTERSECTION ANALYSIS

Table 6-1 displays the LOS analysis results for the study intersections under Opening Day with and without Project conditions. As shown in the table, all study intersections would continue to operate at acceptable LOS D or better except at the following locations:

- SR 76 & Airport Road (LOS E, AM peak period, without and with project);
- SR 76 & Foussat Road (LOS F, AM peak period, without and with project); and
- El Camino Real & Mission Avenue (LOS E, PM peak period, without and with project);

At these intersection, the change in delay due to the addition of project traffic does not exceed the allowable threshold, therefore the addition of project traffic does not create a significant impact at the study locations.

Many intersections show a decrease in delay with the addition of the proposed project. These intersections are busy intersections and the proposed project adds traffic primarily to movements with a lower delay than other movements, this brings the average intersection delay down as a result of the increase volume.

Appendix F contains the peak-hour intersections LOS calculation worksheets under Opening Year Conditions.

Table 6-1 Opening Day Peak-Hour Intersection LOS Summary

	Intersection	Peak Hour	Opening Day Conditions		Opening Day with Project Conditions	
			Delay (a)	LOS (b)	Delay (a)	LOS (b)
1	Airport Rd & SR 76	AM	61.8	E	62.1	E
		PM	52.7	D	55.0	D
2	Foussat Rd & SR 76	AM	88.7	F	85.7	F
		PM	45.5	D	55.0	D
3	Airport Rd & Mission Ave	AM	20.9	C	21.1	C
		PM	12.4	B	12.4	B
4	Roymar Rd & Mission Ave	AM	15.5	B	25.6	C
		PM	23.9	C	44.5	D
5	Foussat Rd & Mission Ave	AM	15.7	B	15.9	B
		PM	15.7	B	18.3	B
6	Copperwood Wy & Mission Ave	AM	6.2	A	6.1	A
		PM	8.0	A	7.9	A
7	Frontier Dr & Mission Ave	AM	10.9	B	10.9	B
		PM	4.5	A	4.5	A
8	Mission Ave & Fireside St	AM	6.2	A	6.2	A
		PM	15.6	B	15.5	B
9	El Camino Real & Mission Ave	AM	41.5	D	42.0	D
		PM	60.6	E	61.2	E
10	Douglas Dr & Mission Ave	AM	18.8	B	18.8	B
		PM	19.9	B	19.9	B
11	Roymar Rd & Via de la Valle	AM	9.0	A	9.7	A
		PM	9.1	A	10.0	B
12	Mission Ave & Project Dwy 1	AM	Intersection does not exist in this scenario.		15.6	C
		PM			13.7	B

Notes:

Bold values indicate intersections operating at LOS E or F. **Bold and shaded** values indicate project significant impact.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the 6th Edition Highway Capacity Manual and performed using Synchro 10.

6.5 ROADWAY SEGMENT ANALYSIS

Table 6-2 displays the roadway segments analysis under Opening Day with and without the proposed project conditions. As shown in the table, all roadway segments would continue to operate at LOS D or better with the addition of the project.

Table 6-2 Opening Day with Project Roadway Segment Analysis Summary

Roadway Segment	Roadway Classification	LOS E Capacity	Opening Day Conditions			Opening Day with Project Conditions		
			ADT	V/C Ratio	LOS	ADT	V/C Ratio	LOS
State Route 76 (SR 76)								
between Benet Rd and Airport Rd	4-Lane Expressway	60,000	51,563	0.859	D	52,830	0.881	D
between Airport Rd and Foussat Rd	4-Lane Expressway	60,000	49,912	0.832	C	51,179	0.853	D
between Foussat Rd and Douglas Dr	4-Lane Expressway	60,000	52,361	0.873	D	53,628	0.894	D
Mission Avenue								
between Airport Rd and Roymar Rd	4-Lane Major	40,000	23,143	0.579	C	24,157	0.604	C
between Roymar Rd and Foussat Rd	4-Lane Major	40,000	24,406	0.61	C	26,940	0.674	C
between Foussat Rd and Frontier Dr	4-Lane Major	40,000	23,395	0.585	C	24,409	0.61	C
between Frontier Dr and Fireside St	4-Lane Major	40,000	24,280	0.607	C	25,294	0.632	C
between Fireside St and El Camino Real	4-Lane Major	40,000	23,632	0.591	C	24,646	0.616	C
between El Camino Real and Douglas Dr	4-Lane Major	40,000	18,578	0.464	A	18,831	0.471	A
Foussat Road								
between SR 76 and Mission Ave	4-In Secondary	25,000	6,534	0.261	A	8,688	0.348	A
Roymar Road								
between Via de la Valle and Mission Ave	2-In Collector	10,000	1,258	0.126	A	2,525	0.253	A
Via de la Valle								
east of Roymar Rd	2-In Collector	10,000	296	0.030	A	1,563	0.156	A

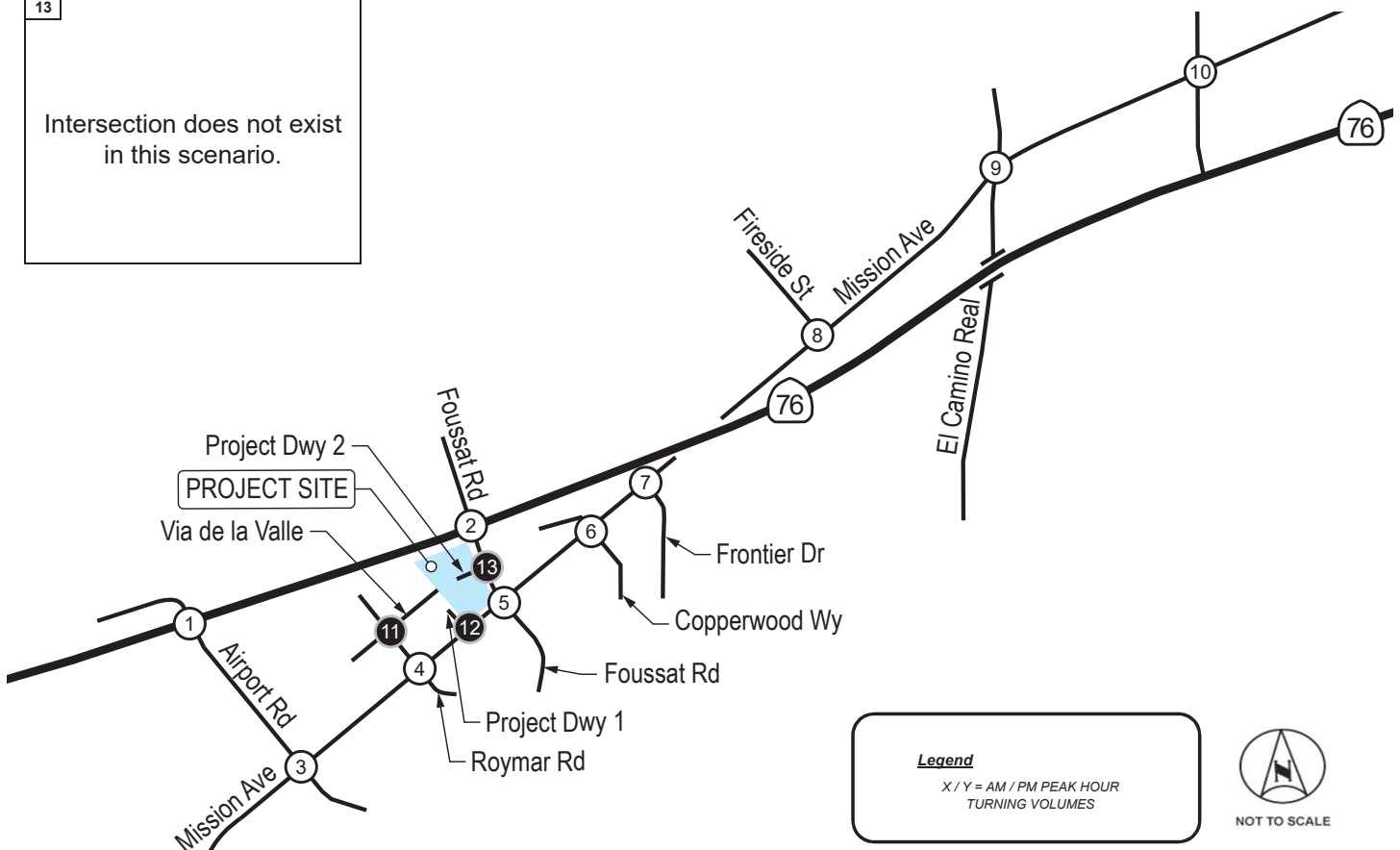
Notes:

Bold values indicate intersections operating at LOS E or F. **Bold and shaded** values indicate project significant impact.

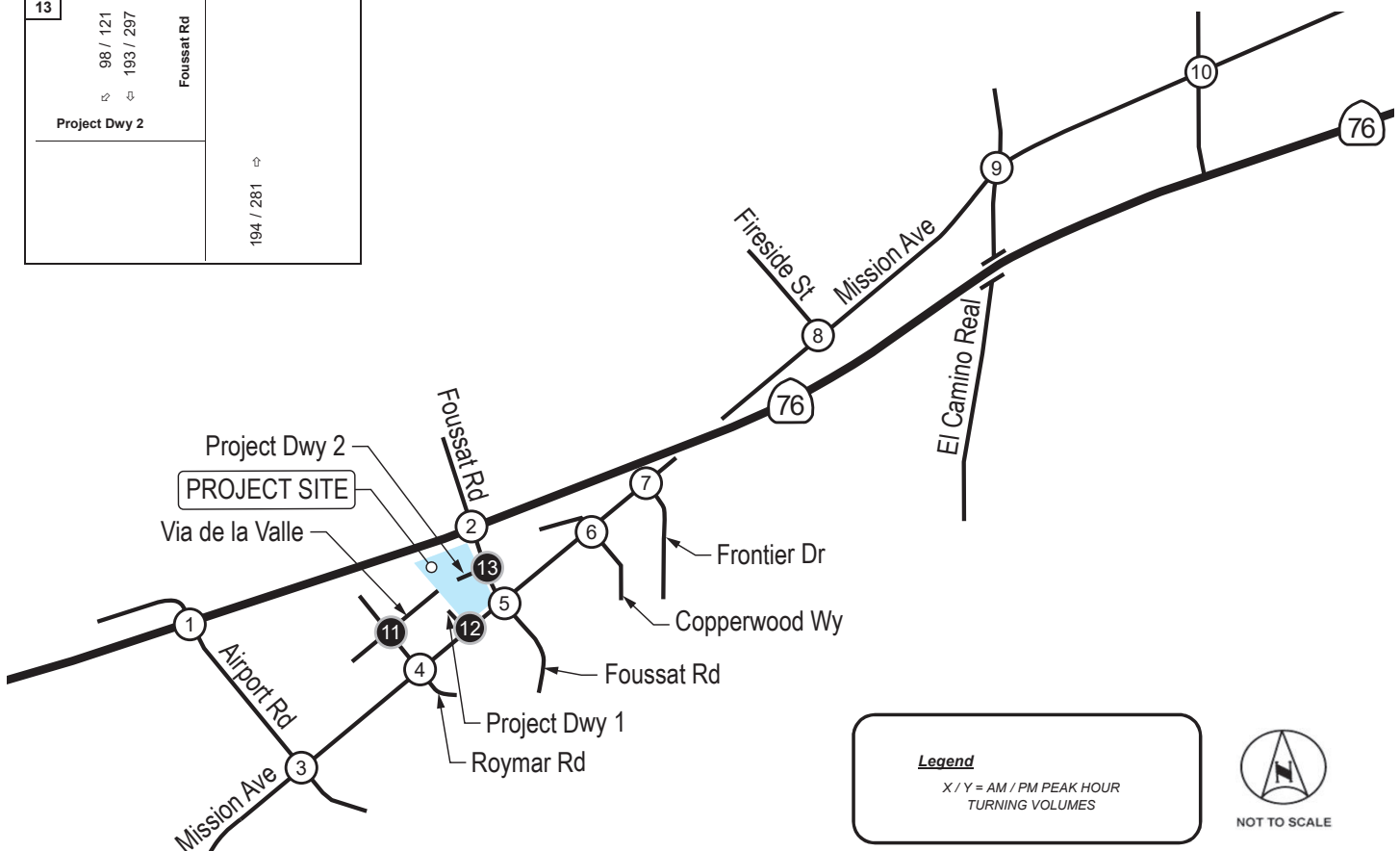
(a) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

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1 11 / 40 31 / 69 38 / 39 25 / 25 2108 / 1334 59 / 80 SR 76 24 / 23 1312 / 2132 81 / 71 81 / 109 27 / 93 89 / 108 25 / 25 2108 / 1334 59 / 80 SR 76	2 41 / 66 27 / 96 52 / 58 34 / 86 2123 / 1332 71 / 132 SR 76 30 / 106 1389 / 2099 44 / 84 37 / 62 38 / 56 72 / 105 34 / 86 2123 / 1332 71 / 132 SR 76	3 17 / 45 17 / 11 44 / 64 101 / 55 1063 / 858 7 / 15 Mission Ave 38 / 31 568 / 1272 6 / 11 13 / 15 20 / 10 19 / 17 101 / 55 1063 / 858 7 / 15 Mission Ave	4 10 / 22 19 / 22 19 / 17 1098 / 819 78 / 101 Mission Ave 17 / 21 560 / 1263 48 / 79 67 / 70 103 / 146 19 / 17 1098 / 819 78 / 101 Mission Ave
5 91 / 115 70 / 121 32 / 61 30 / 39 1065 / 753 22 / 30 Mission Ave 78 / 83 540 / 1297 48 / 65 43 / 50 79 / 94 35 / 29 30 / 39 1065 / 753 22 / 30 Mission Ave	6 7 / 7 0 / 1 4 / 5 8 / 7 1045 / 700 91 / 55 Mission Ave 7 / 4 487 / 1280 90 / 91 47 / 96 6 / 2 41 / 108 8 / 7 1045 / 700 91 / 55 Mission Ave	7 1108 / 747 63 / 45 Mission Ave 479 / 1245 45 / 45 39 / 28 43 / 41 1108 / 747 63 / 45 Mission Ave	8 54 / 113 31 / 50 9 / 97 1112 / 665 Mission Ave 17 / 234 529 / 1042 54 / 113 31 / 50 9 / 97 1112 / 665 Mission Ave
9 407 / 289 734 / 421 87 / 167 24 / 102 496 / 273 156 / 122 Mission Ave 143 / 368 270 / 602 115 / 148 145 / 222 215 / 700 91 / 252 24 / 102 496 / 273 156 / 122 Mission Ave	10 64 / 79 99 / 105 22 / 32 42 / 37 635 / 433 31 / 35 Mission Ave 52 / 65 380 / 997 55 / 50 50 / 58 106 / 92 24 / 28 42 / 37 635 / 433 31 / 35 Mission Ave	11 16 / 35 4 / 6 5 / 3 15 / 9 Via de la Valle 26 / 27 9 / 13 16 / 35 4 / 6 5 / 3 15 / 9 Via de la Valle	12 Intersection does not exist in this scenario.
13 Intersection does not exist in this scenario.			



1 11 / 40 31 / 69 38 / 39 24 / 23 1339 / 2167 81 / 71 25 / 25 2085 / 1308 59 / 80 SR 76 130 / 169 27 / 93 89 / 108 194 / 281	2 41 / 66 32 / 103 52 / 58 30 / 106 1373 / 2080 87 / 138 34 / 86 2100 / 1306 121 / 193 SR 76 37 / 62 43 / 63 114 / 157 194 / 281	3 17 / 45 17 / 11 44 / 64 38 / 31 590 / 1300 6 / 11 117 / 75 1084 / 885 7 / 15 Mission Ave 13 / 15 20 / 10 19 / 17 194 / 281	4 10 / 22 88 / 107 45 / 56 554 / 1256 48 / 79 19 / 17 1135 / 866 88 / 114 Mission Ave 67 / 70 103 / 146 194 / 281
5 91 / 115 70 / 121 32 / 61 125 / 141 561 / 1324 53 / 72 30 / 39 1087 / 781 22 / 30 Mission Ave 48 / 57 79 / 94 35 / 29 194 / 281	6 7 / 7 0 / 1 4 / 5 7 / 4 508 / 1307 90 / 91 8 / 7 1067 / 728 91 / 55 Mission Ave 47 / 96 6 / 2 41 / 108 194 / 281	7 500 / 1272 45 / 45 39 / 28 43 / 41 1130 / 775 63 / 45 Mission Ave 17 / 234 550 / 1069 194 / 281	8 54 / 113 31 / 50 17 / 234 550 / 1069 9 / 97 1134 / 693 Mission Ave 194 / 281
9 418 / 303 734 / 421 87 / 167 153 / 381 275 / 609 120 / 155 24 / 102 501 / 280 156 / 122 Mission Ave 150 / 229 215 / 700 91 / 252 194 / 281	10 64 / 79 104 / 112 22 / 32 52 / 65 385 / 1004 55 / 50 42 / 37 640 / 440 31 / 35 Mission Ave 50 / 58 111 / 99 24 / 28 194 / 281	11 16 / 35 4 / 6 26 / 27 37 / 48 38 / 42 84 / 94 Via de la Valle 740 / 1537 194 / 281	12 59 / 74 740 / 1537 39 / 49 1183 / 923 Mission Ave 194 / 281
13 98 / 121 193 / 297 Project Dwy 2 194 / 281	10 194 / 281	9 194 / 281	76 194 / 281



7 HORIZON YEAR CONDITIONS

This section provides a description of Horizon Year conditions with the addition of the project.

7.1 ROAD NETWORK

No changes to the roadway network were assumed under this condition except the project changes described in Section 5.1.

7.2 TRAFFIC VOLUMES

The Horizon Year Baseline average daily traffic (ADT) volumes were based on the 2030 volumes published in the City of Oceanside Circulation Element (2012), which were then used to develop the Horizon Year turning movement volumes using the methodology discussed in Section 2.2. **Figure 7-1** illustrates the Horizon Year Baseline conditions peak hour traffic volumes.

To determine the traffic volumes under the Horizon Year with Project scenario, the net project trips were added to the Horizon Year Baseline volumes in the study area. Horizon Year with Project peak hour traffic volumes are shown in **Figure 7-2**.

7.3 INTERSECTION ANALYSIS

Table 7-1 displays the LOS analysis results for the study intersections under Horizon Year with and without Project conditions. As shown in the table, all study intersections would continue to operate at acceptable LOS D or better except at the following locations:

- **SR 76 & Airport Road** (LOS F, AM peak period, without and with project; LOS F, PM peak period, without and with project);
- **SR 76 & Foussat Road** (LOS F, AM peak period, without and with project; LOS F, PM peak period, with project);
- **El Camino Real & Mission Avenue** (LOS E, AM peak period, without and with project; LOS F, PM peak period, with project); and
- Douglas Drive & Mission Avenue (LOS F, PM peak period, without and with project).

Intersections in **bold** represent intersections exceeding the allowable threshold, and would therefore be considered a significant impact. At the intersection of Douglas Drive and Mission Avenue, the change in delay due to the addition of project traffic does not exceed one second, therefore the addition of project traffic does not create a significant impact.

Many intersections show a decrease in delay with the addition of the proposed project. These intersections are busy intersections and the proposed project adds traffic primarily to movements with a lower delay than other movements, this brings the average intersection delay down as a result of the increase volume.

Appendix G contains the peak-hour intersections LOS calculation worksheets under Horizon Year Conditions.

Table 7-1 Horizon Year Peak-Hour Intersection LOS Summary

Intersection		Peak Hour	Horizon Year Conditions		Horizon Year with Project Conditions	
			Delay (a)	LOS (b)	Delay (a)	LOS (b)
1	Airport Rd & SR 76	AM	155.0	F	151.6	F
		PM	127.4	F	135.1	F
2	Foussat Rd & SR 76	AM	187.2	F	181.4	F
		PM	82.8	F	94.4	F
3	Airport Rd & Mission Ave	AM	19.1	B	14.3	B
		PM	14.5	B	14.6	B
4	Roymar Rd & Mission Ave	AM	16.5	B	26.6	C
		PM	23.8	C	41.9	D
5	Foussat Rd & Mission Ave	AM	18.7	B	19.7	B
		PM	20.9	C	21.3	C
6	Copperwood Wy & Mission Ave	AM	6.2	A	6.1	A
		PM	8.6	A	8.5	A
7	Frontier Dr & Mission Ave	AM	11.8	B	11.9	B
		PM	4.6	A	4.6	A
8	Mission Ave & Fireside St	AM	10.1	B	10.2	B
		PM	16.7	B	16.7	B
9	El Camino Real & Mission Ave	AM	55.4	E	56.2	E
		PM	90.5	F	93.7	F
10	Douglas Dr & Mission Ave	AM	44.7	D	45.2	D
		PM	117.0	F	117.3	F
11	Roymar Rd & Via de la Valle	AM	9.1	A	9.7	A
		PM	9.2	A	10.1	B
12	Mission Ave & Project Dwy 1	AM	Intersection does not exist in this scenario.		18.2	C
		PM			15.4	C

Notes:

Bold values indicate intersections operating at LOS E or F. **Bold and shaded** values indicate project significant impact.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the 6th Edition Highway Capacity Manual and performed using Synchro 10.

7.4 ROADWAY SEGMENT ANALYSIS

Table 7-2 displays the roadway segments analysis under Opening Day with and without the proposed project conditions. As shown in the table, all roadway segments would continue to operate at LOS D or better with the addition of the project except for the following roadway segments:

- **SR 76 between Benet Road and Airport Road** (LOS F, with and without project);
- **SR 76 between Airport Road and Foussat Road** (LOS F, with and without project); and
- **SR 76 between Foussat Road and Douglas Drive** (LOS E, with and without project).

Roadway segments in **bold** represent segments exceeding the allowable threshold and would therefore be considered a significant impact.

Table 7-2 Horizon Year Roadway Segment Analysis Summary

Roadway Segment	Roadway Classification	LOS E Capacity	Horizon Year Conditions			Horizon Year with Project Conditions		
			ADT	V/C Ratio	LOS	ADT	V/C Ratio	LOS
State Route 76 (SR 76)								
between Benet Rd and Airport Rd	4-Lane Expressway	60,000	64,633	1.077	F	65,900	1.098	F
between Airport Rd and Foussat Rd	4-Lane Expressway	60,000	64,633	1.077	F	65,900	1.098	F
between Foussat Rd and Douglas Dr	4-Lane Expressway	60,000	58,533	0.976	E	59,800	0.997	E
Mission Avenue								
between Airport Rd and Roymar Rd	4-Lane Major	40,000	26,186	0.655	C	27,200	0.68	C
between Roymar Rd and Foussat Rd	4-Lane Major	40,000	24,666	0.617	C	27,200	0.68	C
between Foussat Rd and Frontier Dr	4-Lane Major	40,000	28,386	0.710	C	29,400	0.735	C
between Frontier Dr and Fireside St	4-Lane Major	40,000	28,386	0.710	C	29,400	0.735	C
between Fireside St and El Camino Real	4-Lane Major	40,000	28,386	0.710	C	29,400	0.735	C
between El Camino Real and Douglas Dr	4-Lane Major	40,000	29,147	0.729	C	29,400	0.735	C
Foussat Road								
between SR 76 and Mission Ave	4-In Secondary	25,000	6,559	0.262	A	8,713	0.349	A
Roymar Road								
between Via de la Valle and Mission Ave	2-In Collector	10,000	1,418	0.142	A	2,685	0.269	A
Via de la Valle								
east of Roymar Rd	2-In Collector	10,000	334	0.033	A	1,601	0.16	A

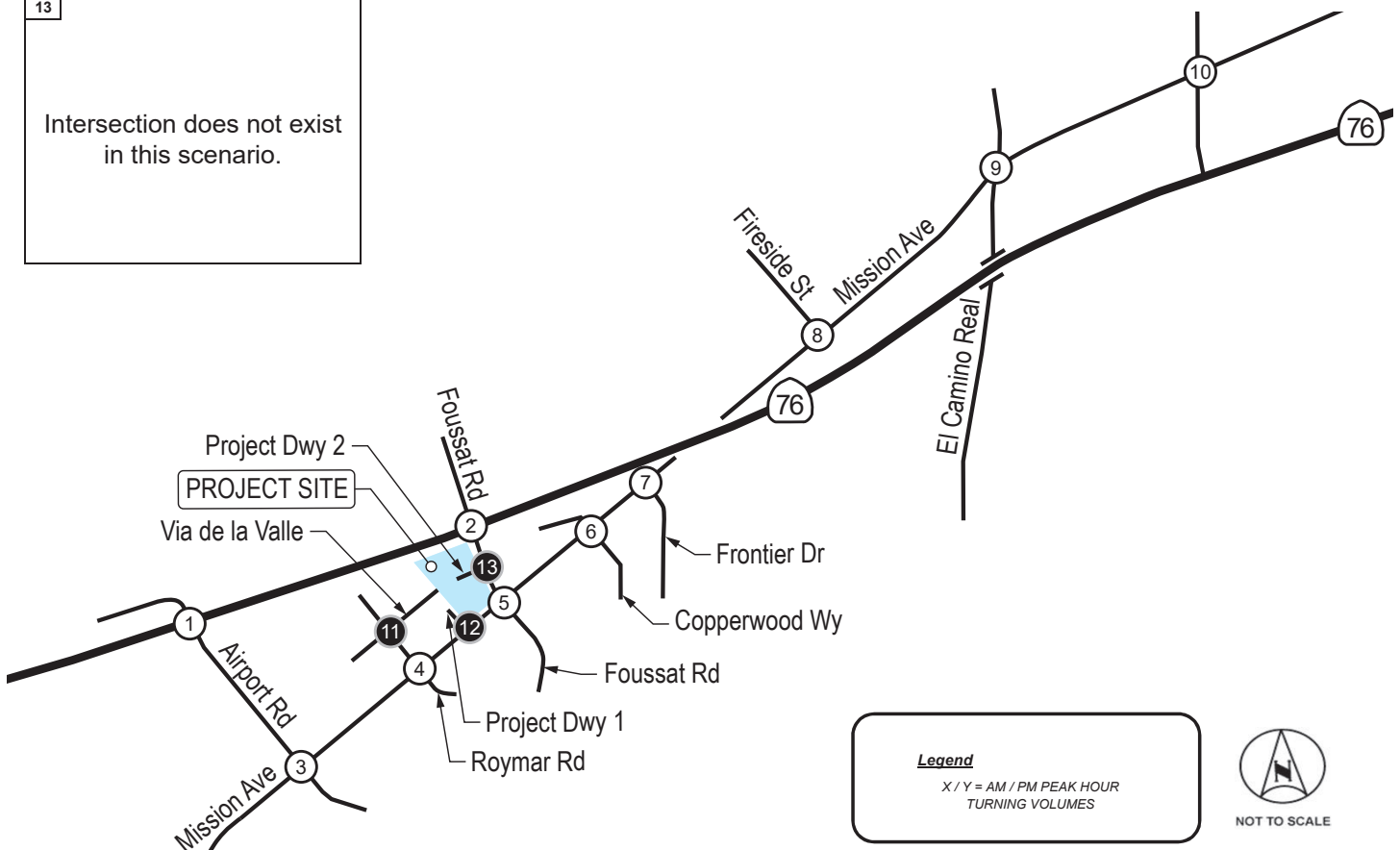
Notes:

Bold values indicate intersections operating at LOS E or F. **Bold and shaded** values indicate project significant impact.

(a) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

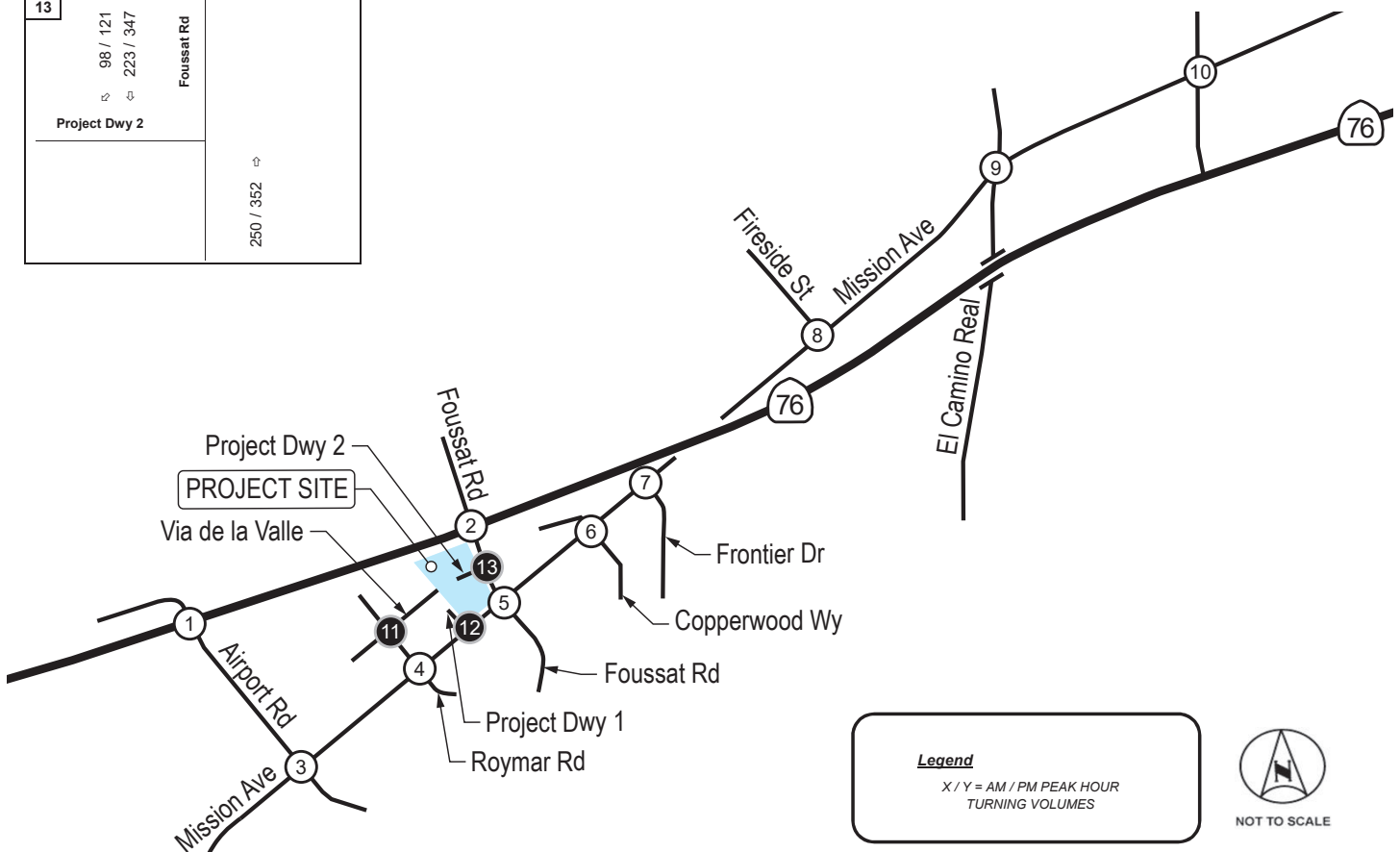
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1 13 / 41 31 / 69 49 / 59 36 / 39 2742 / 1756 59 / 99 SR 76 26 / 27 1765 / 2791 81 / 71 81 / 109 27 / 93 116 / 115	2 90 / 127 27 / 96 52 / 58 34 / 86 2653 / 1700 71 / 132 SR 76 64 / 186 1689 / 2521 95 / 177 93 / 133 38 / 56 72 / 105	3 25 / 50 17 / 11 44 / 64 101 / 55 1319 / 1078 7 / 15 Mission Ave 41 / 40 696 / 1560 11 / 18 18 / 22 22 / 11 19 / 17	4 15 / 30 19 / 22 19 / 18 1317 / 998 78 / 101 Mission Ave 21 / 24 673 / 1510 48 / 79 67 / 70 103 / 146
5 91 / 115 75 / 129 57 / 103 52 / 66 1283 / 903 39 / 54 Mission Ave 78 / 83 650 / 1576 48 / 65 43 / 50 83 / 98 57 / 52	6 7 / 9 0 / 1 4 / 6 8 / 7 1321 / 886 102 / 62 Mission Ave 11 / 7 611 / 1624 103 / 103 54 / 109 6 / 2 47 / 122	7 1376 / 931 63 / 45 Mission Ave 581 / 1531 63 / 60 54 / 43 43 / 41	8 54 / 123 45 / 63 15 / 126 1360 / 815 Mission Ave 17 / 248 647 / 1292
9 407 / 289 737 / 421 143 / 242 39 / 153 766 / 451 266 / 209 Mission Ave 143 / 368 420 / 931 115 / 150 145 / 241 215 / 700 155 / 423	10 148 / 190 553 / 580 74 / 102 125 / 128 957 / 629 114 / 120 Mission Ave 115 / 149 582 / 1609 134 / 113 126 / 138 563 / 521 88 / 105	11 18 / 39 4 / 7 6 / 4 18 / 11 Via de la Valle 28 / 30 10 / 14	12 Intersection does not exist in this scenario.
13 Intersection does not exist in this scenario.			



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1 13 / 41 31 / 69 49 / 59 36 / 39 2719 / 1730 59 / 99 SR 76 26 / 27 1792 / 2826 81 / 71 130 / 169 27 / 93 116 / 115 90 / 127 32 / 103 52 / 58 34 / 86 2630 / 1674 121 / 193 SR 76	2 25 / 50 17 / 11 44 / 64 117 / 75 1340 / 1105 7 / 15 Mission Ave 41 / 40 718 / 1588 11 / 18 18 / 22 22 / 11 19 / 17 49 / 59 667 / 1503 48 / 79 15 / 30 88 / 107 19 / 18 1354 / 1045 88 / 114 Mission Ave
5 91 / 115 75 / 129 57 / 103 52 / 66 1305 / 931 39 / 54 Mission Ave 125 / 141 671 / 1603 53 / 72 48 / 57 83 / 98 57 / 52 7 / 9 0 / 1 4 / 6 8 / 7 1343 / 914 102 / 62 Mission Ave	6 602 / 1558 63 / 60 54 / 109 6 / 2 47 / 122 1398 / 959 63 / 45 Mission Ave 17 / 248 668 / 1319 54 / 123 45 / 63 15 / 126 1382 / 843 Mission Ave
9 418 / 303 737 / 421 143 / 242 39 / 153 771 / 458 266 / 209 Mission Ave 153 / 381 425 / 938 120 / 157 150 / 248 215 / 700 155 / 423 148 / 190 558 / 587 74 / 102 125 / 128 962 / 636 114 / 120 Mission Ave	10 18 / 39 4 / 7 39 / 43 87 / 96 Via de la Valle 28 / 30 38 / 49 59 / 74 39 / 49 1402 / 1103 Mission Ave
13 98 / 121 223 / 347 250 / 352 Project Dwy 2 250 / 352 115 / 149 587 / 1616 134 / 113 126 / 138 568 / 528 88 / 105 11 / 7 632 / 1651 103 / 103 117 / 75 1340 / 1105 7 / 15 Mission Ave	11 18 / 39 4 / 7 39 / 43 87 / 96 Via de la Valle 28 / 30 38 / 49 59 / 74 39 / 49 1402 / 1103 Mission Ave



7.5 MITIGATION

Intersections: As described in Section 7.3, the following intersections were found to experience a significant impact with the addition of the proposed project under Cumulative Conditions:

- SR 76 & Airport Road;
- SR 76 & Foussat Road; and
- El Camino Real & Mission Avenue.

The intersections along SR 76 currently do not provide sufficient capacity for the eastbound and westbound thru movements. To mitigate the impacts along SR 76 at Airport Road and Foussat Road, an additional travel lane would be required in the eastbound and westbound directions, expanding SR 76 from four lanes to six lanes.

To mitigate the impact at El Camino Real & Mission Avenue, the northbound shared left-thru lane would be required to be restriped to be a thru lane and the traffic signal would be required to be modified so that the north-south direction would provide protected left-turn phasing instead of split service. The northbound left-turn pocket would also be required to be extended to 525 feet.

Table 7-3 displays the LOS analysis results for the study intersections with the proposed intersection mitigations. As shown in the table, with the proposed mitigations, the intersections of SR 76 at Airport Road and Foussat Road would operate at acceptable LOS D under both AM and PM peak periods. The intersection of El Camino Real & Mission Avenue would operate at a LOS E during the PM peak with the proposed mitigations. However, the proposed mitigations would improve the operations at the intersection to better than baseline conditions. **Appendix H** contains the peak-hour intersections LOS calculation worksheets under mitigated conditions.

Table 7-3 Horizon Year with Project Mitigated Intersection LOS Summary

Intersection	Peak Hour	Before Horizon Year Improvement		After Horizon Year Improvement	
		Delay (a)	LOS (b)	Delay (a)	LOS (b)
1 Airport Rd & SR 76	AM	151.6	F	43.4	D
	PM	135.1	F	47.0	D
2 Foussat Rd & SR 76	AM	181.4	F	54.2	D
	PM	94.4	F	42.4	D
9 El Camino Real & Mission Ave	AM	56.2	E	50.6	D
	PM	93.7	F	75.9	E

Notes:

Bold values indicate intersections operating at LOS E or F. **Bold and shaded** values indicate project significant impact.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the 6th Edition Highway Capacity Manual and performed using Synchro 10.

Roadway Segments: As described in Section 7.4, the following roadway segments were found to experience a significant impact with the addition of the proposed project under cumulative conditions:

- SR 76 between Benet Road and Airport Road
- SR 76 between Airport Road and Foussat Road
- SR 76 between Foussat Road and Douglas Drive

SR 76 between Benet Road and Douglas Drive is expected to not provide sufficient capacity for daily vehicles under cumulative conditions. The cumulative impacts along SR 76 can be mitigated by implementing the proposed intersection mitigations at SR 76 at Airport Road and Foussat Road. The proposed intersection mitigations would add an additional through lane in the eastbound and westbound directions on SR 76 between Benet Road and Foussat Road. **Table 7-4** displays the roadway segments analysis with the proposed roadway mitigations. As shown in the table, the addition of another through lane in each direction will improve the operations to acceptable conditions.

The impacts at the study intersections and roadway segments are considered cumulative impacts. The project applicant is required to provide their fair share contribution toward installing improvements to mitigate cumulative impacts. The fair share contribution is based on the project's proportionate traffic contribution to future increased traffic volumes on a facility. **Table 7-5** displays the fair share percent calculations.

Per the SR 76 Transportation Concept Report (February 2016) published by Caltrans, there are no plans to expand SR 76 to six lanes. The project applicant will pay their fair share for the widening of SR 76 to have an additional travel lane in each direction between Benet Road and Foussat Road and a second northbound right-turn lane at Foussat Road per the Oceanside General Plan Circulation Element (September 2012). A portion of the fair share will include the 30% design and capital cost estimate. This will mitigate the cumulative impacts at the following study area facilities:

- SR 76 & Airport Road
- SR 76 & Foussat Road
- SR 76 between Benet Road and Airport Road
- SR 76 between Airport Road and Foussat Road
- SR 76 between Foussat Road and Douglas Drive

The project applicant will design and construct the extension of the northbound left-turn pocket to 525 feet at the intersection of El Camino Real and Mission Avenue. This will mitigate the cumulative impact at this location.

Table 7-4 Horizon Year with Project Mitigated Roadway Segment Analysis Summary

Roadway Segment	With Project ADT	Before Improvement				After Improvement			
		Roadway Classification	LOS E Capacity	V/C Ratio	LOS	Roadway Classification	LOS E Capacity	V/C Ratio	LOS
State Route 76 (SR 76)									
between Benet Rd and Airport Rd	65,900	4-Lane Expressway	60,000	1.077	F	6-Lane Expressway	80,000	0.824	D
between Airport Rd and Foussat Rd	65,900	4-Lane Expressway	60,000	1.077	F	6-Lane Expressway	80,000	0.824	D
between Foussat Rd and Douglas Dr	59,800	4-Lane Expressway	60,000	0.976	E	6-Lane Expressway	80,000	0.748	C

Notes:

Bold values indicate intersections operating at LOS E or F. **Bold and shaded** values indicate project significant impact.

(a) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

Table 7-5 Fair Share Percent Calculations

Impacted Study Facility	Time Period (a)	Volumes			Total Growth (b)	Total Project Volume (c)	Fair Share % (d)
		Existing Conditions	Horizon Year Conditions	Horizon Year with Project Conditions			
Intersections							
SR-76 & Airport Rd	PM Peak	3,935	5,269	5,338	1,403	69	4.9%
SR-76 & Foussat Rd	PM Peak	4,101	5,377	5,513	1,412	136	9.6%
Roadway Segments							
SR-76 between Benet Rd and Airport Rd	Daily	49,715	64,633	65,900	16,185	1,267	7.8%
SR-76 between Airport Rd and Foussat Rd	Daily	48,509	64,633	65,900	17,391	1,267	7.3%
SR-76 between Foussat Rd and Douglas Dr	Daily	50,264	58,533	59,800	9,536	1,267	13.3%

Notes:

(a) Fair share percent used is the higher of the AM or PM peak hour

(b) Total Growth = Horizon Year with Project Conditions – Existing Conditions

(c) Total Project Volume = Horizon Year with Project Conditions – Horizon Year Conditions

(d) Fair Share % = Total Project Volume / Total Growth

8 FINDINGS AND CONCLUSIONS

The following section provides a summary of the key findings of the transportation impact analysis.

8.1 SUMMARY OF INTERSECTION ANALYSIS

Table 8-1 displays the LOS at all the study intersections for the different scenarios analyzed. As shown in the table, all intersections would operate at LOS D or better during all peak periods under all scenarios except for the following intersections. Intersections with a significant impact are shown in **bold**.

- **Intersection 1: SR 76 & Airport Road** Opening Day Baseline (LOS E AM Peak), Opening Day with Project (LOS E AM Peak), Horizon Year Baseline (LOS F AM & PM Peak), Horizon Year with Project (LOS F AM & **PM Peak**)
- **Intersection 2: SR 76 & Foussat Road** Existing Baseline (LOS E AM Peak), Existing with Project (LOS E AM Peak), Opening Year Baseline (LOS F AM Peak), Opening Year with Project (LOS F AM Peak), Horizon Year Baseline (LOS F AM & PM Peak), Horizon Year plus Project (LOS F AM & **PM Peak**)
- **Intersection 9: El Camino Real & Mission Avenue** Existing Baseline (LOS E PM Peak), Existing with Project (LOS E PM Peak), Opening Year Baseline (LOS E PM Peak), Opening Year with Project (LOS E PM Peak), Horizon Year Baseline (LOS E AM Peak, LOS F PM Peak), Horizon Year with Project (LOS E AM Peak, LOS F **PM Peak**)
- **Intersection 10: Douglas Drive & Mission Avenue** Horizon Year Baseline (LOS F PM Peak), Horizon Year plus Project (LOS F PM Peak)

Direct Impacts:

The proposed project was not found to result in any direct intersection impacts.

Cumulative Impacts:

The proposed project was found to have cumulative impacts at SR 76 and Airport Road, SR 76 and Foussat Road, and at the intersection of El Camino Real and Mission Avenue. The cumulative impacts along SR 76 at Airport Road and Foussat Road can be mitigated by paying fair share towards the widening of SR 76. Per the SR 76 Transportation Concept Report (February 2016) published by Caltrans, there are no plans to expand SR 76 to six lanes. The project applicant will pay their fair share for the widening of SR 76 to have an additional travel lane in each direction between Benet Road and Foussat Road and a second northbound right-turn lane at Foussat Road per the Oceanside General Plan Circulation Element (September 2012). A portion of the fair share will include the 30% design and capital cost estimate. This will mitigate the cumulative impacts at the intersections along SR 76 at Airport Road and Foussat Road.

The cumulative impact at El Camino Real and Mission Avenue can be mitigated by paying fair share towards restriping the northbound shared left-thru lane to a thru lane, modifying the traffic signal so that the north-south direction would provide protected left-turn phasing instead of split service, and extending the northbound left-turn pocket to 525 feet. The project applicant will design and construct the extension of the northbound left-turn pocket to 525 feet at the intersection of El Camino Real and Mission Avenue. This will mitigate the cumulative impact at this location.

Table 8-1 Summary of Peak-Hour Intersection LOS Analysis

Intersection		Peak Hour	Existing Conditions		Existing with Project Conditions		Opening Day Conditions		Opening Day with Project Conditions		Horizon Year Conditions		Horizon Year with Project Conditions	
			Delay (a)	LOS (b)	Delay (a)	LOS (b)	Delay (a)	LOS (b)	Delay (a)	LOS (b)	Delay (a)	LOS (b)	Delay (a)	LOS (b)
1	Airport Rd & SR 76	AM	54.6	D	54.0	D	61.8	E	62.1	E	155.0	F	151.6	F
		PM	45.8	D	50.1	D	52.7	D	55.0	D	127.4	F	135.1	F
2	Foussat Rd & SR 76	AM	77.5	E	74.5	E	88.7	F	85.7	F	187.2	F	181.4	F
		PM	41.8	D	49.0	D	45.5	D	55.0	D	82.8	F	94.4	F
3	Airport Rd & Mission Ave	AM	19.4	B	15.0	B	20.9	C	21.1	C	19.1	B	14.3	B
		PM	11.6	B	11.6	B	12.4	B	12.4	B	14.5	B	14.6	B
4	Roymar Rd & Mission Ave	AM	9.4	A	21.1	C	15.5	B	25.6	C	16.5	B	26.6	C
		PM	14.5	B	37.3	D	23.9	C	44.5	D	23.8	C	41.9	D
5	Foussat Rd & Mission Ave	AM	15.8	B	15.8	B	15.7	B	15.9	B	18.7	B	19.7	B
		PM	18.4	B	15.6	B	15.7	B	18.3	B	20.9	C	21.3	C
6	Copperwood Wy & Mission Ave	AM	6.4	A	6.2	A	6.2	A	6.1	A	6.2	A	6.1	A
		PM	8.1	A	8.0	A	8.0	A	7.9	A	8.6	A	8.5	A
7	Frontier Dr & Mission Ave	AM	10.9	B	10.9	B	10.9	B	10.9	B	11.8	B	11.9	B
		PM	4.6	A	4.5	A	4.5	A	4.5	A	4.6	A	4.6	A
8	Mission Ave & Fireside St	AM	6.3	A	6.2	A	6.2	A	6.2	A	10.1	B	10.2	B
		PM	15.8	B	15.6	B	15.6	B	15.5	B	16.7	B	16.7	B
9	El Camino Real & Mission Ave	AM	40.7	D	41.2	D	41.5	D	42.0	D	55.4	E	56.2	E
		PM	59.0	E	59.6	E	60.6	E	61.2	E	90.5	F	93.7	F
10	Douglas Dr & Mission Ave	AM	18.5	B	18.5	B	18.8	B	18.8	B	44.7	D	45.2	D
		PM	19.4	B	19.4	B	19.9	B	19.9	B	117.0	F	117.3	F
11	Roymar Rd & Via de la Valle	AM	9.0	A	9.7	A	9.0	A	9.7	A	9.1	A	9.7	A
		PM	9.1	A	10.0	B	9.1	A	10.0	B	9.2	A	10.1	B
12	Mission Ave & Project Dwy 1	AM	Intersection does not exist in this scenario.		15.0	C	Intersection does not exist in this scenario.		15.6	C	Intersection does not exist in this scenario.		18.2	C
		PM			13.1	B			13.7	B			15.4	C

Notes:

Bold values indicate intersections operating at LOS E or F. **Bold and shaded** values indicate project significant impact.

- (a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.
- (b) LOS calculations are based on the methodology outlined in the 6th Edition Highway Capacity Manual and performed using Synchro 10.

8.2 SUMMARY OF ROADWAY SEGMENT ANALYSIS

Table 8-2 displays the LOS at all the study roadway segments for the different scenarios analyzed. As shown in the table, all roadway segments would operate at LOS D or better during all peak periods under all scenarios except for the following roadway segments. Roadway segments with a significant impact are shown in **bold**.

- **SR 76 between Benet Road and Airport Road:** Horizon Year Baseline (LOS F), **Horizon Year plus Project (LOS F)**
- **SR 76 between Airport Road and Foussat Road:** Horizon Year Baseline (LOS F), **Horizon Year plus Project (LOS F)**
- **SR 76 between Foussat Road and Douglas Drive:** Horizon Year Baseline (LOS E), **Horizon Year plus Project (LOS E)**

Direct Impacts:

The proposed project was not found to result in any direct impacts.

Cumulative Impacts:

The proposed project was found to have cumulative impacts at SR 76 from Benet Road to Douglas Drive. The cumulative impacts along SR 76 can be mitigated by paying fair share towards the proposed intersection mitigations at SR 76 at Airport Road and Foussat Road. Per the SR 76 Transportation Concept Report (February 2016) published by Caltrans, there are no plans to expand SR 76 to six lanes. The project applicant will pay their fair share for the widening of SR 76 to have an additional travel lane in each direction between Benet Road and Foussat Road and a second northbound right-turn lane at Foussat Road per the Oceanside General Plan Circulation Element (September 2012). A portion of the fair share will include the 30% design and capital cost estimate. This will mitigate the cumulative impacts at the roadway segments.

Table 8-2 Summary of Roadway Segment Analysis

Roadway Segment	Roadway Classification	LOS E Capacity	Existing Conditions		Existing with Project Conditions		Opening Day Conditions		Opening Day with Project Conditions		Horizon Year Conditions		Horizon Year with Project Conditions	
			ADT	LOS	ADT	LOS	ADT	LOS	ADT	LOS	ADT	LOS	ADT	LOS
State Route 76 (SR 76)														
between Benet Rd and Airport Rd	4-Lane Expressway	60,000	49,715	C	50,982	D	51,563	D	52,830	D	64,633	F	65,900	F
between Airport Rd and Foussat Rd	4-Lane Expressway	60,000	48,509	C	49,776	C	49,912	C	51,179	D	64,633	F	65,900	F
between Foussat Rd and Douglas Dr	4-Lane Expressway	60,000	50,264	D	51,531	D	52,361	D	53,628	D	58,533	E	59,800	E
Mission Avenue														
between Airport Rd and Roymar Rd	4-Lane Major	40,000	21,751	C	22,765	C	23,143	C	24,157	C	26,186	C	27,200	C
between Roymar Rd and Foussat Rd	4-Lane Major	40,000	22,848	C	25,382	C	24,406	C	26,940	C	24,666	C	27,200	C
between Foussat Rd and Frontier Dr	4-Lane Major	40,000	22,841	C	23,855	C	23,395	C	24,409	C	28,386	C	29,400	C
between Frontier Dr and Fireside St	4-Lane Major	40,000	23,694	C	24,708	C	24,280	C	25,294	C	28,386	C	29,400	C
between Fireside St and El Camino Real	4-Lane Major	40,000	23,046	C	24,060	C	23,632	C	24,646	C	28,386	C	29,400	C
between El Camino Real and Douglas Dr	4-Lane Major	40,000	17,820	A	18,073	A	18,578	A	18,831	A	29,147	C	29,400	C
Foussat Road														
between SR 76 and Mission Ave	4-In Secondary	25,000	5,821	A	7,975	A	6,534	A	8,688	A	6,559	A	8,713	A
Roymar Road														
between Via de la Valle and Mission Ave	2-In Collector	10,000	1,258	A	2,525	A	1,258	A	2,525	A	1,418	A	2,685	A
Via de la Valle														
east of Roymar Rd	2-In Collector	10,000	296	A	1,563	A	296	A	1,563	A	334	A	1,601	A

Notes:

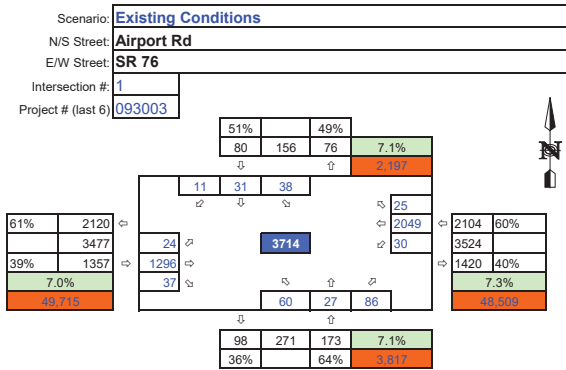
Bold values indicate intersections operating at LOS E or F. **Bold and shaded** values indicate project significant impact.

(a) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

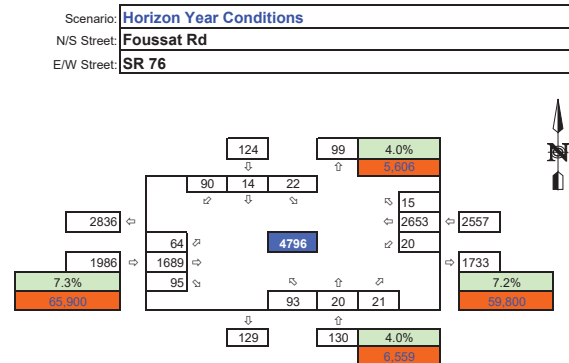
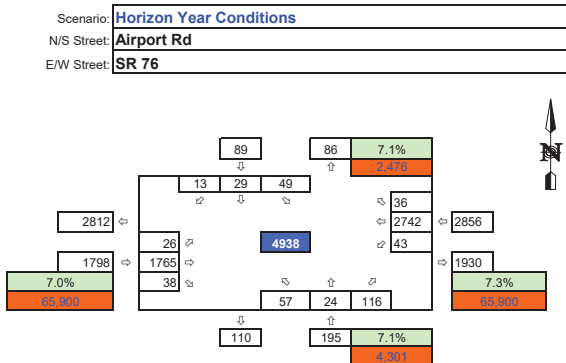
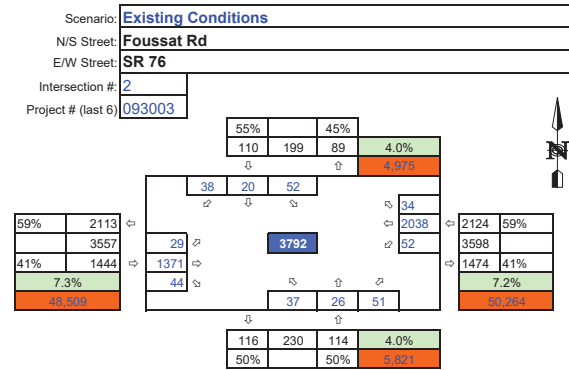
APPENDIX A

PEAK-HOUR FUTURE FORECAST WORKSHEETS

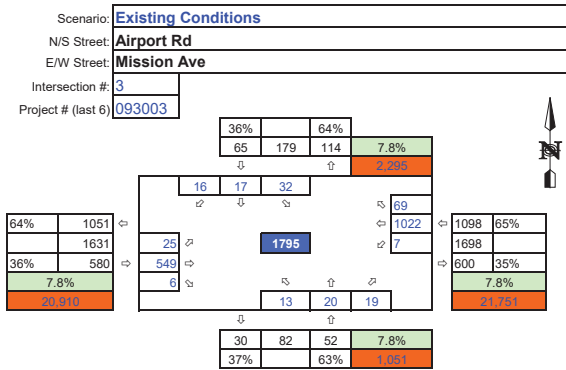
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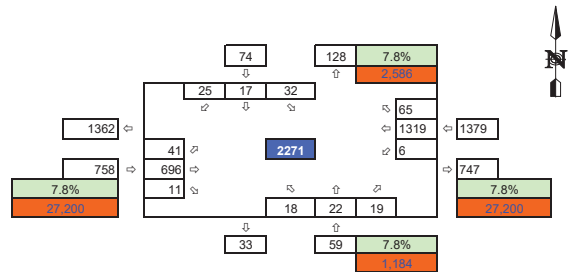
Int 2 AM Peak Volumes



Int 3 AM Peak Volumes



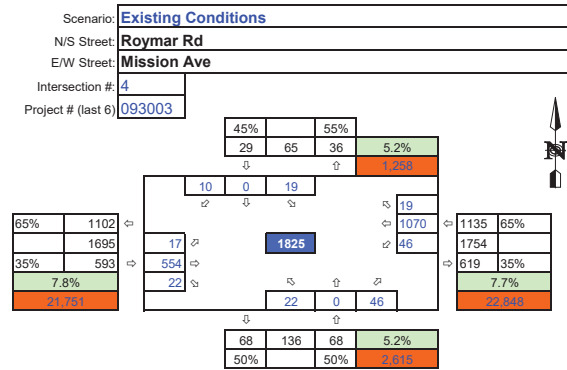
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 N/S Street: **Airport Rd**
 E/W Street: **Mission Ave**



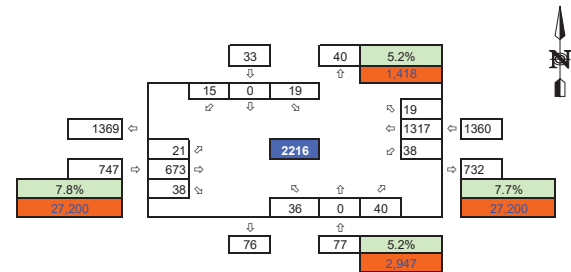
LEGEND

Existing K-Factor: xx%
 ADT Volume: xx

Int 4 AM Peak Volumes



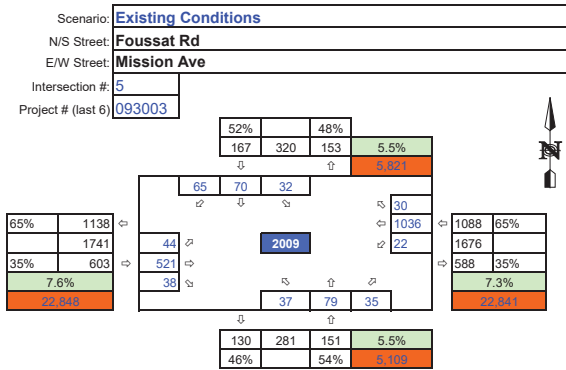
Scenario: **Horizon Year Conditions**
 N/S Street: **Roymar Rd**
 E/W Street: **Mission Ave**



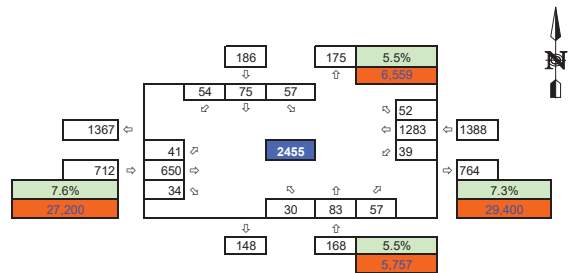
LEGEND

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 ADT Volume: xx

Int 5 AM Peak Volumes



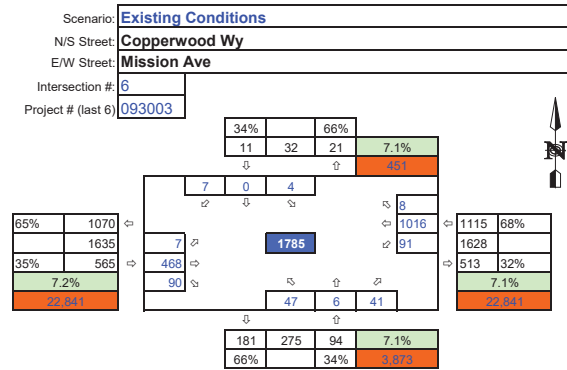
Scenario: **Horizon Year Conditions**
 N/S Street: **Foussat Rd**
 E/W Street: **Mission Ave**



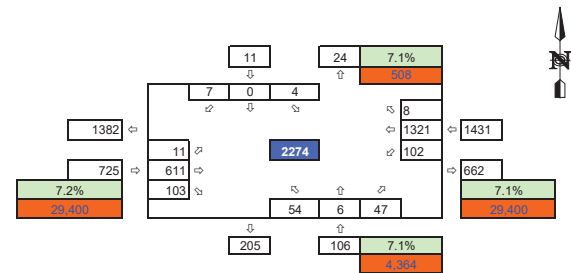
LEGEND

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 ADT Volume: xx

Int 6 AM Peak Volumes



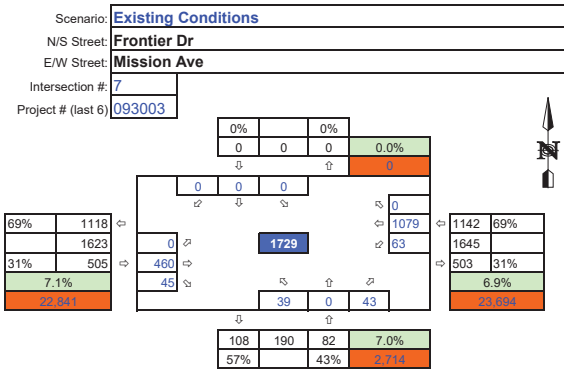
Scenario: **Horizon Year Conditions**
 N/S Street: **Copperwood Wy**
 E/W Street: **Mission Ave**



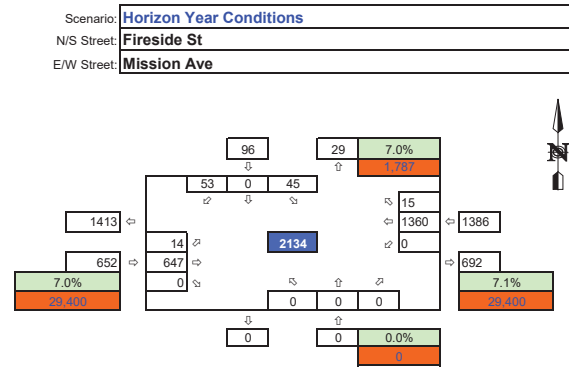
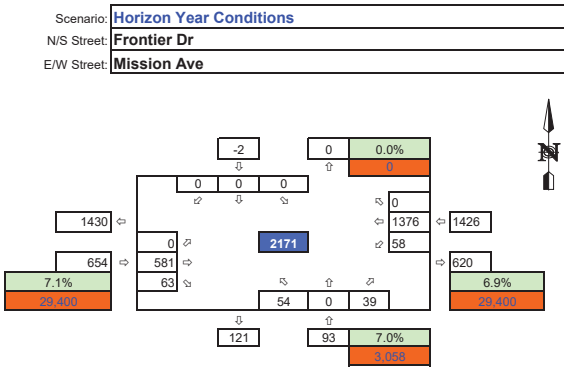
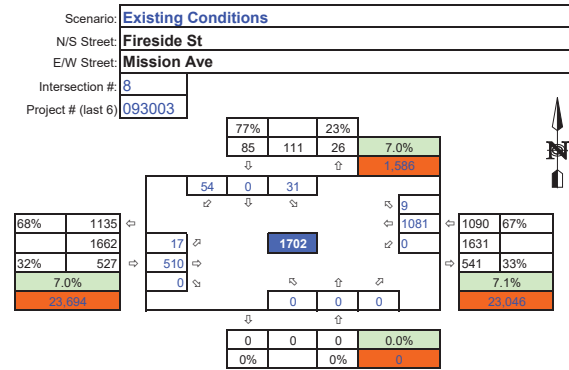
LEGEND

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 ADT Volume: xx

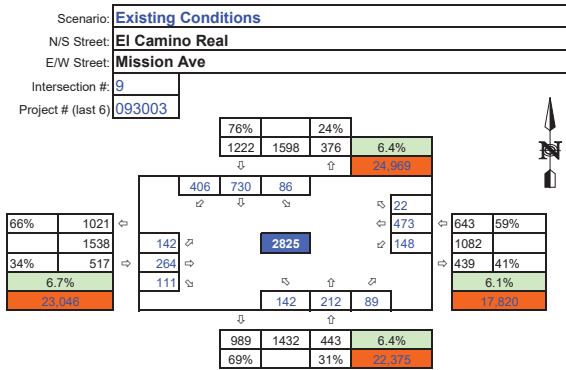
Int 7 AM Peak Volumes



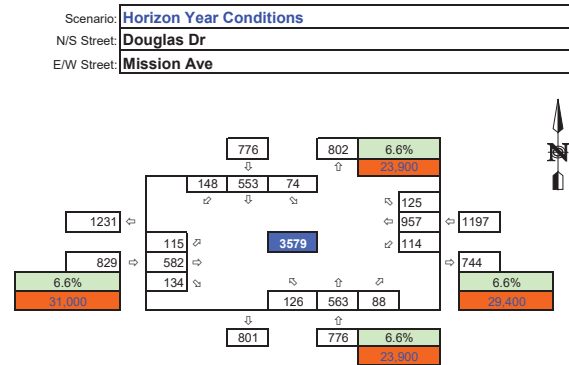
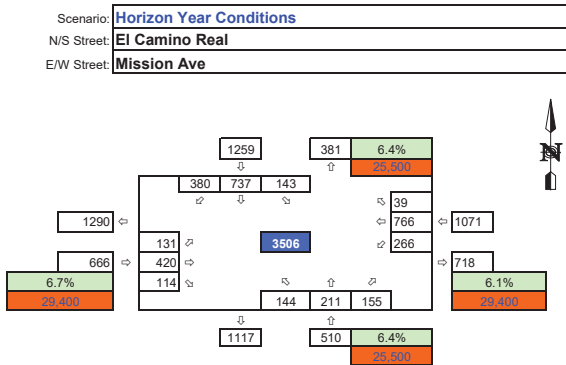
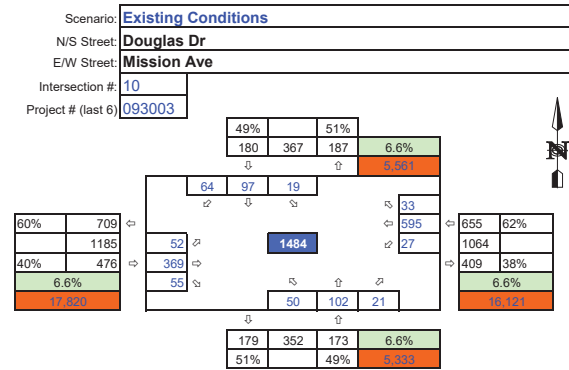
Int 8 AM Peak Volumes



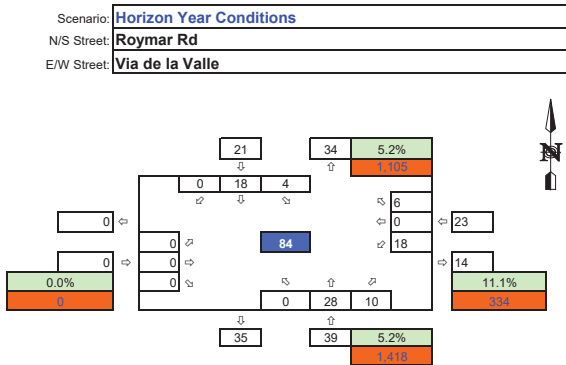
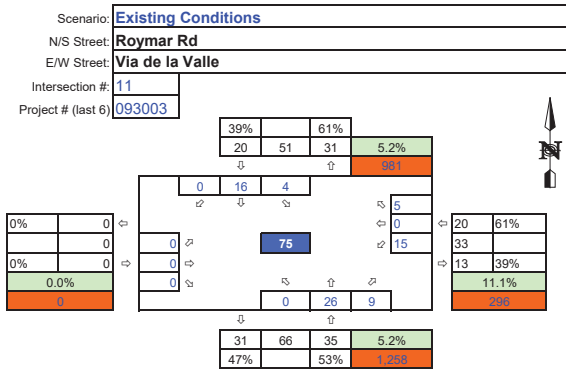
Int 9 AM Peak Volumes



Int 10 AM Peak Volumes

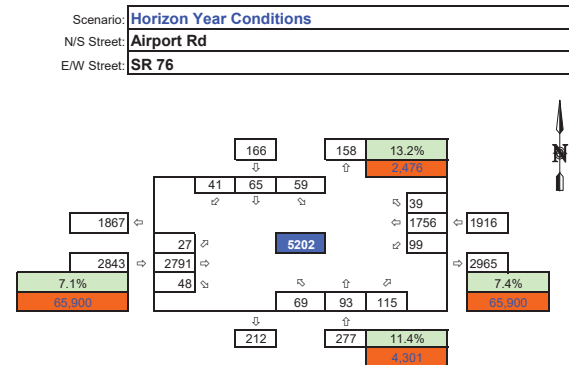
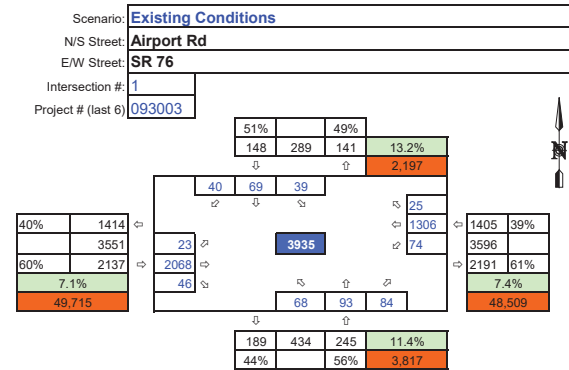


Int 11 AM Peak Volumes



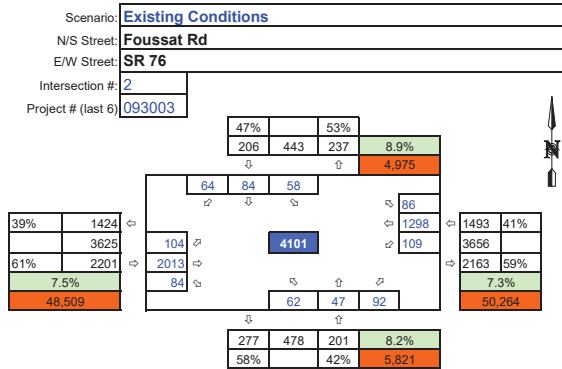
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ADT Volume	xx

Int 1 PM Peak Volumes

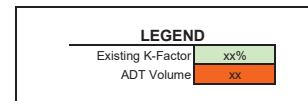
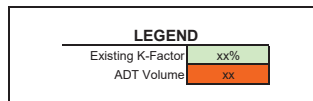
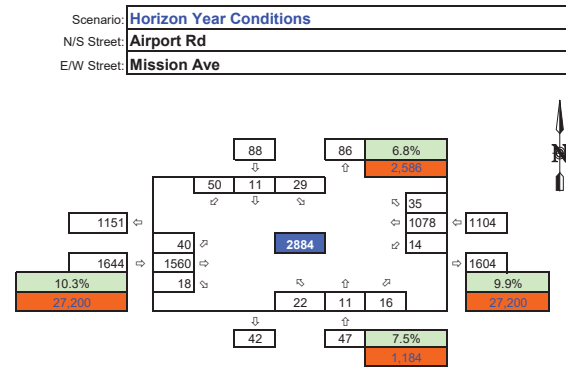
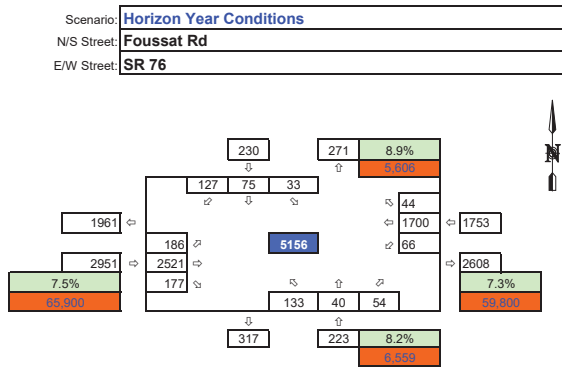
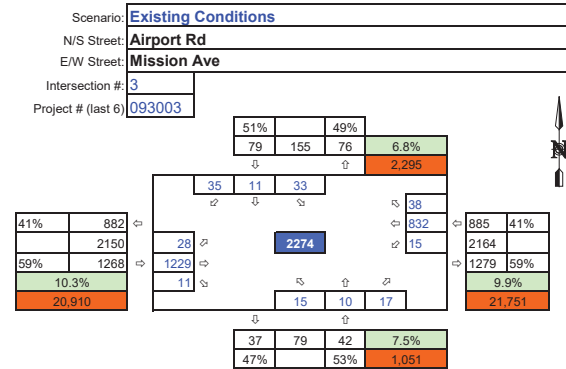


LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

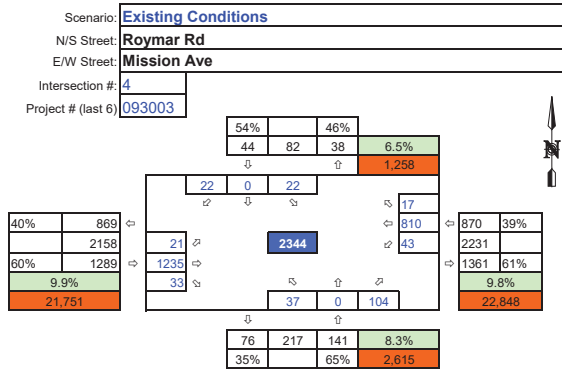
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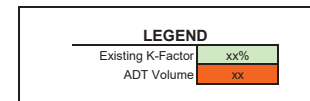
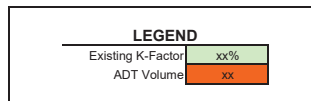
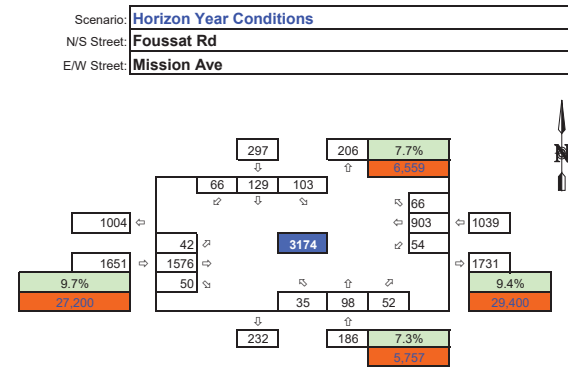
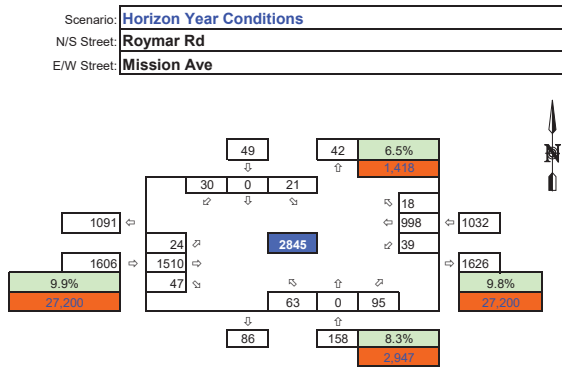
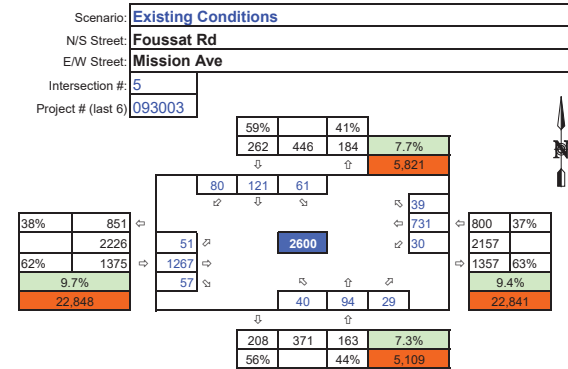
Int 3 PM Peak Volumes



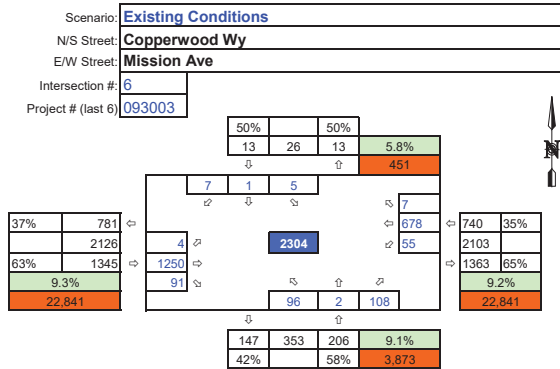
Int 4 PM Peak Volumes



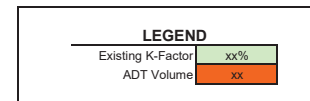
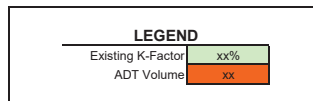
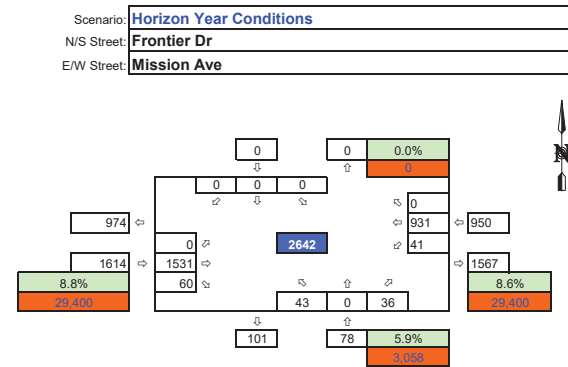
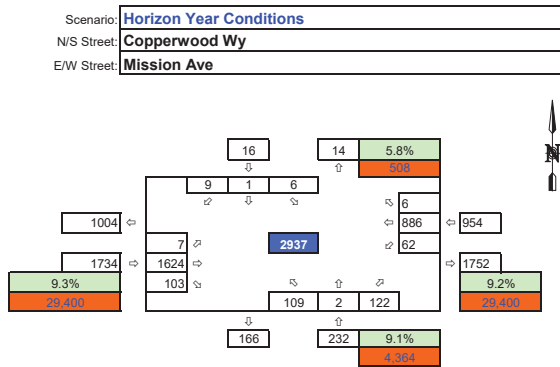
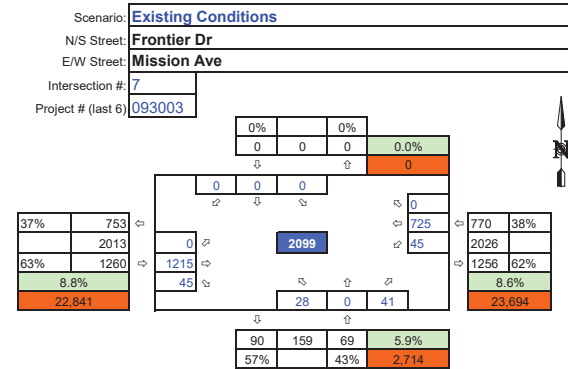
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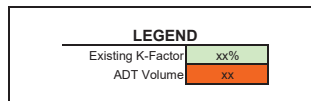
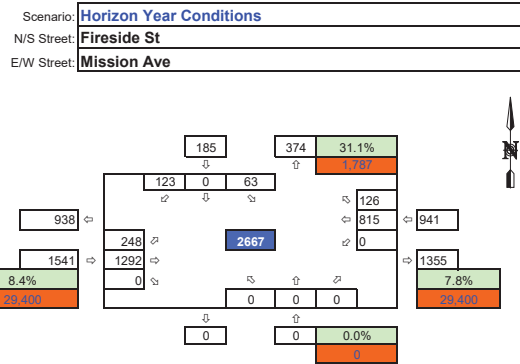
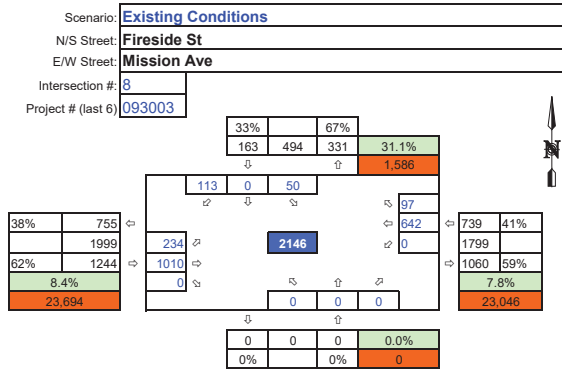
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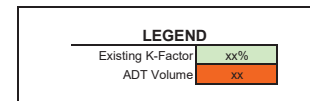
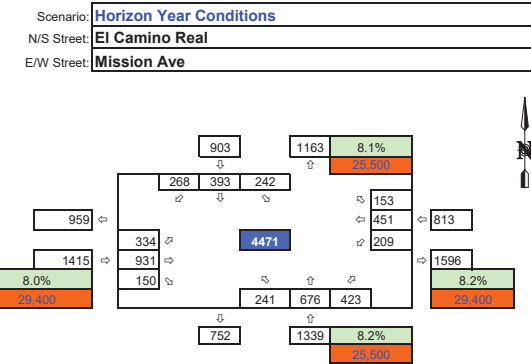
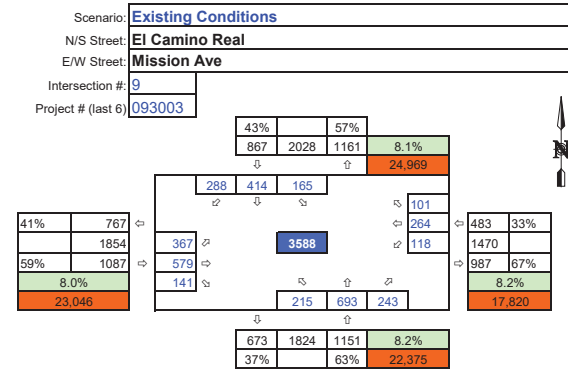
Int 7 PM Peak Volumes



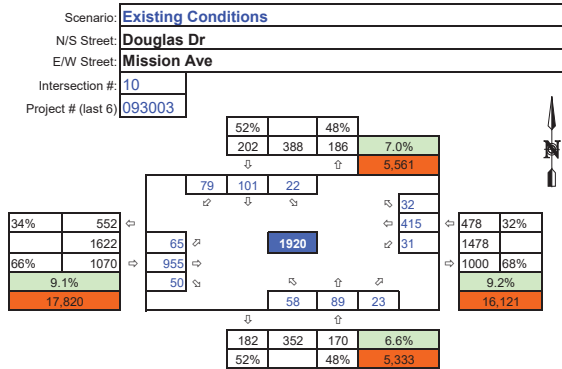
Int 8 PM Peak Volumes



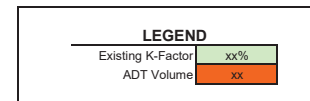
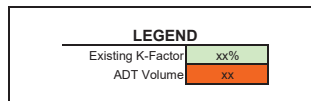
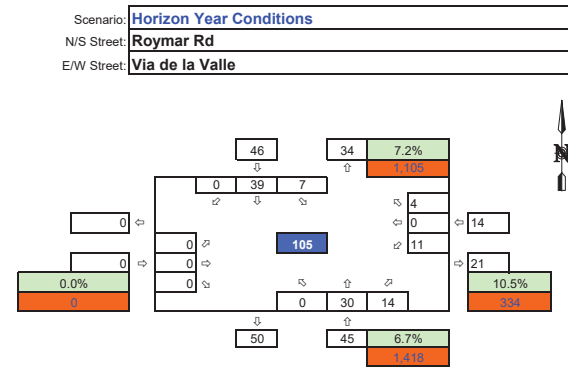
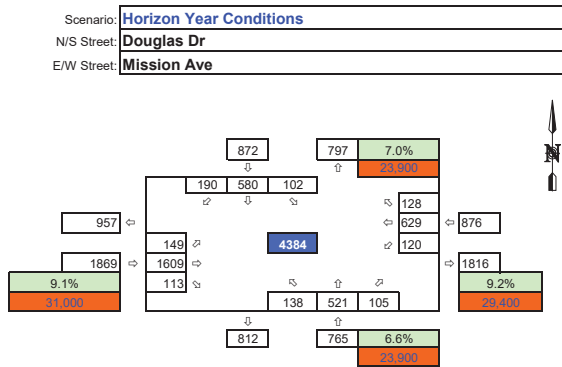
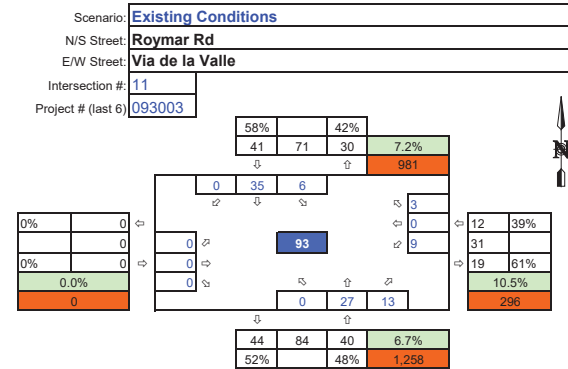
Int 9 PM Peak Volumes



Int 10 PM Peak Volumes



Int 11 PM Peak Volumes



APPENDIX B

CUMULATIVE PROJECT INFORMATION

OnPoint - Oceanside

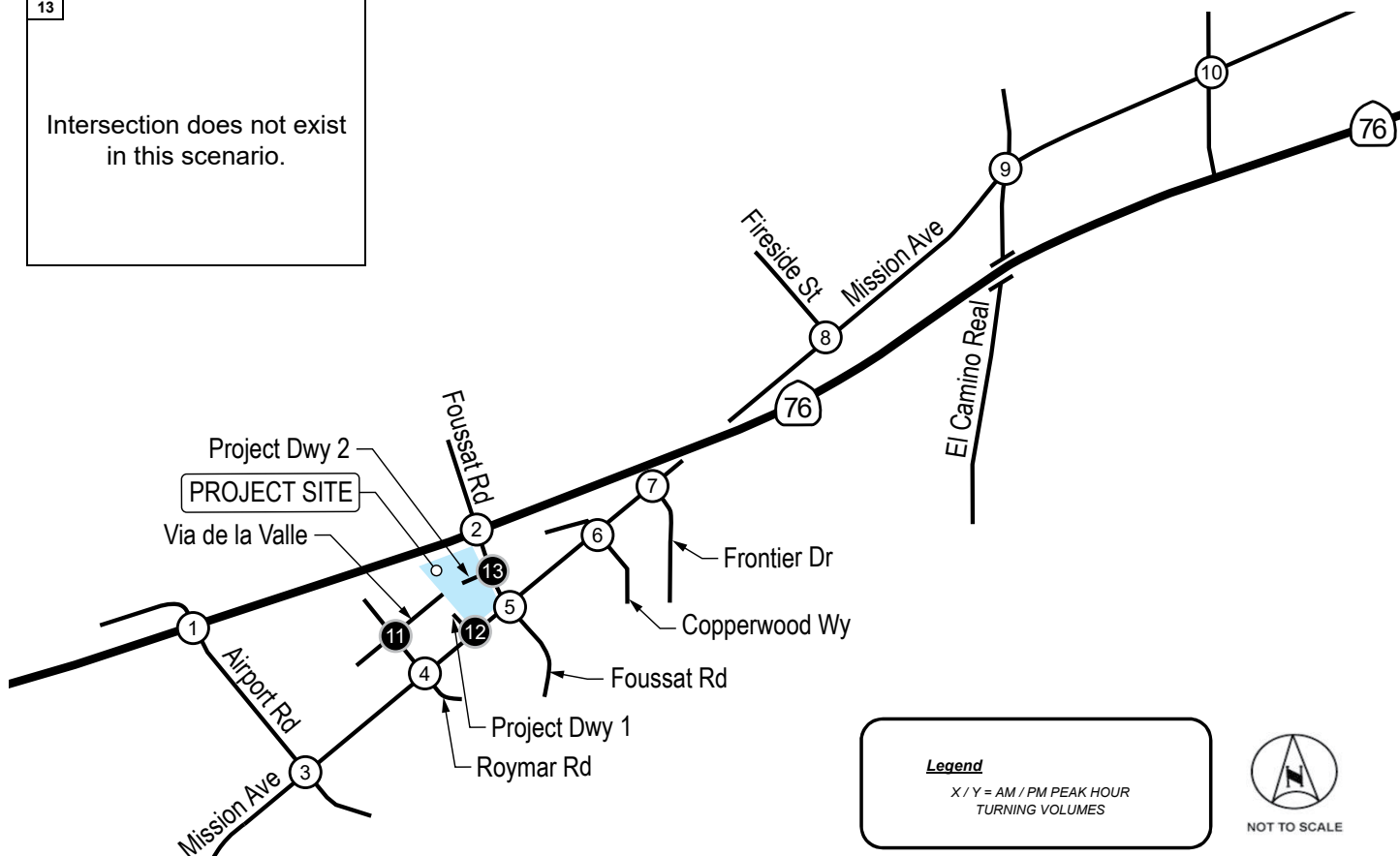
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5	34 / 32 19 / 30 10 / 8 ↔ ↓ ↔	↔ ↑ 29 / 22 Mission Ave	↔ ↑ 26 / 35 Foussat Rd	↔ ↑ 19 / 30 ↓	↔ ↑ 29 / 22 Mission Ave	↔ ↑ 29 / 22 Mission Ave	↔ ↑ 19 / 30 ↓	↔ ↑ 29 / 22 Mission Ave	↔ ↑ 19 / 32 ↓	↔ ↑ 31 / 23 Mission Ave	↔ ↑ 31 / 23 Mission Ave
9	1 / 1 6 / 23 4 / 7 ↔ ↓ ↔	↔ ↑ 3 / 7 3 / 7 2 / 9	↔ ↑ 2 / 1 23 / 9 8 / 4 Mission Ave	↔ ↑ 2 / 4 3 / 10 Douglas Dr	↔ ↑ 4 / 3 3 / 5	↔ ↑ 9 / 5 40 / 18 4 / 4 Mission Ave	↔ ↑ 11 / 42 ↓	↔ ↑ 9 / 5 40 / 18 4 / 4 Mission Ave	↔ ↑ 11 / 42 ↓	↔ ↑ 11 / 42 ↓	↔ ↑ 11 / 42 ↓
13	Intersection does not exist in this scenario.										

Fireside Ave

10

9

7



2.0 Introduction

ADVANTEC completed a traffic impact study for the Airport Office Building project along Airport Road in the City of Oceanside to analyze and determine the potential traffic impacts of the proposed office building. The development will consist of a two story, 35,791 square foot office building. The project location is shown in **FIGURE 1**.

The proposed Airport Office Building is located on Airport Road at the southwest corner of the State Route (SR)-76 and Airport Road intersection in the City of Oceanside, California. The proposed project will be accessed from SR-76 to the north or Mission Avenue to the south. The site plan is shown in **FIGURE 2**.

The property currently is zoned as Limited Industrial (LI), which permits the development of non-medical/dental office buildings. The proposed project is consistent with the General Plan designation of the site and with zoning.

This report describes the existing roadway network in the vicinity of the project and includes a review of existing and proposed trip activities for weekday AM peak hour, PM peak hour, and daily traffic conditions when the project is completed.

3.0 Description of Analysis

3.1 Project Analysis

The parameters by which this traffic study was prepared included the determination of what intersections and roadways needed to be analyzed, the scenarios to be analyzed and the methods required for analysis.

According to the San Diego Traffic Engineers' Council and the Institute of Transportation Engineers, California Border Section (SANTEC/ITE) Guidelines, a Traffic Impact Study (TIS) should be prepared for all projects, which generate traffic greater than or equal to 1,000 total average daily trips (ADT) or 100 peak hour trips, and if the proposed project is in conformance with the General Plan.

The proposed office building generates substantially less daily traffic than the 1,000 trips per day threshold, but does just meet the 100-trip threshold in the morning peak hour. The estimated trip generation of the proposed project is also used to identify the extents of the study area. Pursuant to the SANTEC/ITE guidelines, the geographic area examined in the TIS must include the following:

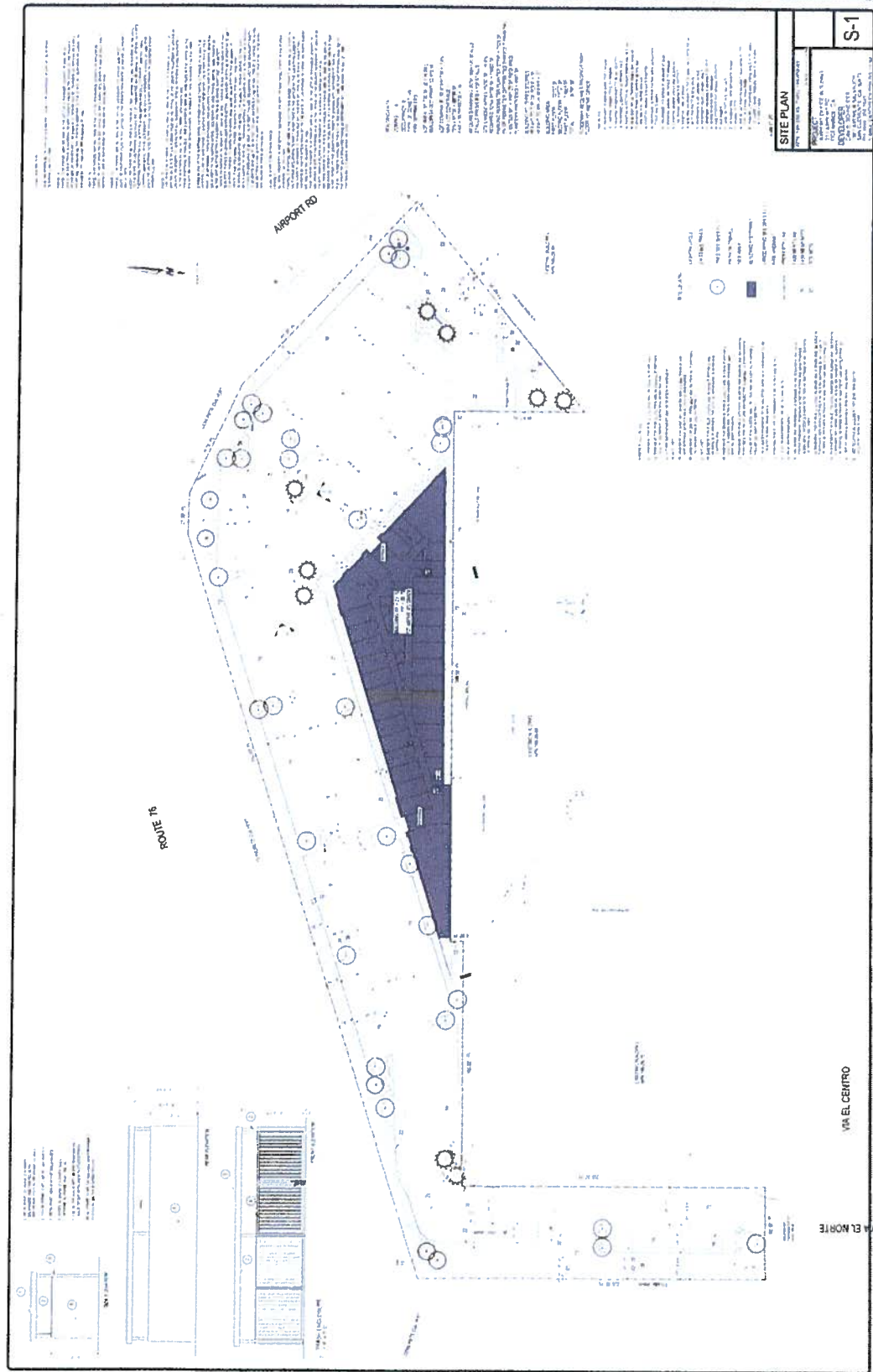
- All local roadway segments (including all State surface routes), intersections, and mainline freeway locations where the proposed project will add 50 or more peak-hour trips in either direction to the existing roadway traffic.

ADVANTEC used the AM and PM peak hour trip generation, distributed and assigned the peak hour trips to determine the intersections to which the project would add 50 or more trips.

For this project, the following intersections and segments were identified based on the above criteria along with discussion with City staff.

The list of project intersections is as follows:





Under existing conditions, all study intersections and roadway segments operate at LOS D or better.

5.0 Project Description

The proposed development will consist of a two story, 35,791 square foot office building on a vacant lot. The property is currently zoned as Limited Industrial (LI), which permits the development of non-medical/dental office buildings. The proposed project is consistent with the General Plan designation of the site and with zoning.

5.1 Project Traffic Generation

The project traffic generation was calculated using the "(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region", San Diego Association of Governments (SANDAG). April 1992. The office building is projected to generate 716 daily trips with 100 AM peak hour trips (90 inbound and 10 outbound) and 93 PM peak hour trips (19 inbound and 74 outbound) as shown in **TABLE 7**.

TABLE 7: Summary of Average Daily and Peak Hour Trip Generation Rates

Site and Building Data			Average Daily Traffic (ADT) Rate		AM Peak Hour Trip Rate (bet. 6:00 and 9:30 AM)			PM Peak Hour Trip Rate (bet. 3:00 and 6:30 PM)		
SANDAG Land Use Classification	Size	Units	Weekday Trips	Variable	Percent of Daily	Ratio of Inbound to Outbound		Percent of Daily	Ratio of Inbound to Outbound	
Standard Commercial Office	35,791	SQ FT.	20	KSF	14%	9	1	13%	2	8
Notes: KSF = 1,000 Square Feet of Building Floor Area is the independent variable used to estimate traffic generation of office buildings. For scoping purposes, no reductions for transit use have been taken. Source: "(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region". San Diego Association of Governments (SANDAG). April 1992.					Peak Hour Directional Trip Generation Rates Per KSF of Building Floor Area					
					In	Out	Total	In	Out	Total
					2.52	0.28	2.80	0.52	2.08	2.60



Estimated Average Daily and Peak Hour Trip Generation of Proposed Development

Site and Building Data			Average Daily Traffic (ADT) Trips	AM Peak Hour Trips (bet. 6:00 and 9:30 AM)			PM Peak Hour Trips (bet. 3:00 and 6:30 PM)		
SANDAG Land Use Classification	Size	Units	Weekday Trips	In	Out	Total	In	Out	Total
Standard Commercial Office	35,791	SQ FT.	716	90	10	100	19	74	93

Notes:

(1) The proposed office development is required to prepare a traffic impact study (TIS) based on the criteria adopted by the City of Oceanside. The minimum criteria for requiring a TIS for projects that are consistent with the General Plan are based on the following daily and peak hour trip generation thresholds: when a proposed project generates equal or greater than 1,000 daily trips or 100 peak hour trips.

(2) The proposed office development is not required to conduct a Congestion Management Program (CMP) analysis because the estimated trip generation of the proposed project is less than the minimum CMP thresholds of 2,400 daily trips or 200 peak hour trips.

The source of the above TIS determination criteria is: "SANTEC / ITE Guidelines For Traffic Impact Studies [TIS] in the San Diego Region". San Diego Traffic Engineers' Council (SANTEC) and the Institute of Transportation Engineers (ITE – California Border Section)--a SANDAG Committee. March 2000.

5.2 Project Distribution and Assignment

Project trips were distributed to the adjacent roadway network based on discussions with City staff. The trip distribution pattern was assumed to be 40% from the west, 30% from the east and 30% from the south. The project distribution is shown in **FIGURE 5** with assignment of the project volumes shown in **FIGURE 6**.

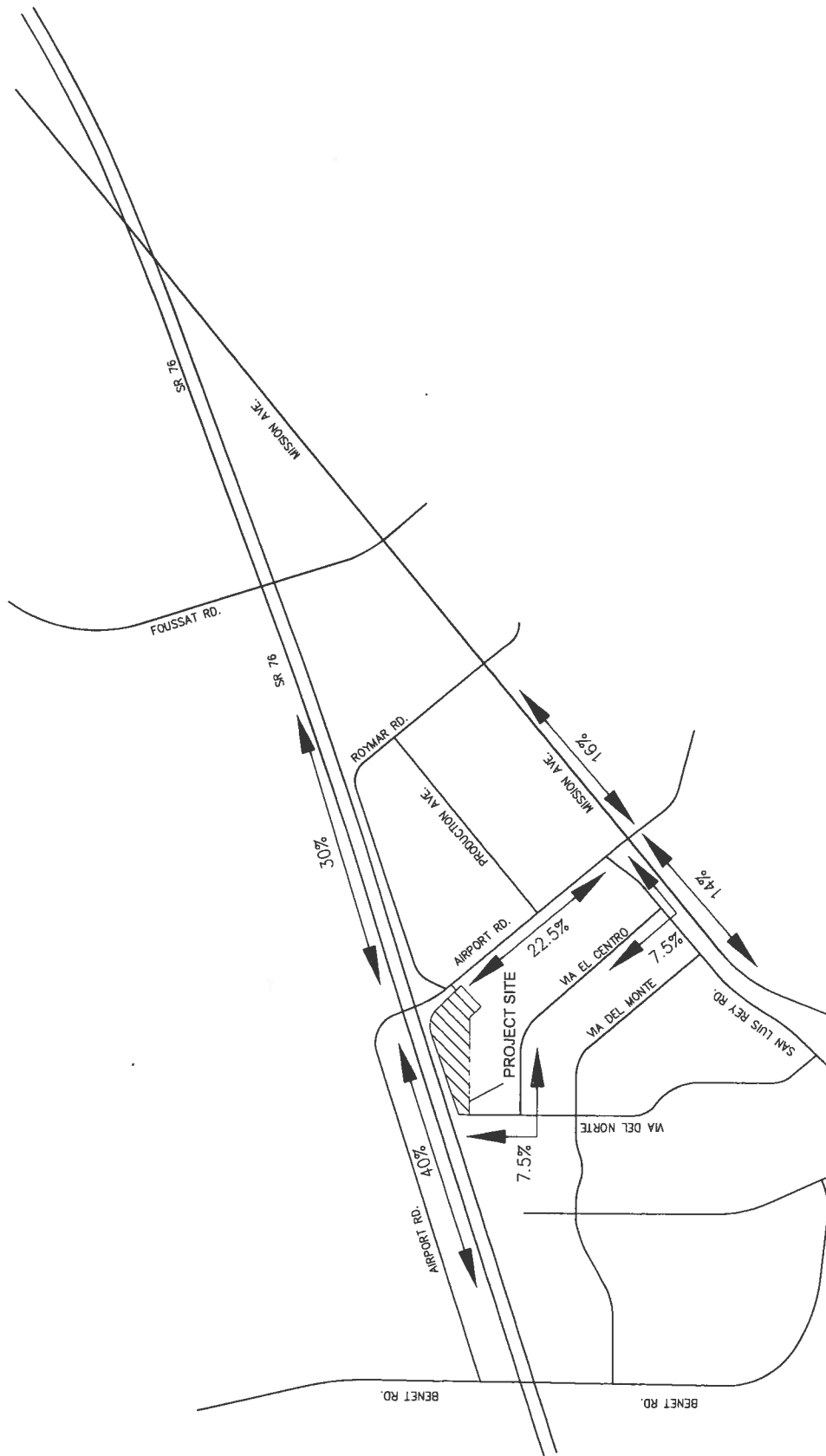
Peak hour trips from the proposed project were assumed to access the site from the Airport Road Driveway (75%) and the Via Del Norte Driveway (25%). The trips to/from the site from the Via Del Norte Driveway are assumed to do so via San Luis Rey Road/Airport Road.

6.0 Existing Conditions + Project

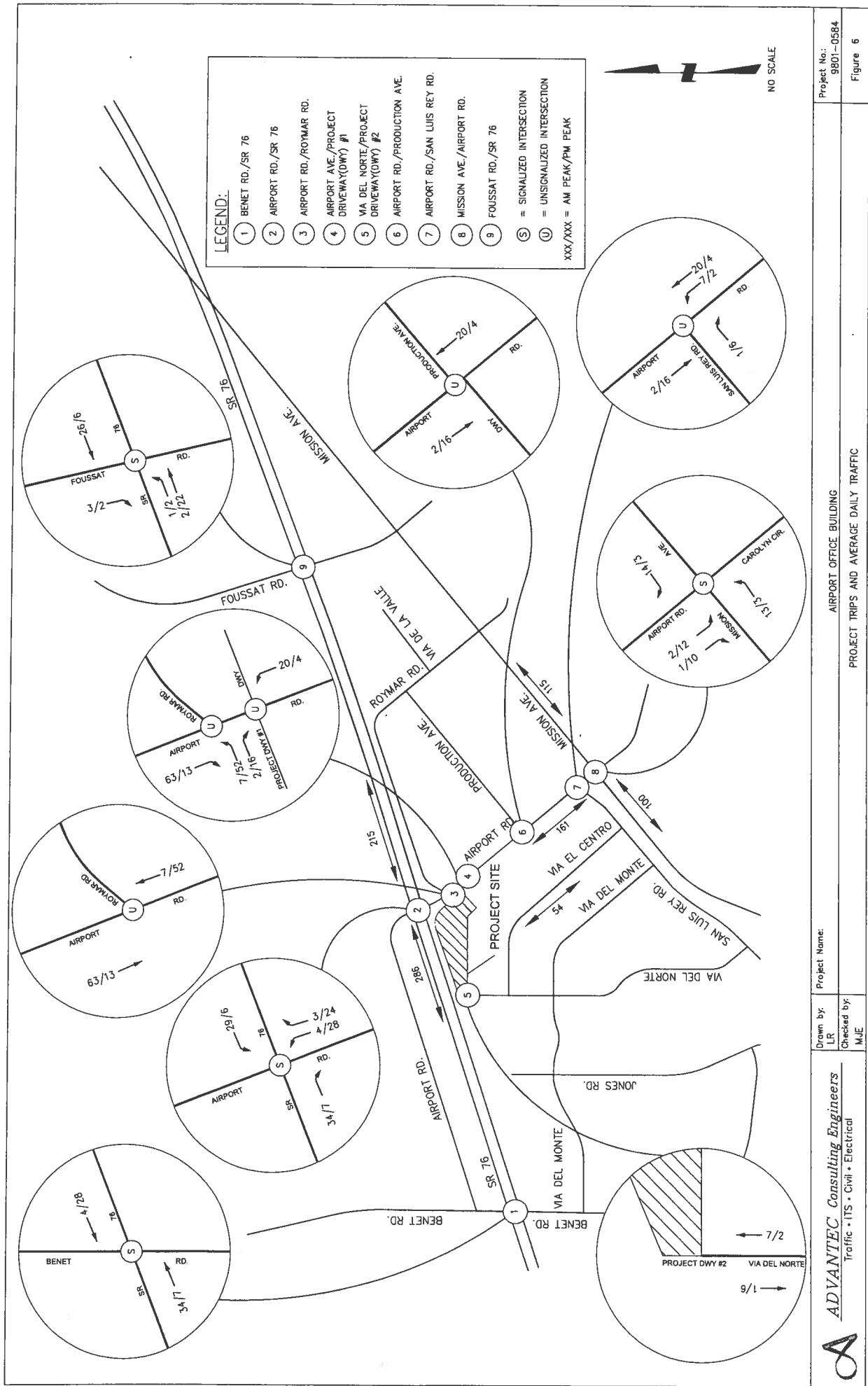
This scenario analyzes the addition of project traffic onto the existing background traffic for the AM and PM peak hours, and daily traffic conditions. The peak hour intersection volumes and daily traffic volumes for this scenario of existing conditions + project is shown in **FIGURE 7**. The intersection and roadway geometrics are the same as Existing Conditions.

The intersection LOS calculated with the addition of project traffic is shown in **TABLE 8** and the LOS worksheets are contained in Appendix B. **TABLE 9** displays the roadway segment analysis results.





 ADVANTEC Consulting Engineers Traffic • ITS • Civil • Electrical	Drawn by: LR	Project Name: AIRPORT OFFICE BUILDING PROJECT TRIP DISTRIBUTION	Project No.: 9801-0584 Figure 5



TRAFFIC IMPACT ANALYSIS
EL CORAZON PROJECT
Oceanside, California
July 01, 2008

1.0 INTRODUCTION

This traffic study has been prepared to determine and evaluate the potential traffic impacts to the local roadway system due to the proposed El Corazon project in the City of Oceanside. The project site is located in the area bound by Mesa Drive, Rancho del Oro Drive, Oceanside Boulevard, and El Camino Real. *Figure 1-1* shows the general vicinity of the project and *Figure 1-2* shows a more detailed project area map.

Included in this traffic analysis are:

- Project Description;
- Study Area Description;
- Existing Conditions Assessment;
- Traffic Analysis Approach & Methodology;
- Significance Criteria;
- Analysis of Existing Conditions;
- Projects Trip Generation/Distribution/Assignment;
- Analysis of Existing + Project (Phase 1D & 1E Only) Scenario;
- Short Term Impacts & Mitigation Measures;
- Analysis of Year 2010 Scenarios;
- Year 2010 Significant Impacts & Mitigation Measures;
- Analysis of Year 2015 Scenarios;
- Year 2015 Significant Impacts & Mitigation Measures;
- Analysis of 2030 Scenarios (Long Term Analysis);
- Residential Alternative Analysis;
- Long Term Significant Impacts & Mitigation Measures;
- Weekend Analysis;
- Access/Internal Circulation Analysis;
- Conclusions

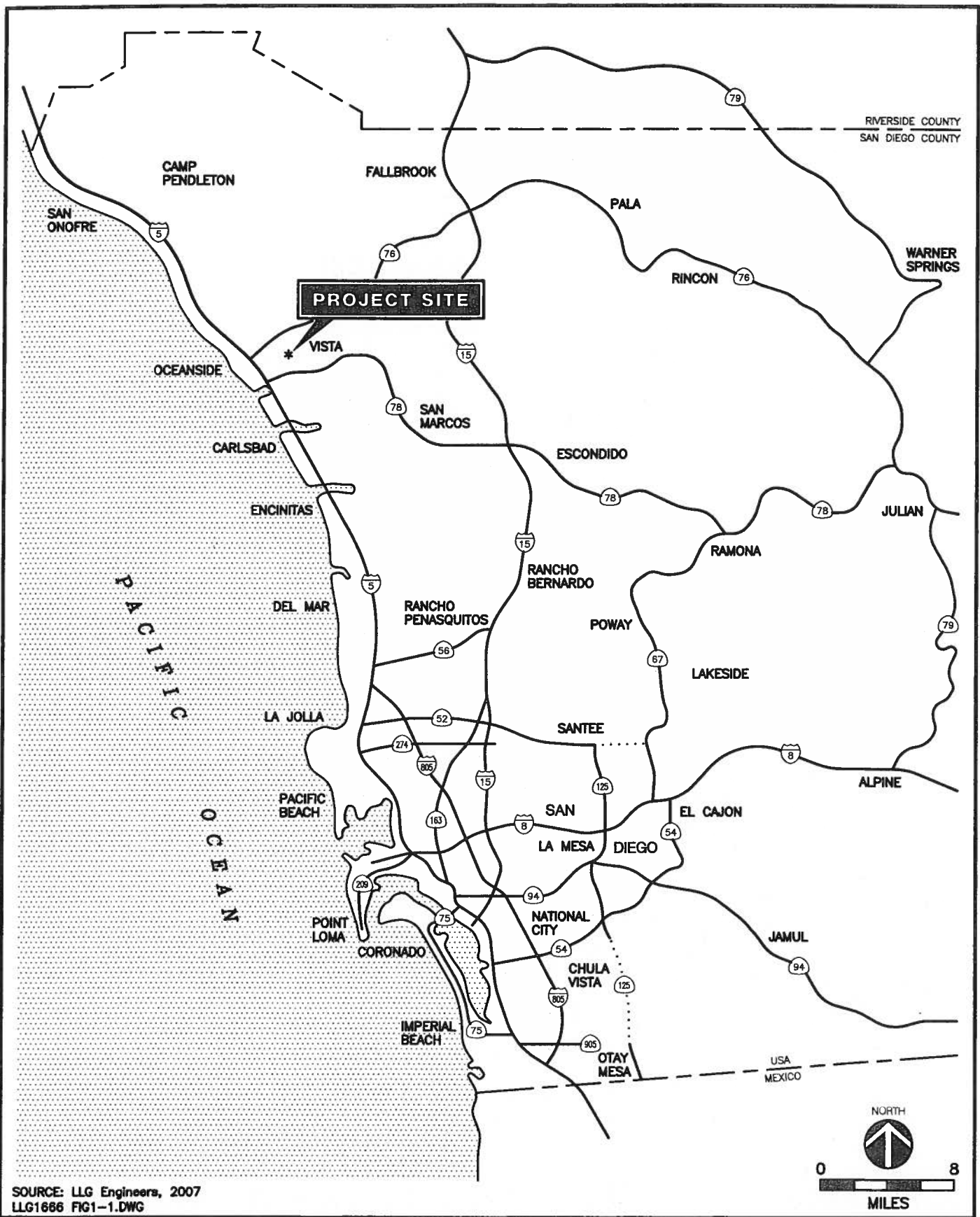


Figure 1-1
Vicinity Map

2.0 PROJECT DESCRIPTION

The City of Oceanside is proposing to redevelop a 465-acre property near the geographic center of Oceanside. The property is owned primarily by the City of Oceanside with approximately 3 acres owned by Ocean Ranch (known as the Stirling Property). The project site is known as El Corazon and is bounded by Mesa Drive on the north, Rancho del Oro Drive on the east, Oceanside Boulevard on the south, and El Camino Real to the west. The property was the former site of the U.S. Silica Mining Company. After the sand mining operation closed, title went to a private developer and subsequently to the City of Oceanside, with some funding to reclaim the former mine site. Several land use proposals were developed and abandoned over the years.

The vision for El Corazon is to create a 465-acre area in the center of Oceanside with a rural look and feel to the trails, roads, and amenities so that the area provides escape from city life.

In June 2005 the City of Oceanside approved a Land Use Master Plan for the El Corazon project site. The Master Plan for the site was developed as a result of a community based planning effort. Currently, the site is undergoing formal mine reclamation however, the Master Plan identifies two major categories of land uses: *Parks, Open Space, and Public Land Uses* (410 acres), and *Commercial Land Uses* (55 acres).

2.1 Land Uses Description

2.1.1 *Parks, Open Space, and Public Land Uses (410 acres)*

1. *Habitat Conservation Areas (150 acres):* Located along the north, west, and a portion of southern peripheral edges of El Corazon, this area will contain contiguous habitat along Garrison Creek and the pond near the western end. This habitat area is identified in the City of Oceanside Multiple Habitat Conservation Program as a Focused Planning Area with a goal of 90 to 100% conservation. Additional buffer zones will be located throughout the property and restored to native coastal sage scrub. Interpretive exhibits will explain habitat areas and restoration efforts, and pedestrian trails and docent led walks will provide access into conservation areas. Habitat can be viewed from the many park trails, and will be protected from the rest of El Corazon due to its difficult terrain and dramatic elevation change. More intensive land uses will be located farthest away from the habitat areas to minimize impacts to natural resources in the conservation area.

2. *Park Areas (160 acres):* Park spaces will be linked together by a comprehensive multi-use loop trail system, allowing for separation from vehicle traffic. This areas land use includes: baseball fields; softball fields; soccer/football fields; a recreation center; playgrounds; picnic grounds and park amenities; a park maintenance facility; docent center; bandstand; passive areas; dog park; several restrooms; and seven distinct parking areas. The park maintenance facility is located adjacent to the green waste facility, and would include a maintenance storage area and yard, as well as a potential location for a water treatment facility.

3. *Native Open Space & Greenbelt (46 acres):* These areas would be: located north of Oceanside Boulevard, bounded by commercial areas to the east and active recreation areas to the north;

additional areas will include the slopes adjacent to the commercial properties and hotel sites. These areas would be revegetated with native vegetation and act as greenbelts.

4. Community/Public Use Areas (6 acres): Community and public land uses at El Corazon potentially include; cultural and community center, and library. The center will provide educational, social and civic opportunities with multi-purpose community rooms. The overall facility will form a campus setting with landscaped grounds, plaza drop-off entry, and parking.

5. Senior Citizen Area (6 acres): The Senior Citizen Area has been approved under separate CEQA documentation, which is available from the City on request. This area is immediately adjacent to the Cultural & Community Center and generally shares this land use area.

6. Recreation Center Area (6 acres): The recreation center area will contain: a skate/BMX park; outdoor basketball courts; recreation center; and an aquatic center with competition size swimming pool. Passive park areas include picnic shelters, interpretive trails, reclaimed water ponds, playgrounds, and benches.

7. Green Waste Facility (16 acres): The Green Waste Facility is proposed to be relocated near the southwest entry of the El Corazon property. The facility will be screened with odor control in place. A potential future use of this area could include a public safety area or additional activity fields.

8. Trails and Pathways (9 miles): Trails and pathways would interconnect various components of the El Corazon site. These trails would be a combination of walking paths as well as pathways available to bicycles. Trails in the native habitat areas would be for pedestrians only, however the trails throughout the remaining areas would be available to both pedestrians and bicycles.

Infrastructure/Other (20 acres): This would include the pathways, driveways, and roadways within the El Corazon site.

2.1.2 Commercial Land Uses (55 acres total)

The Commercial Land Uses of El Corazon are divided into four areas as follows:

1. Commercial Development/Asset Property/Village Commercial (19 acres): A mixed-use commercial village located at the eastern boundary of El Corazon near the Rancho del Oro entryway will contain approximately 150,000 square feet of buildings. This area will contain specialty retail that is complimentary and compatible with adjacent recreational, civic, and surrounding land uses.

2. Commercial Development/Asset Property/Commercial Site II (25 acres): The southeastern corner of El Corazon, located adjacent to Oceanside Boulevard, is planned for traditional commercial retail and services to serve the surrounding community. The site may also contain offices and light industrial (technical) uses. Access to this site will be from the new internal project streets and Oceanside Boulevard. This site is topographically isolated from the core of the El Corazon property, and future uses are not planned to necessarily be directly related to the public land uses.

3. Commercial Development/Asset Property/Hotel Site A (5 acres): The Hotel Site A will contain a 100-150 room hotel to serve the recreational, business, and residential land uses within project area and the surrounding area. This hotel site is located near the northern Rancho del Oro entry point near the Commercial Village and will have onsite parking.

4. Commercial Development/Asset Property/Hotel Site B (6 acres): A second hotel site, also between 100 and 120 rooms, will be located on the highest point of the project, providing commanding views of the large park and open space areas, as well as quieter setting. Both sites provide on-site parking, pedestrian spaces, and landscaping.

2.2 Planning Aspects

Currently the El Corazon site is within the Rancho de Oro Specific Plan. In order to initiate any of the proposed plans for the project site, there will be an amendment to the Rancho de Oro Specific Plan, a General Plan Amendment, as well as an El Corazon Specific Plan for the proposed redevelopment. Additionally, as stated in the Master Plan, the City is anticipating redevelopment of the site to occur in phases over the next 15 to 20 years. This phasing could change however, based on the development agreements reached between the City and private developers, who are anticipated to complete the identified project elements.

2.3 Project Phasing

The project is proposed to be constructed by over many years. The project has been divided into Six (6) phases and the land use types and the year of completion is described below:

Phase 1

Phase 1A: Roads, Sidewalks & Infrastructure to Commercial Sites.

Phase 1B: Senior Center. 2008 (Opening)

Phase 1C: Green Waste Facility. 2006-2008

Phase 1D: Commercial Development Asset Property – Hotel Site A. 2006-2010

Phase 1E: Commercial Development Asset Property – Village Commercial. 2007-2010

Phase 1F: West Passive Trails & Interpretive Areas. 2007-2008

Phase 1G: Commercial Development Asset Property – Commercial Site B. 2010-2020

Phase 2

Phase 2A: Park – Soccer Fields & Infrastructure. 2008-2013

Phase 2B: Park – Softball Complex & Infrastructure. 2008-2013

Phase 2C: Park – Baseball Complex & Infrastructure. 2008-2013

Phase 3

Phase 3A: Commercial Development Asset Property – Hotel Site B. 2010-2015

Phase 3B: Cultural / Community Center / Library. 2010-2015

Phase 3C: Park – Passive Recreation Areas. 2010-2015

Phase 3D: West Passive Trails Extension.

Phases 3E, 3F 7 3G: Native Open Space Restoration Greenbelt Landscaping.

3. Commercial Development/Asset Property/Hotel Site A (5 acres): The Hotel Site A will contain a 100-150 room hotel to serve the recreational, business, and residential land uses within project area and the surrounding area. This hotel site is located near the northern Rancho del Oro entry point near the Commercial Village and will have onsite parking.

4. Commercial Development/Asset Property/Hotel Site B (6 acres): A second hotel site, also between 100 and 120 rooms, will be located on the highest point of the project, providing commanding views of the large park and open space areas, as well as quieter setting. Both sites provide on-site parking, pedestrian spaces, and landscaping.

2.2 Planning Aspects

Currently the El Corazon site is within the Rancho de Oro Specific Plan. In order to initiate any of the proposed plans for the project site, there will be an amendment to the Rancho de Oro Specific Plan, a General Plan Amendment, as well as an El Corazon Specific Plan for the proposed redevelopment. Additionally, as stated in the Master Plan, the City is anticipating redevelopment of the site to occur in phases over the next 15 to 20 years. This phasing could change however, based on the development agreements reached between the City and private developers, who are anticipated to complete the identified project elements.

2.3 Project Phasing

The project is proposed to be constructed by over many years. The project has been divided into Six (6) phases and the land use types and the year of completion is described below:

Phase 1

Phase 1A: Roads, Sidewalks & Infrastructure to Commercial Sites.

Phase 1B: Senior Center. 2008 (Opening)

Phase 1C: Green Waste Facility. 2006-2008

Phase 1D: Commercial Development Asset Property – Hotel Site A. 2006-2010

Phase 1E: Commercial Development Asset Property – Village Commercial. 2007-2010

Phase 1F: West Passive Trails & Interpretive Areas. 2007-2008

Phase 1G: Commercial Development Asset Property – Commercial Site B. 2010-2020

Phase 2

Phase 2A: Park – Soccer Fields & Infrastructure. 2008-2013

Phase 2B: Park – Softball Complex & Infrastructure. 2008-2013

Phase 2C: Park – Baseball Complex & Infrastructure. 2008-2013

Phase 3

Phase 3A: Commercial Development Asset Property – Hotel Site B. 2010-2015

Phase 3B: Cultural / Community Center / Library. 2010-2015

Phase 3C: Park – Passive Recreation Areas. 2010-2015

Phase 3D: West Passive Trails Extension.

Phases 3E, 3F & 3G: Native Open Space Restoration Greenbelt Landscaping.

Phase 4

Phase 4A: Recreation Center. 2012-2017

Phase 4B: Park – Recreation Areas. 2010-2015

Phase 5

Phase 5A: Park Expansion. 2015-2020

Phase 6

Phase 6A: Roads, Sidewalks & Infrastructure

Phase 6B: Park Expansion & Public Safety Center. 2015-2020

For the purpose of the traffic analysis the following scenarios were analyzed.

Existing + Project (Phase 1D & 1E Only): Considered the following land uses, which are proposed to be constructed prior to Year 2010. The Senior Center has been approved under separate CEQA documentation and is included in the baseline forecast volumes.

Phase 1

Phase 1A: Roads, Sidewalks & Infrastructure to Commercial Sites.

Phase 1D: Commercial Development Asset Property – Hotel Site A. 2006-2010

Phase 1E: Commercial Development Asset Property – Village Commercial. 2007-2010

Phase 1F: West Passive Trails & Interpretive Areas. 2007-2008

Short Term (Year 2010 + Project): Considered the following **additional** land uses, which are proposed to be constructed prior to Year 2013.

Phase 2

Phase 2A: Park – Soccer Fields & Infrastructure. 2008-2013

Phase 2B: Park – Softball Complex & Infrastructure. 2008-2013

Phase 2C: Park – Baseball Complex & Infrastructure. 2008-2013

Year 2015 + Project: Considered the following **additional** land uses, which are proposed to be constructed prior to Year 2017.

Phase 1

Phase 1G: Commercial Development Asset Property – Commercial Site B. 2010-2020

Phase 3

Phase 3A: Commercial Development Asset Property – Hotel Site B. 2010-2015

Phase 3B: Cultural / Community Center / Library. 2010-2015

Phase 3C: Park – Passive Recreation Areas. 2010-2015

Phase 3D: West Passive Trails Extension.

Phases 3E, 3F & 3G: Native Open Space Restoration Greenbelt Landscaping.

Phase 4

Phase 4A: Recreation Center. 2012-2017

Phase 4B: Park – Recreation Areas. 2010-2015

Year 2030 + Project: Considered the entire El Corazon project, which consisted of the previous land uses and the following remaining land uses.

Phase 5

Phase 5A: Park Expansion. 2015-2020

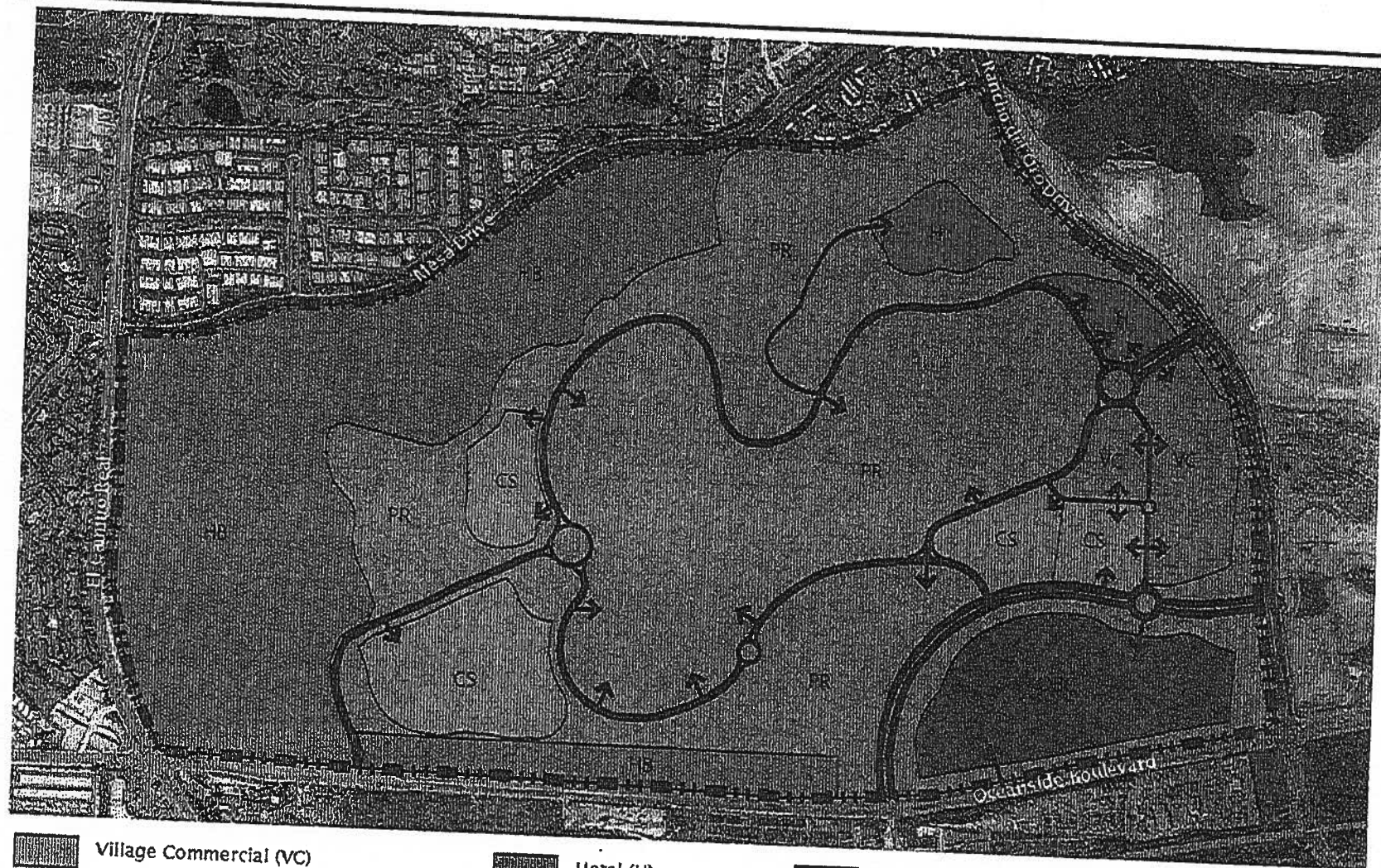
Phase 6

Phase 6A: Roads, Sidewalks & Infrastructure

Phase 6B: Park Expansion & Public Safety Center. 2015-2020

An alternative, which is identical to the proposed project except for and additional 300 residential units, was also analyzed.

The conceptual master plan for the project is shown on *Figure 2-1*. Access to the project site will be provided via Oceanside Boulevard and Rancho Del Oro Drive.



Village Commercial (VC)

Hotel (H)

Parks and Recreation (PR)

Roads

Oceanside Boulevard Commercial (OBC)

Civic Services (CS)

Habitat (HB)

Access Points

Source: RRM Design Group, 2007
LLG1666 FIG2-1.DWG

NORTH
NOT TO SCALE

LINSCOTT
LAW &
GREENSPAN

engineers

Figure 2-1
Conceptual Site Plan

7.0 EXISTING + PROJECT (PHASE 1D & 1E ONLY) ANALYSES

7.1 Trip Generation

Land uses which are expected to be constructed by Year 2010, were considered for existing plus project (Phase 1D & 1E Only) analysis. Based on the land use phasing described in Section 2.3, the following land uses were considered for Existing + Project (Phase 1D & 1E Only) analysis:

Phase 1D: Commercial Development Asset Property – Hotel Site. According to the El Corazon Land Use Master Plan Project Report dated June 28th, 2005 the hotel is planned to be developed in an urban compact form due to its near location near the Village Commercial district. Therefore, a trip generation for Hotel (w/convention facilities/restaurants) was considered for this land use.

Phase 1E: Commercial Development Asset Property – Village Commercial. Based on the El Corazon Land Use Master Plan Project and Report dated June 28th, 2005, the Village Commercial will contain specialty retail that is complementary and compatible to adjacent park, community, and cultural and surrounding land uses. Based on this description, since high generation retail anchor is planned and based on the proposed nature of this commercial, a trip generation for Specialty Retail/Strip Commercial was utilized for this land use.

The trip generation for both the land uses was calculated based on the SANDAG publication “Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region”, April 2002. *Table 7-1* summarizes the trip generation calculations for both the project sites.

Additionally, the Village commercial traffic generation was divided into primary trips and pass-by trips due to the percentage of pass-by trips attracted to this type of development. Pass-by trips are trips attracted from traffic already on the street system passing near the site while going from one location to another such as work to retail to home. This is as opposed to primary trips in which the trip returns to its place of origin such as home to grocery store to home. *Table 7-1* shows the breakdown of primary trips and pass-by trips for the existing + project (Phase 1D & 1E Only) project site.

Appendix B contains a detailed description of pass-by trips as contained in the Institute of Transportation Engineers (ITE) Trip Generation Manual. As seen on *Table 7-1*, the project (Phase 1) is calculated to generate a total of 7,960 primary daily trips, with 285 trips (171 inbound and 114 outbound trips) in the AM peak hour and 702 trips (363 inbound and 339 outbound trips) in the PM peak hour.

7.2 Trip Distribution/Assignment

The project-generated traffic was distributed to the street system based on a SANDAG Select Zone Assignment (SZA). The SZA uses the land-use assumptions in the Cities/County Transportation Forecast to distribute traffic volumes generated by the project site throughout the region. It is from this forecasted distribution (as well as existing traffic counts and the project’s location in relation to the I-5, SR-76 and SR-78 freeways) that the general regional traffic distribution is deduced.

Figure 7-1 depicts the project traffic distribution for Hotel and Figure 7-2 depicts the project traffic distribution for Commercial. Figure 7-3a depicts the existing plus project (Phase 1D & 1E Only) access/internal circulation traffic volumes and Figure 7-3b depicts the existing plus project (Phase 1D & 1E Only) traffic volumes. Figure 7-4 depicts Existing + Project Traffic Volumes. Please note that all the figures are at the end of this chapter.

TABLE 7-1
PHASE I—PROJECT TRIP GENERATION

Land Use	Quantity	Daily Trip Ends (ADT)		AM Peak Hour				PM Peak Hour			
		Rate	Volume	% of ADT	In:Out Split	Volume		% of ADT	In:Out Split	Volume	
						In	Out			In	Out
1D: Hotel Site A	5 Acres	300 /Acre ^a	1,500	6%	6:4	54	36	8%	6:4	72	48
1E: Village Commercial	19 Acres	400 /Acre ^b	7,600	3%	6:4	137	91	9%	5:5	342	342
Total Trip Generation:			9,100	—	—	191	127	—	—	414	390
Primary Trip Generation:			7,960	—	—	171	114	—	—	363	339
Pass-by Trip Generation For Village Commercial:			1,140	—	—	20	13	—	—	51	102

Footnotes:

- a. Generation rates obtained from the SANDAG Brief Guide (May 2002).
- b. Rate is a trip-end 1,000 square feet for retail.

General Notes:

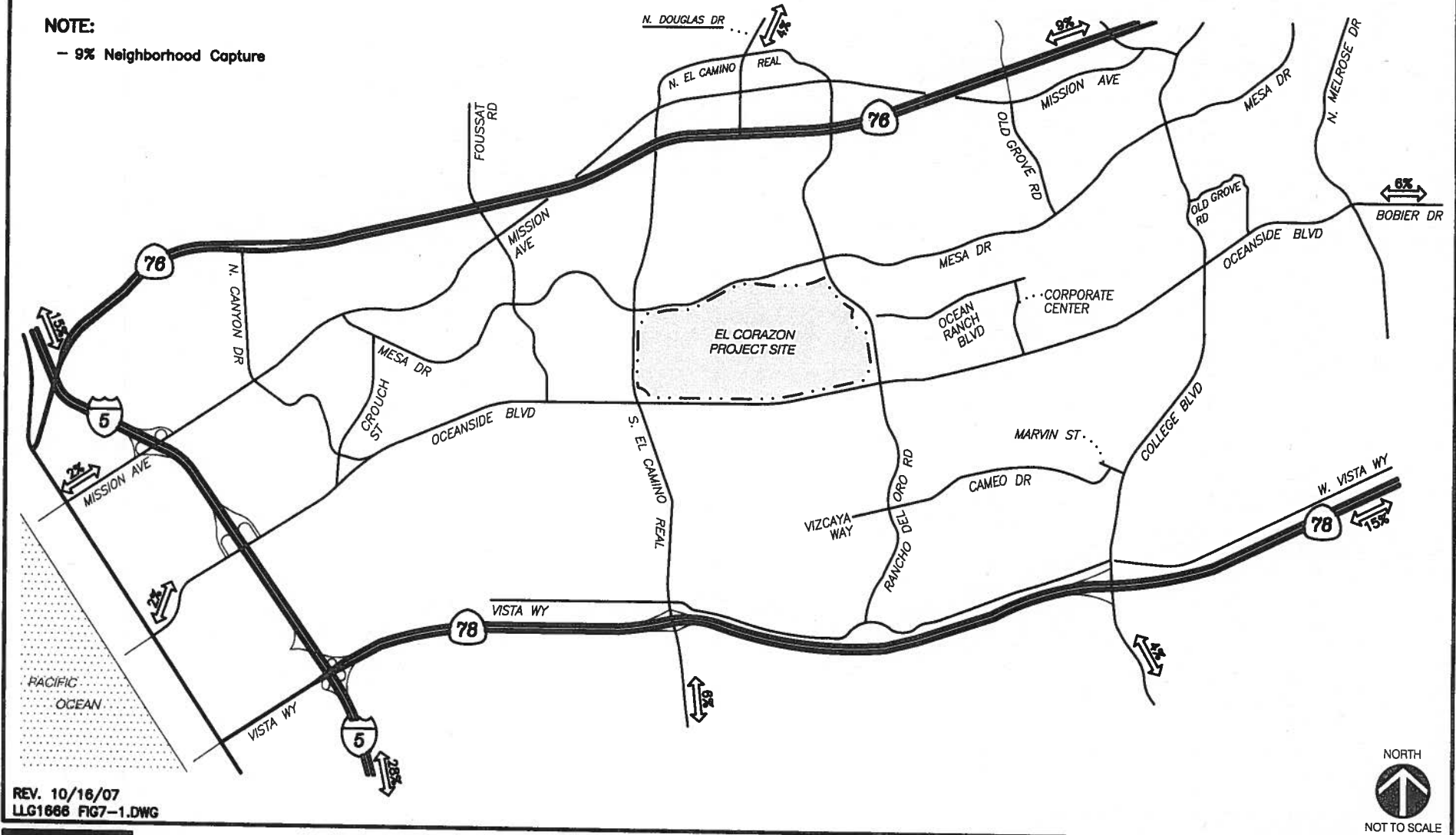
1. Trip-ends are one-way traffic movements, either entering or leaving.
2. Numbers shown in parenthesis are negative values.

LEGEND

- Regional Trip Distribution

NOTE:

- 9% Neighborhood Capture



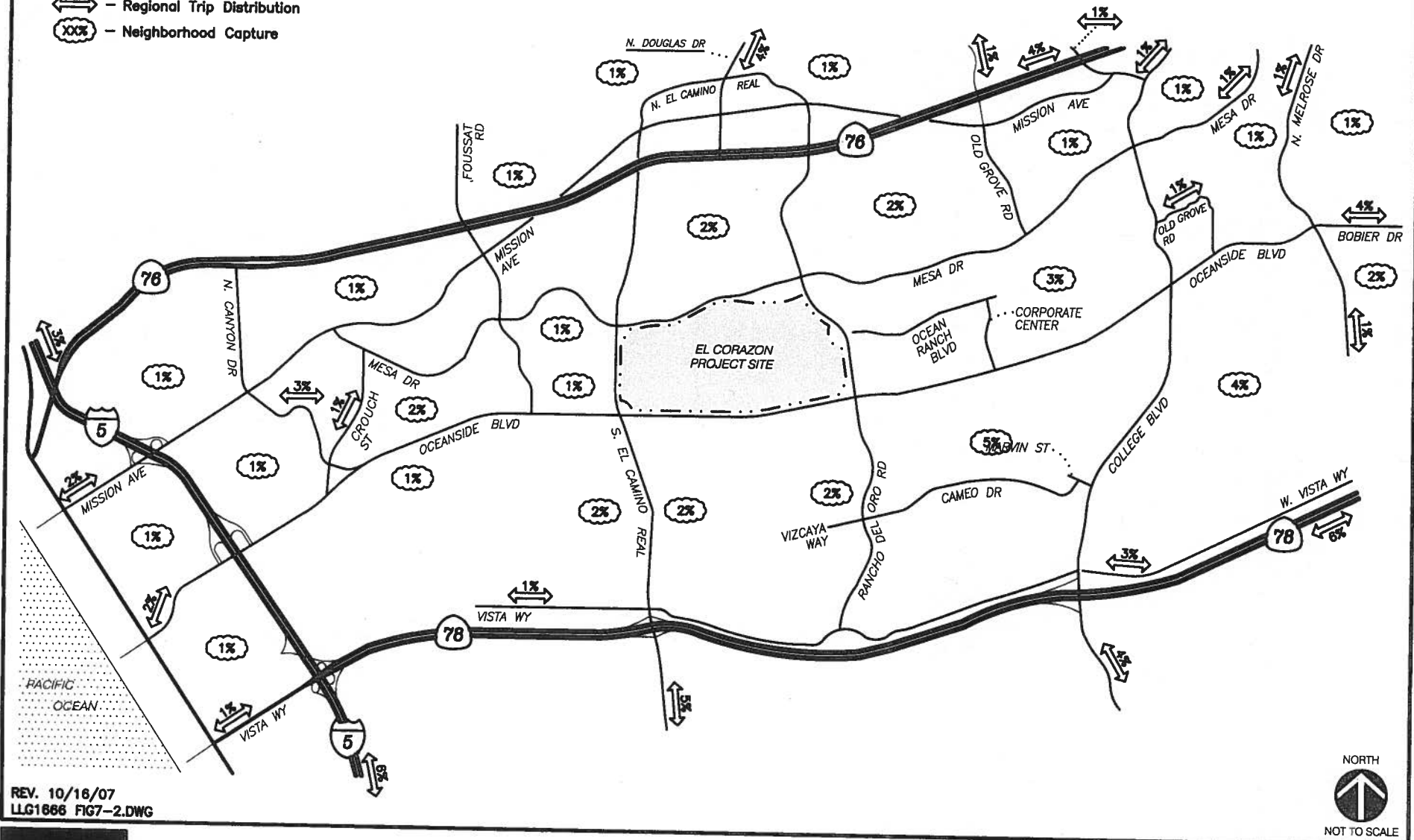
LINSCOTT
LAW &
GREENSPAN
engineers

Figure 7-1

Hotel - Project Regional Traffic Distribution

LEGEND

- Regional Trip Distribution
 - Neighborhood Capture



LINSOTT
 LAW &
 GREENSPAN
 engineers

Figure 7-2

Commercial - Project Regional Traffic Distribution

8.2.3 Freeway Analysis

Table 8-6 summarizes the Year 2010 freeway mainline operations on I-5. As seen in Table 8-6, the study area freeway segments are calculated to continue to operate at LOS D or better except for the following:

- I-5 SB: Oceanside Boulevard to SR-78 operates at a LOS E during the PM peak hour.
- I-5 NB: South of SR-78 operates at a LOS E during both AM and PM peak hours.
- I-5 SB: South of SR 78 operates at LOS E during the PM peak hour.
- SR78 EB: East of College Boulevard operates at a LOS E during the PM peak hour.

8.2.4 Ramp Meter Analysis

Table 8-7 summarizes the existing ramp meter operations. As seen in Table 8-7, all ramps are calculated to operate with less than 15 minutes of delay under worst-case conditions.

8.2.5 Intersection Lane Vehicle (ILV) Analysis

Table 8-8 summarizes the 2010 ILV analysis results for the study area intersections. As seen in Table 8-8, all intersections are calculated to currently operate “at Capacity” or better during both the AM and PM peak hours except for Oceanside Blvd/I-5 NB Ramp, which currently operates over capacity during the PM Peak Hour.

Appendix V contains the existing intersection ILV analysis worksheets.

8.3 Trip Generation, Distribution and Assignment

8.3.1 Trip Generation

Land uses which are expected to be constructed by Year 2013, were considered for short-term analysis. Based on the land use phasing described in Section 2.3, the Phase I land uses along with the following new land uses (Phase 2) were considered for short-term (Year 2010) analysis:

Phase 2A: Park – Soccer Fields & Infrastructure. Based on the El Corazon Land Use Master Plan Project Report dated June 28th, 2005 the Soccer Fields and Infrastructure will consist of 55.3 Acres, Irrigation Pond Water Features and Water Treatment Facilities.

Phase 2B: Park – Softball Fields & Infrastructure. Based on the El Corazon Land Use Master Plan Project Report dated June 28th, 2005 the Softball Field will consist of 12.5 Acres.

Phase 2C: Park – Baseball Complex & Infrastructure. Based on the El Corazon Land Use Master Plan Project Report dated June 28th, 2005 the Baseball Complex and Infrastructure will consist of 15.7 Acres, roads, sidewalks and Greenbelt landscaping.

The SANDAG “City Park” land use was utilized to estimate the daily trip generation for the proposed parks. However, the peak hour percentages for the AM and PM peak hours identified in the SANDAG were believed to be potentially low for the PM peak hour and high for the AM peak hour. Therefore, a detailed trip generation study was completed to determine the appropriate highest peak

hour percentages for the proposed park project. Following is a brief discussion of the process implemented to complete the study.

Three existing community parks with similar amenities were selected for comparison: Poinsettia Park, Poway Community Park and Kearny Mesa Recreation Center. A detailed comparison of these parks can be found in *Appendix H*. LLG used the available weekday and Saturday inbound and outbound counts for Poinsettia Park and Poway Community Park from the Katz, Okitsu & Associates (KOA) traffic impact report dated March 2004. In addition, inbound and outbound counts for two weekdays and one Saturday were commissioned for the Kearny Mesa Recreation Center in August 2004. Using the inbound and outbound traffic counts from the three parks, trip generation rates were calculated based upon the total acreage of each of the three parks surveyed.

The highest peak hour percentages for each park and the average percentage are shown in *Table 8-1*. These average percentages were used to calculate the El Corazon Park trip generation shown in *Table 8-2*. As seen on *Table 8-2*, Year 2010 trip generation is calculated to generate a total of 13,275 primary daily trips, with 403 trips (234 inbound and 169 outbound trips) in the AM peak hour and 1,349 trips (687 inbound and 662 outbound trips) in the PM peak hour.

TABLE 8-1
TRIP GENERATION RATE CALCULATION

Park Facility	AM Peak Hour % Of Daily ADT	PM Peak Hour % Of Daily ADT
Poway Community Park	3.82%	9.48%
Poinsettia Community Park	1.40%	16.01%
Kearny Mesa Community Park	—	—
Day 1	1.85%	17.06%
Day 2	2.09%	17.01%
Average Percentage	2.38% (Used 2%)	12.73% (Used 13%)

As mentioned in earlier sections, Phase 1B and Phase 1C are approved under separate CEQA documentation and hence were included in Year 2010 without project forecasted volumes.

8.3.2 Trip Distribution/Assignment

The project-generated traffic for park was distributed to the street system based on a SANDAG Select Zone Assignment (SZA). The SZA uses the land-use assumptions in the Cities/County Transportation Forecast to distribute traffic volumes generated by the project site throughout the region. It is from this forecasted distribution (as well as existing traffic counts and the project's location in relation to the I-5, SR-76 and SR-78 freeways) that the general regional traffic distribution is deduced.

Figure 8-2 depicts the project traffic distribution for Park. Figure 8-3a depicts the short-term project access/internal circulation traffic volumes and Figure 8-3b depicts the short-term project traffic volumes. Figure 8-4 depicts the Short Term + Project Traffic Volumes. Please note that all the figures are at the end of this chapter.

**TABLE 8-2
TRIP GENERATION YEAR 2010 (PHASE II)**

Land Use	Quantity	Daily Trip Ends (ADT)		AM Peak Hour					PM Peak Hour				
		Rate	Volume	% of ADT	In:Out Split	Volume			% of ADT	In:Out Split	Volume		
						In	Out	Total			In	Out	Total
Soccer Fields & Infrastructure	55.3 Acres	50 /Acre ¹	2,765	2%	5:5	28	28	56	13%	5:5	180	180	360
Softball Complex & Infrastructure	12.5 Acres	50 /Acre ¹	625	2%	5:5	7	6	13	13%	5:5	41	41	82
Baseball Complex & Infrastructure	15.7 Acres	50 /Acre ¹	785	2%	5:5	8	8	16	13%	5:5	52	51	103
Total Trip Generation (Phase 2)			4,175			43	42	85			273	272	545
Trip Generation (Phase 1D & 1E) From Table 7-1			9,100			191	127	318			414	390	804
Net Short Term (Year 2010) Trip Generation			13,275			234	169	403			687	662	1,349
Net Short Term (Year 2010) Total Primary Trip Generation			12,135			214	156	370			636	611	1,247
Pass-by Trip Generation For Village Commercial (Phase 1E)			1,140			20	13	33			51	51	102

Footnotes:

1. Generation rate for daily traffic obtained from the SANDAG Brief Guide (April 2002) for City park (Active Park), and the peak hour percentages and split is based on the additional survey conducted by LLG.

LEGEND

-  - Regional Trip Distribution
 - Neighborhood Capture

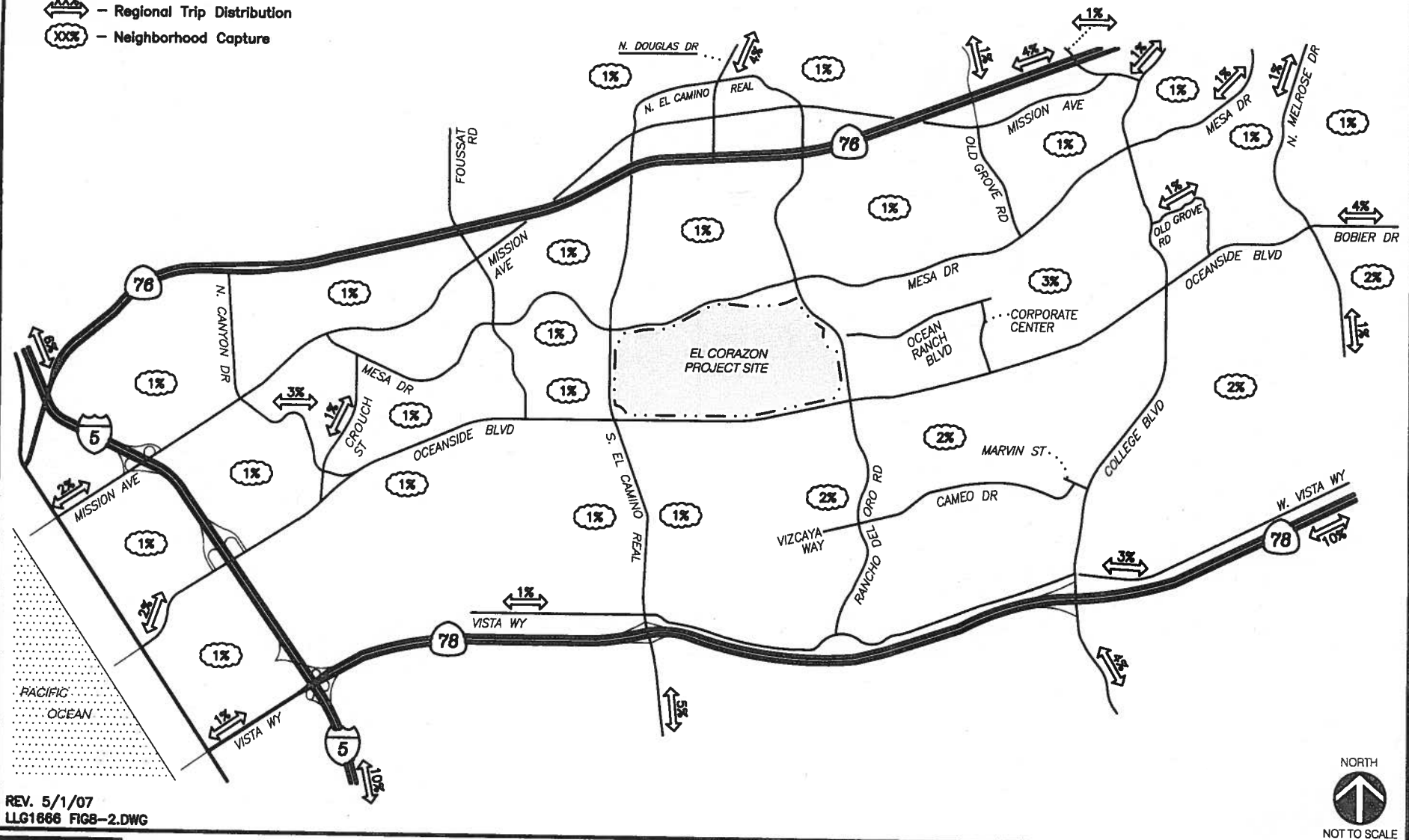
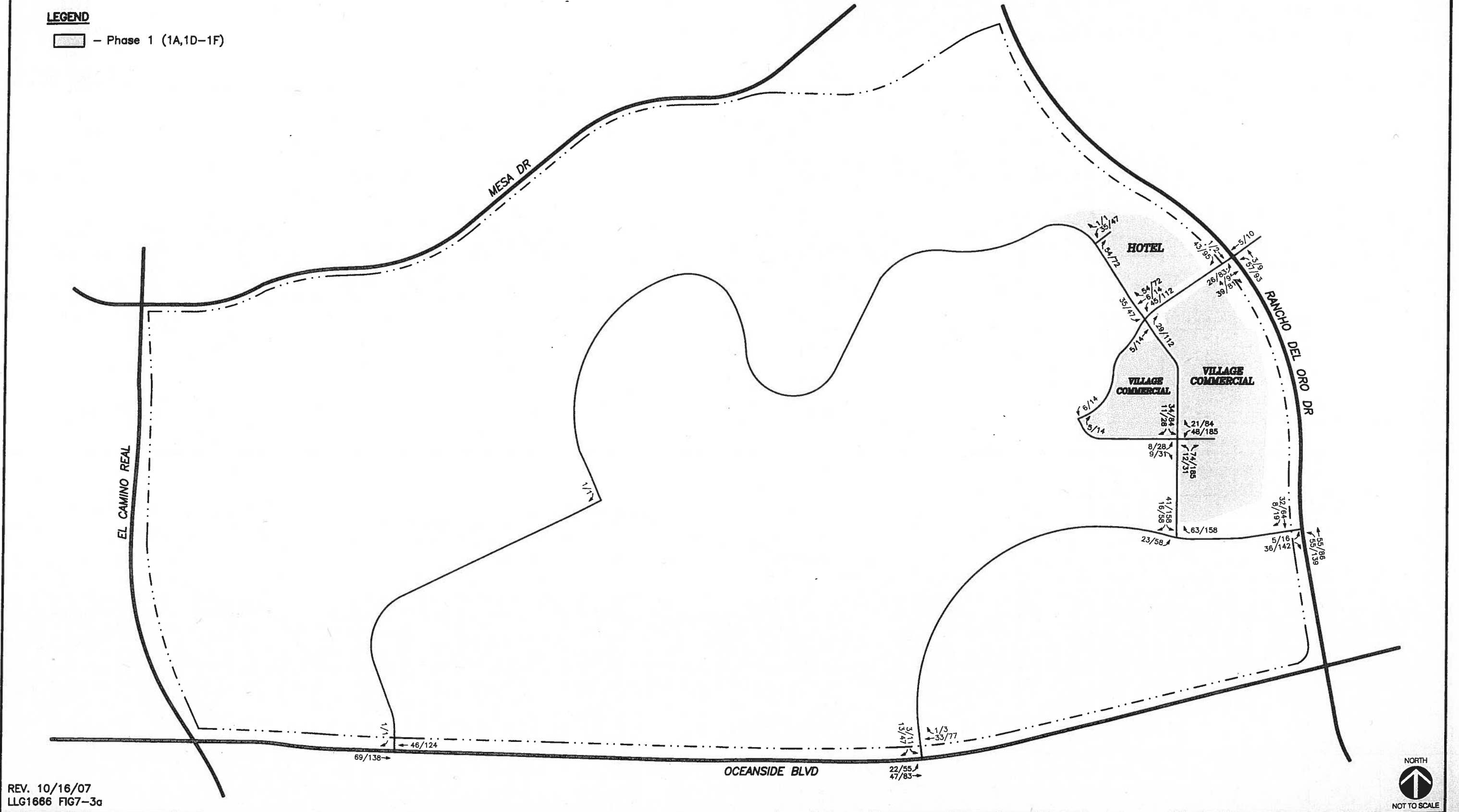


Figure 8-2

Park - Project Regional Traffic Distribution

LEGEND

— Phase 1 (1A,1D-1F)

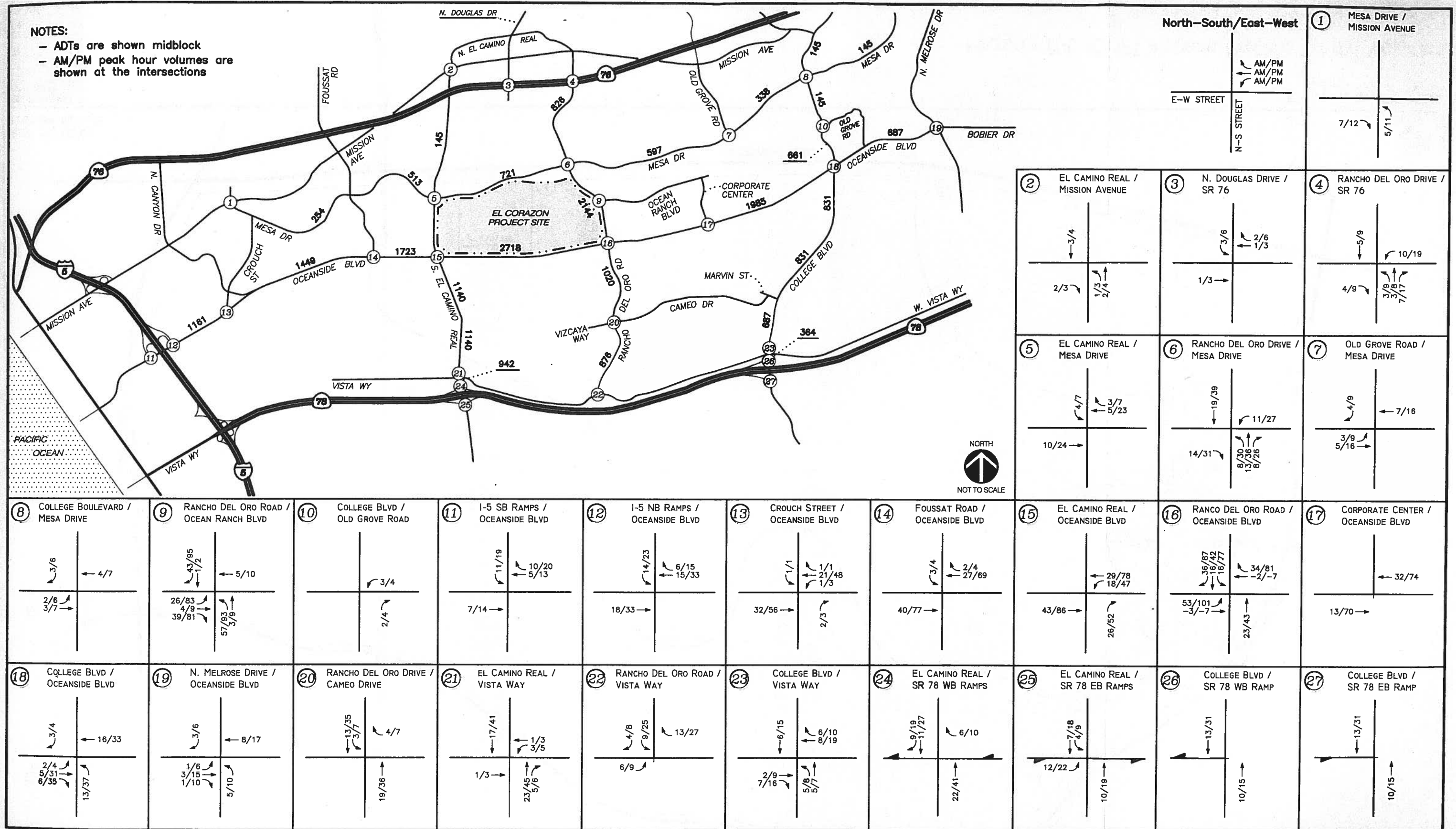


REV. 10/16/07
LLG1666 FIG7-3a

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GREENSPAN
engineers

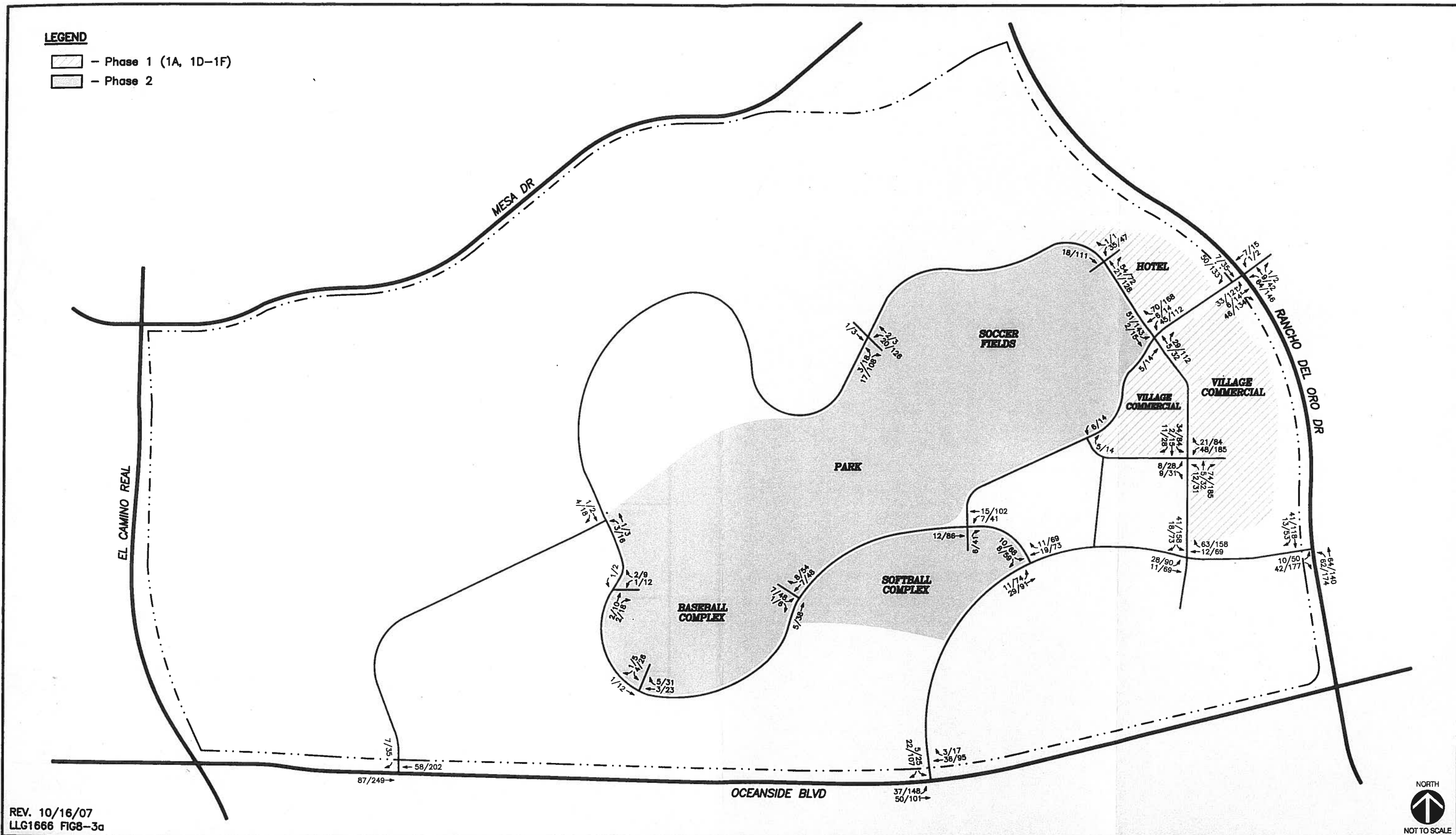
Figure 7-3a

Phase I (1A, 1D-1F) Access Project Traffic Volumes



LEGEND

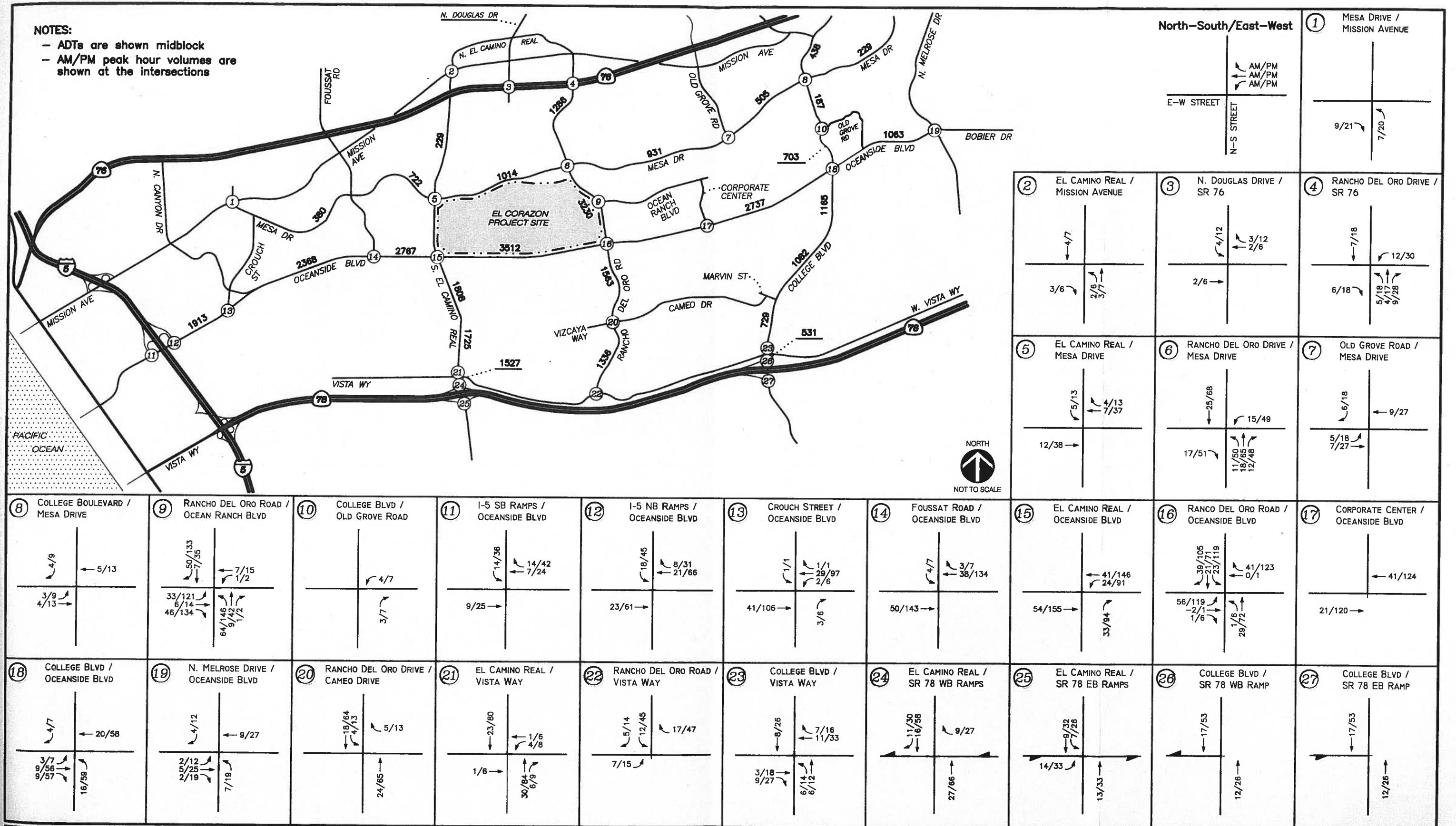
-  - Phase 1 (1A, 1D-1F)
-  - Phase 2



REV. 10/16/07
LLG1666 FIG8-3a

LINSCOTT
LAW &
GREENSPAN
engineers

Figure 8-3a
Year 2010 Access/Internal Circulation Project Traffic Volumes
Phase 1 (1A, 1D-1F) + Phase 2



REV. 10/15/07
LLG1666 FIG8-3b

LINSCOTT
LAW &
GREENSPAN
engineers

Figure 8-3b
Year 2010 - Project Phase 1 (1A, 1D-1F) + Phase 2 Traffic Volumes
AM/PM Peak Hours & ADT

INTRODUCTION

This study analyzes the forecast traffic impact of the proposed Mission Cove Mixed-Use Project, located on a vacant site along the south side of Mission Avenue between Airport Road and Foussat Road in the City of Oceanside. **Exhibit 1** shows the regional project location.

The project site plan is illustrated in **Exhibit 2**. The project proposes to do a General Plan Amendment to rezone the site from Industrial to High Density Residential and General Commercial.

As required by the City of Oceanside, this traffic impact study has been prepared in accordance with the City's 1995 Circulation Element and SANDAG Congestion Management Program (CMP) traffic impact study guidelines.

SITE ACCESS AND CIRCULATION

The proposed project will take access from Mission Avenue at the existing signalized intersection of Mission Avenue / Roymar Road. The project driveway will be aligned with the existing Roymar Road on the north side of Mission Avenue, forming a four-legged intersection. A secondary, right-turn in/right-turn out only driveway will also be provided near the western boundary of the project site. The analysis assumes all project trips will use the primary Mission Avenue / Roymar Road project access in order to provide a conservative, worst-case scenario.

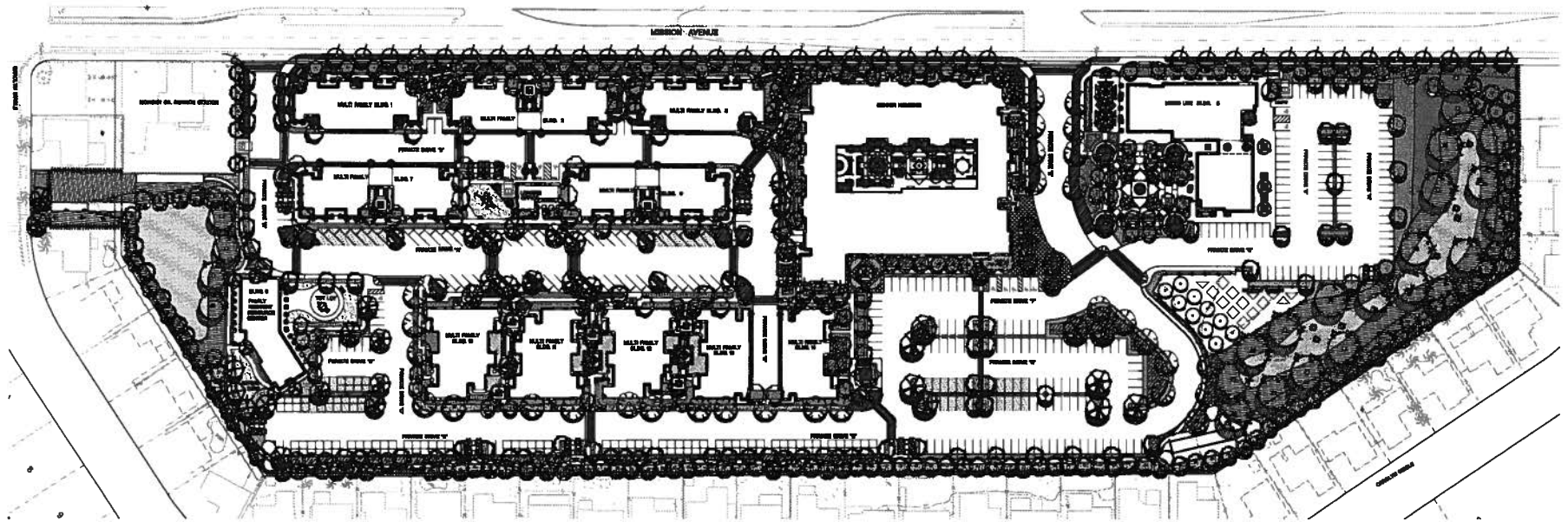
PROJECT STUDY AREA

The project study area was defined based on the distribution of project-generated trips on the roadway network. A Select Zone Assignment model run was conducted by SANDAG for the proposed project to determine the project trip distribution. The SANDAG CMP guidelines indicate that all signalized intersections where 50 or more project-generated trips are forecast to be added should be included in the traffic impact study.

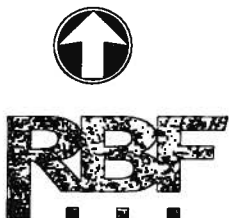
A total of 14 study intersections and 14 roadway segments were identified for inclusion in this traffic study. Based on the SANDAG CMP guidelines and discussions with City of Oceanside staff, the study area consists of the following intersections and roadway segments:

Intersections

1. SR-76 / Benet Road
2. SR-76 / Airport Road
3. SR-76 / Foussat Road
4. SR-76 / Douglas Drive
5. SR-76 / Rancho Del Oro Drive
6. Mission Avenue / Canyon Drive
7. Mission Avenue / Carey Road
8. Mission Avenue / Mesa Drive
9. Mission Avenue / Airport Road
10. Mission Avenue / Roymar Road (project access)
11. Mission Avenue / Foussat Road
12. Mission Avenue / El Camino Real
13. Mission Avenue / Douglas Drive
14. Foussat Road / Mesa Drive



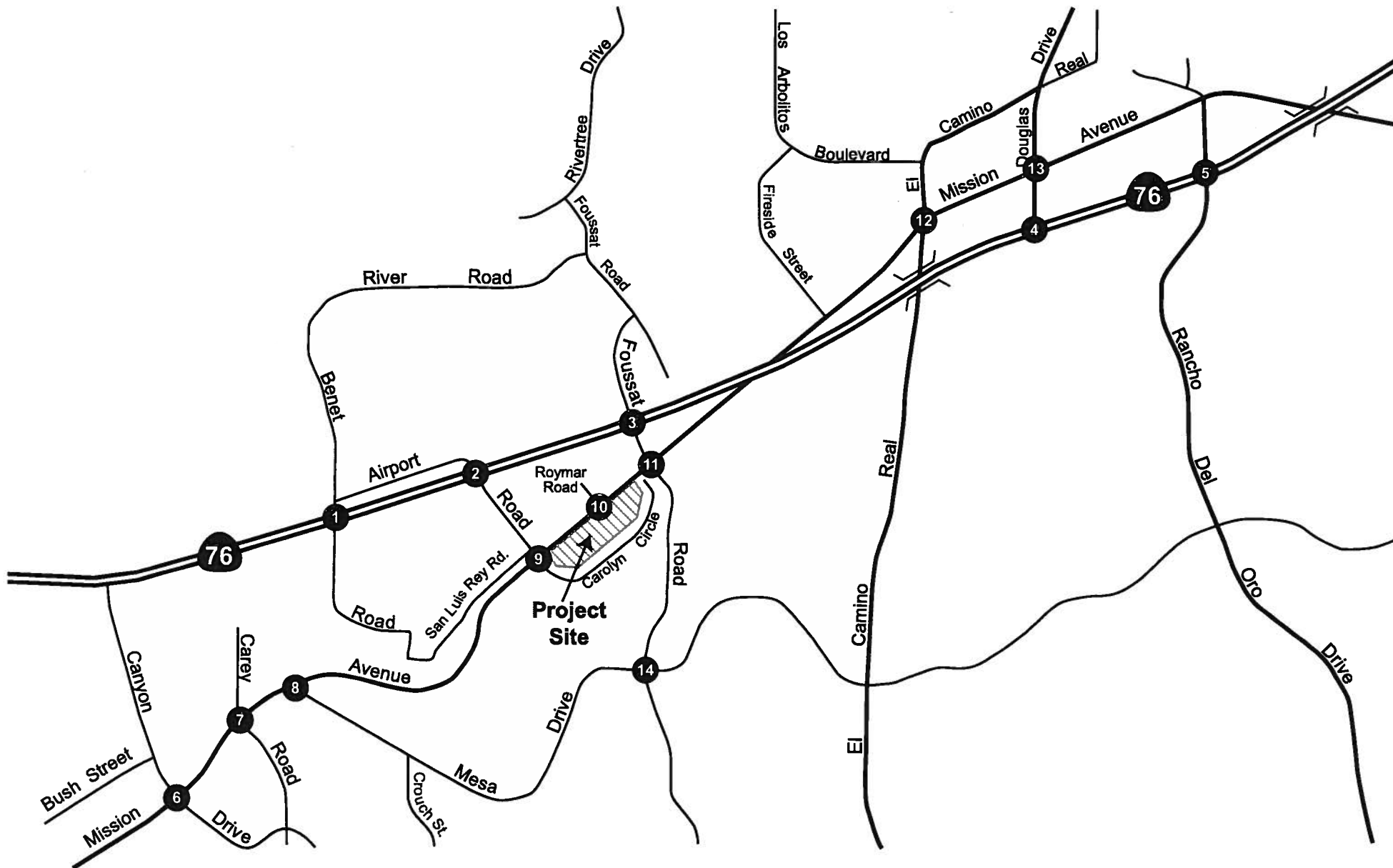

THE PORTLAND PLANNING GROUP
 5800 PASTEUR COURT SUITE 110
 CARLSBAD, CA 92008
 (760) 833-1001 www.thepggroup.com
 SITE DESIGN LANDSCAPE ARCHITECTURE



55-100754.001 AUGUST 2012

PROJECT SITE PLAN

EXHIBIT 2



Not to Scale



55-100754.001 - AUGUST 2011

LEGEND

X Study Intersection

PROJECT STUDY AREA

EXHIBIT 3

PROPOSED PROJECT

The proposed Mission Cove Mixed-Use Project consists of the following uses:

- 150 apartments
- 138 senior/special needs housing
- 5,000 square-feet of specialty retail
- 2,750 square-feet of office
- 2,750 square-feet of medical office
- Senior/special needs adult day care center serving up to 60 adults
- Child day care center serving up to 50 children

The project is located on a vacant site along the south side of Mission Avenue between Airport Road and Foussat Road in the City of Oceanside. The project will take access from the existing signalized intersection of Mission Avenue / Roymar Road.

Project Trip Generation

To determine the trips forecast to be generated by the proposed project, *April 2002 SANDAG Trip Generation* rates were utilized in accordance with the City of Oceanside and SANTEC/ITE Traffic Study Guidelines. The SANDAG (*Not So*) *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (April 2002) showing the trip generation rate for the proposed land uses is provided in **Appendix D. Table 6** summarizes the project trip generation rates.

Table 6
Proposed Project Trip Generation Rates

Land Use	Unit	Daily Rate (per unit)	AM Peak Hour			PM Peak Hour		
			Total (% of Daily)	In (% AM)	Out (% AM)	Total (% of Daily)	In (% PM)	Out (% PM)
Apartment	DU	6	8%	20%	80%	9%	70%	30%
Senior / Special Needs Housing	DU	4	5%	40%	60%	7%	60%	40%
Specialty Retail	TSF	40	3%	60%	40%	9%	50%	50%
Medical Office	TSF	50	6%	80%	20%	11%	30%	70%
Office	TSF	20	14%	90%	10%	13%	20%	80%
Adult Day Care Center	adult	5	17%	50%	50%	0%	50%	50%
Child Day Care Center	child	5	17%	50%	50%	18%	50%	50%

Source: SANDAG, "Not So Brief Guide", April 2002.

Note: TSF = 1000 square feet.

Table 7 summarizes the forecast project-generated trips based on the trip generation rates contained in Table 6. As summarized in Table 7, the proposed project is forecast to generate approximately 2,080 trips per day, which includes approximately 167 a.m. peak hour trips and approximately 179 p.m. peak hour trips.

**Table 7
Proposed Project Trip Generation**

Land Use	Size	Unit	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
				Total	In	Out	Total	In	Out
Apartment	150	DU	900	72	14	58	81	57	24
Senior / Special Needs Housing	138	DU	552	28	11	17	39	23	16
Specialty Retail	5	TSF	200	6	4	2	18	9	9
Medical Office	2.75	TSF	137.5	8	7	2	15	4	11
Office	2.75	TSF	55	8	7	1	7	1	6
Adult Day Care Center	60	adult	300	51	26	25	0	0	0
Child Day Care Center	50	child	250	43	22	21	45	22	23
Subtotal			2,395	215	90	125	205	116	88
<i>10% Mixed Use Reduction for Commercial Uses ⁽¹⁾</i>			<i>-40</i>	<i>-1</i>	<i>-1</i>	<i>0</i>	<i>-4</i>	<i>-2</i>	<i>-2</i>
<i>50% internal capture for day care center</i>			<i>-275</i>	<i>-47</i>	<i>-24</i>	<i>-23</i>	<i>-23</i>	<i>-11</i>	<i>-11</i>
NET PROJECT TRIPS			2,080	167	58	102	179	104	75

Note: TSF = 1000 square feet.

⁽¹⁾ Mixed use reduction of 10% has been applied only to the trips generated by the retail use and an equal amount of residential trips has been deducted

Project Trip Generation Comparison – Proposed Project vs. General Plan Land Use

As discussed earlier in the report, the proposed project site is currently zoned for Limited Industrial use. The project proposes to do a General Plan Amendment to rezone the site from Limited Industrial to High Density Residential and General Commercial. A comparison of the trip generation between the General Plan Land Use and the proposed land uses was conducted to determine the net change in traffic with the rezoning of the site to the proposed uses. The trip generation comparison is presented in Table 8. As shown in Table 8, the proposed Mission Cove project would result in a net decrease of 811 trips per day, with a net decrease of 180 a.m. peak hour trips and a net decrease of 168 p.m. peak hour trips.

**Table 8
Project Trip Generation Comparison – Proposed Project vs. General Plan Land Use**

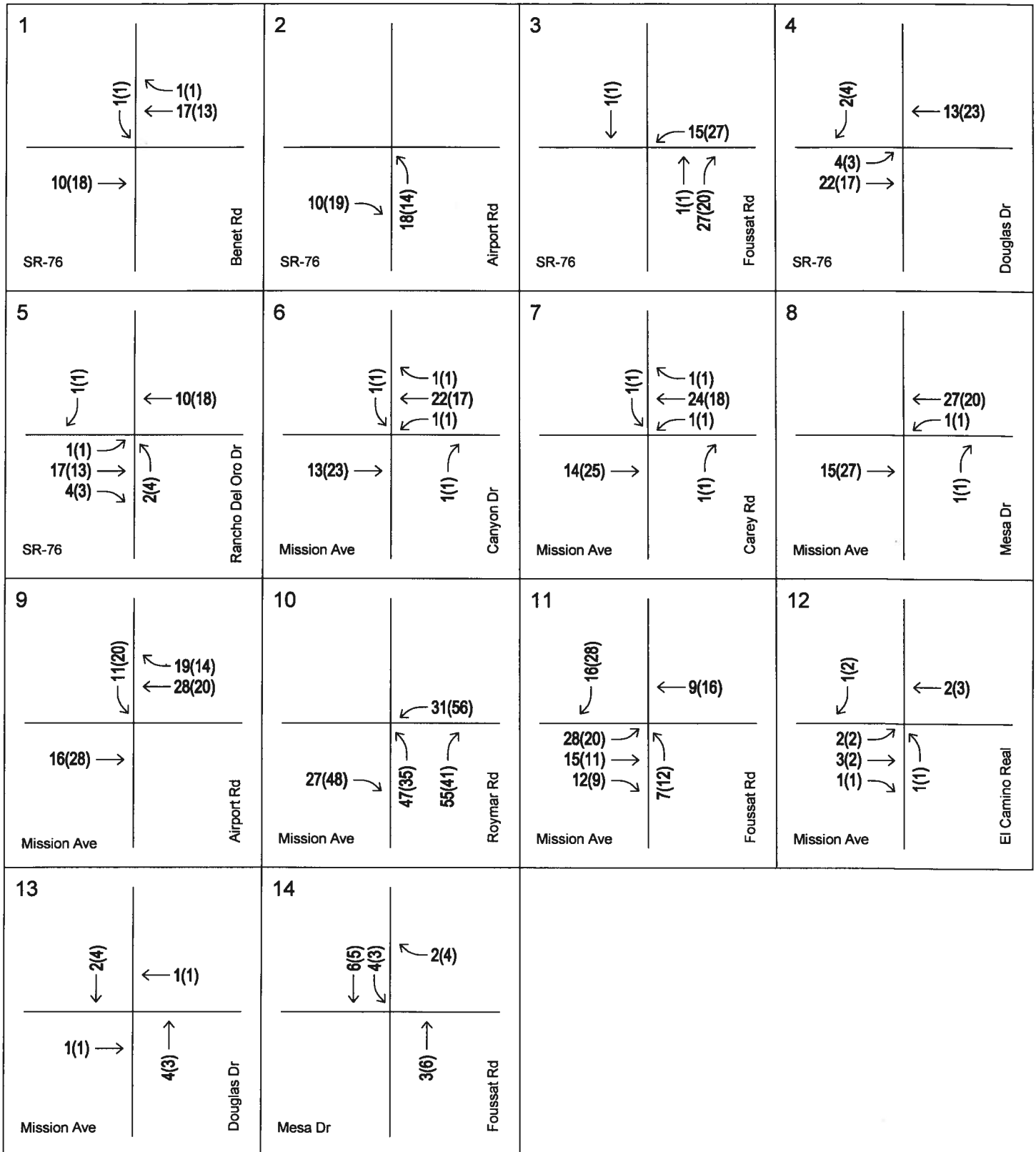
Trip Generation Rate for General Plan Land Use

Land Use	Unit	Daily (per unit)	AM Peak			PM Peak		
			Total (of daily)	In (% AM)	Out (% AM)	Total (of daily)	In (% PM)	Out (% PM)
Industrial/Business Park (with commercial)	acre	200	12%	80%	20%	12%	20%	80%

Trip Generation Comparison - Proposed Project vs. General Plan Land Use

Land Use	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
		Total	In	Out	Total	In	Out
Proposed Mission Cove Project (Multi-Family Residential / Commercial)	2,080	167	58	102	179	104	75
Current General Plan Land Use (Limited Industrial) *	2,890	347	277	69	347	69	277
Difference (Proposed Project – General Plan Land Use)	-811	-180	-219	32	-168	34	-202

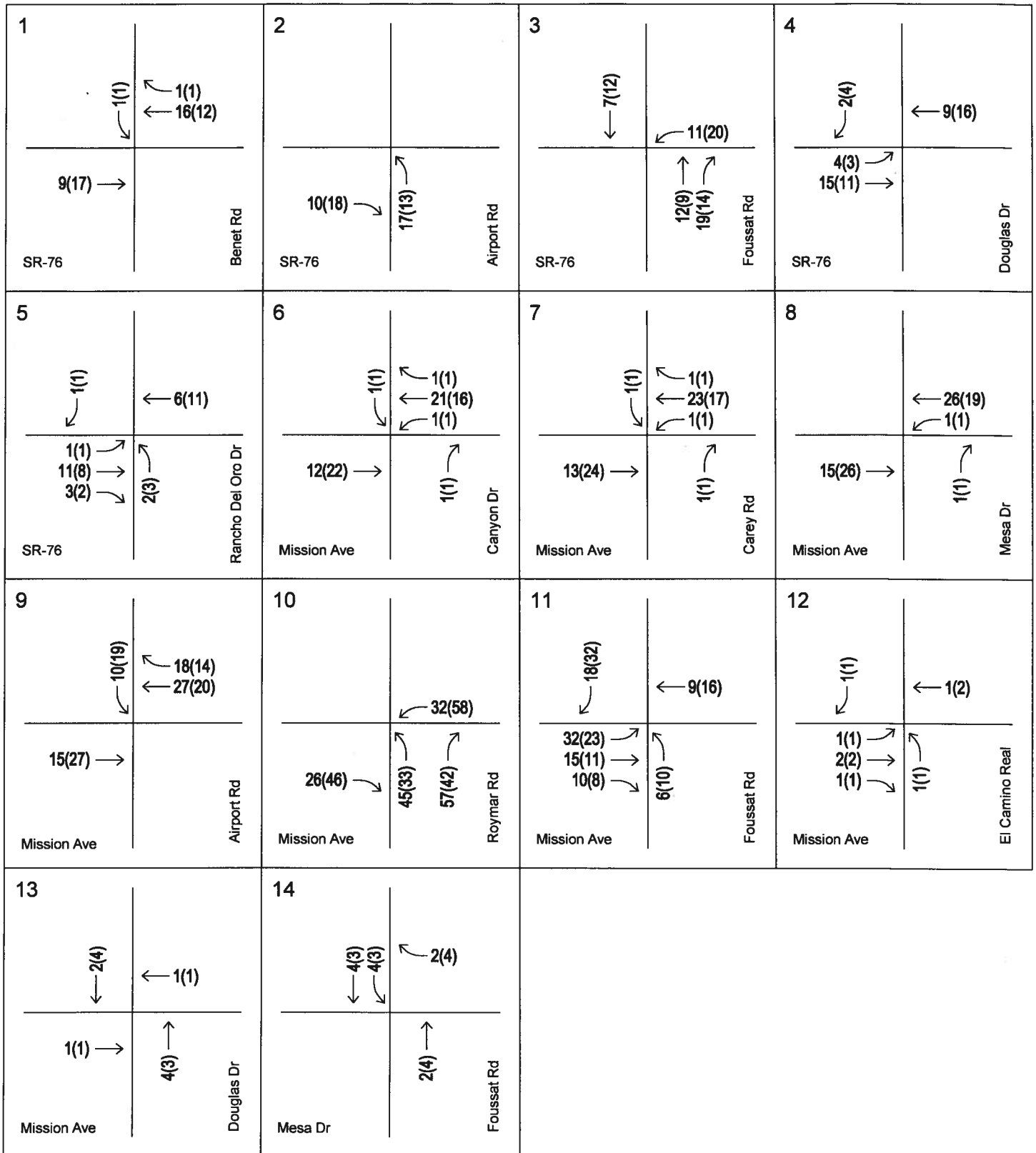
* SANDAG Trip Rate for an Industrial/Business Park use (200 trips per acre) was used to calculate the GPLU trips. The proposed project site is approximately 14.45 acres.



LEGEND

XX(XX) AM/PM PEAK HOUR VOLUME

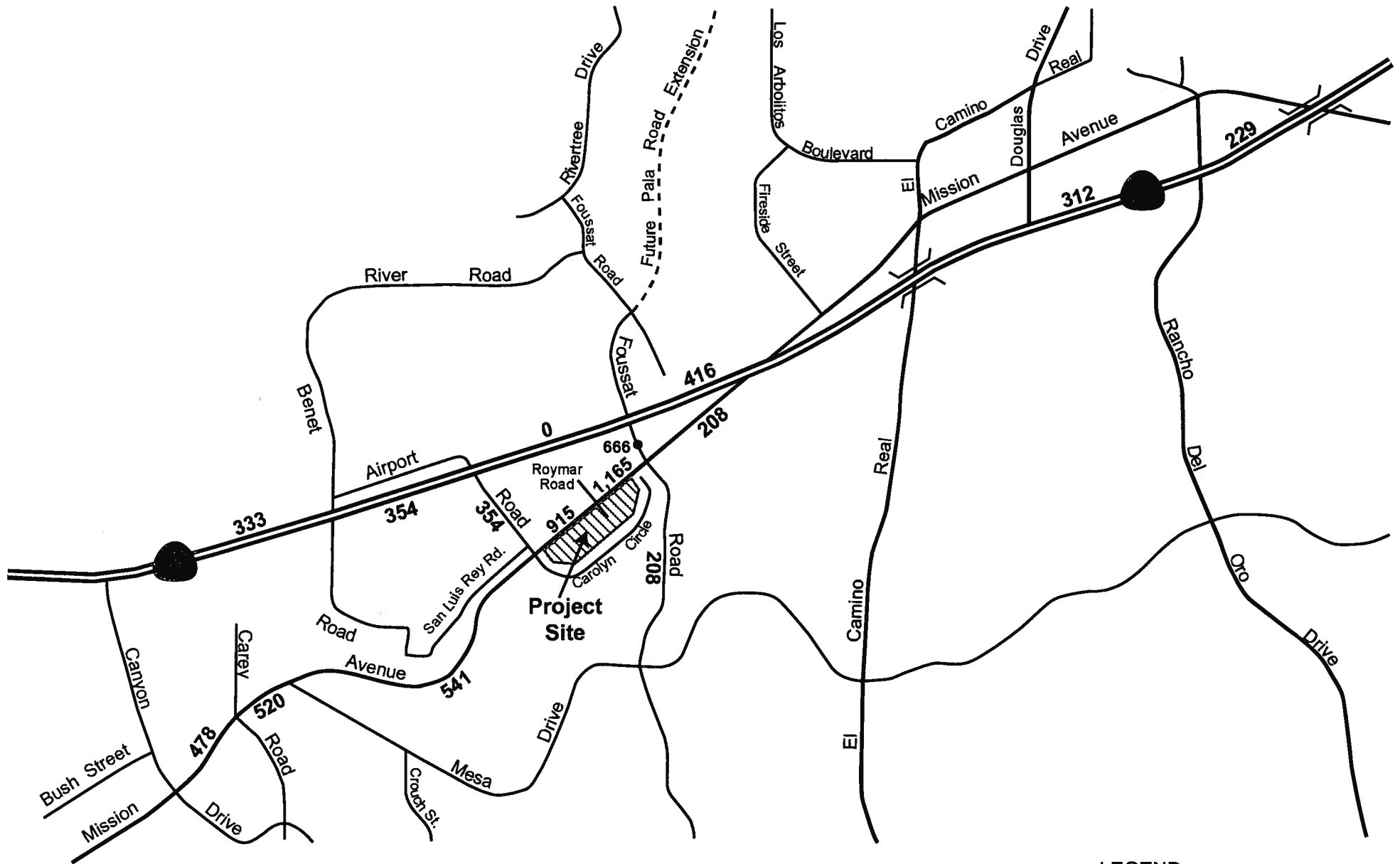
PEAK HOUR PROJECT TRIPS EXISTING + PROJECT CONDITIONS



LEGEND

XX(XX) AM/PM PEAK HOUR VOLUME

PEAK HOUR PROJECT TRIPS HORIZON YEAR 2030 WITH PROJECT CONDITIONS



Not to Scale



55-100754.001 - JULY 2012

DAILY PROJECT TRIPS - HORIZON YEAR 2030 WITH PROJECT

EXHIBIT 15

INTRODUCTION

This study analyzes the forecast traffic impact of the proposed Terraza at Rancho Del Oro Village XII multi-family development located at the northwest quadrant of College Boulevard and Old Grove Road in the City of Oceanside. **Exhibit 1** shows the regional project location.

The threshold to determine the need for traffic studies is 500 daily trips for non-conforming land uses and 1,000 daily trips for projects consistent with the City's General Plan land use. The proposed residential project is forecast to generate approximately 2,704 trips per day, which includes approximately 216 a.m. peak hour trips and approximately 270 p.m. peak hour trips.

The forecast project trip generation exceeds the threshold for a Congestion Management Plan (CMP) traffic study; therefore, project traffic was distributed on the roadway network based on a select zone model run conducted by SANDAG. The select zone model run was conducted in 2009 in conjunction with the "Revised Pacific Coast Business Park in the City of Oceanside" Traffic Impact Analysis prepared by KHA. RBF coordinated with the City of Oceanside in refining the distribution specifically for this project and associated land use. Based on the 50-trip threshold, a total of 16 intersections and 21 roadway segments are included in the study area. The analysis of project impacts was conducted for existing, cumulative and Horizon year (2030) scenarios with and without the proposed project.

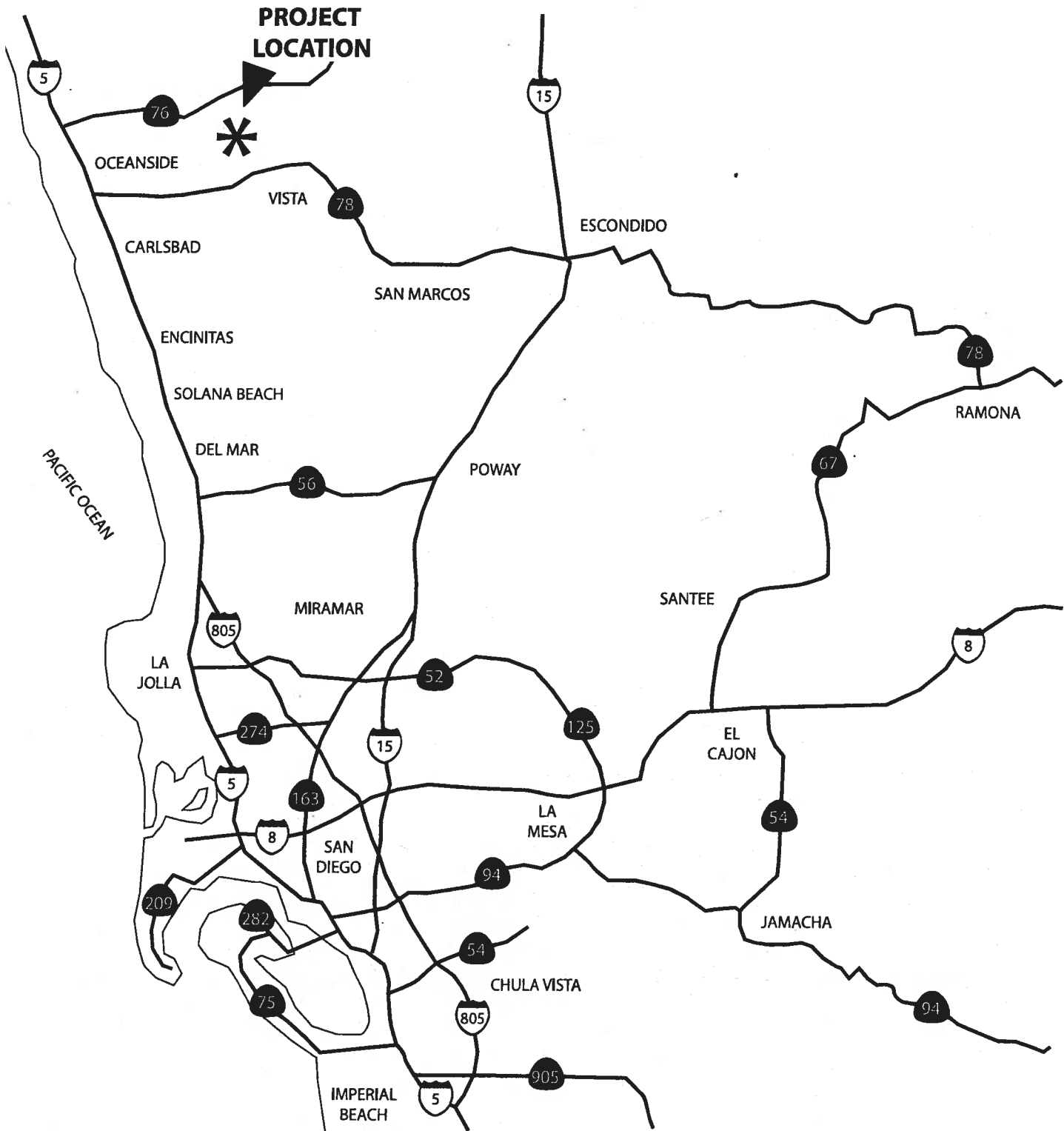
As required by the City of Oceanside, this traffic impact study has been prepared in accordance with the City's 2012 Circulation Element Update and SANTEC/ITE traffic impact study guidelines.

Project Description

The proposed Terraza at Rancho Del Oro Village XII project site is currently vacant and is bound by Old Grove Road to the south and College Boulevard to the east. As shown in the project site plan (**Exhibit 2**), the property will consist of approximately 338 multifamily residential units that will be compromised of one, two and three bedroom apartments.

The project site will take access from two driveways along the north side of Old Grove Road. The westerly driveway will be aligned with Avenida Del Oro at the existing signalized intersection of Old Grove Road / Avenida Del Oro. The project entrance road will extend north of Avenida Del Oro, which will convert the existing signalized "T" intersection to a four-way intersection.

The easterly driveway will be aligned with an existing internal street (Trestles Street) for the partially built Pacific Coast Business Park project. The project will install a traffic signal at the easterly driveway that will serve both the Pacific Coast Business Park and the proposed project uses.



NOT TO SCALE



55-100847.001 APRIL 2013

REGIONAL PROJECT VICINITY

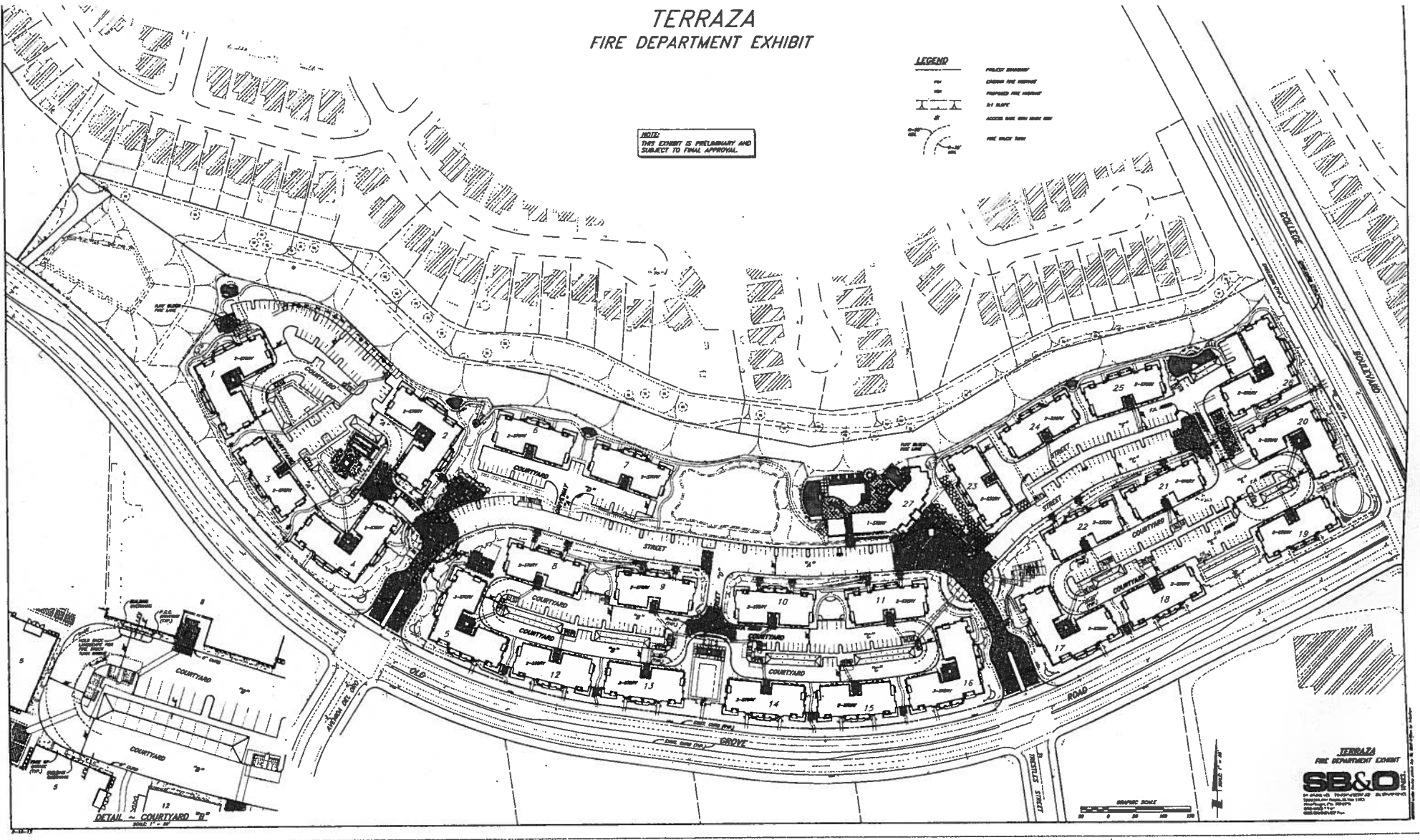
EXHIBIT 1

TERRAZA FIRE DEPARTMENT EXHIBIT

LEGEND

PROJECT BOUNDARY
EXISTING FIRE HOSEWAY
PROPOSED FIRE HOSEWAY
ST ALLEY
ACCESS DRIVE WITH DRIVE WAY
FIRE TRUCK TURN

NOTE:
THIS EXHIBIT IS PRELIMINARY AND
SUBJECT TO FINAL APPROVAL.



TERRAZA
FIRE DEPARTMENT EXHIBIT
SB&O
INCORPORATED
10000 W. 10TH AVE. SUITE 100
DENVER, CO 80202
303.751.1000

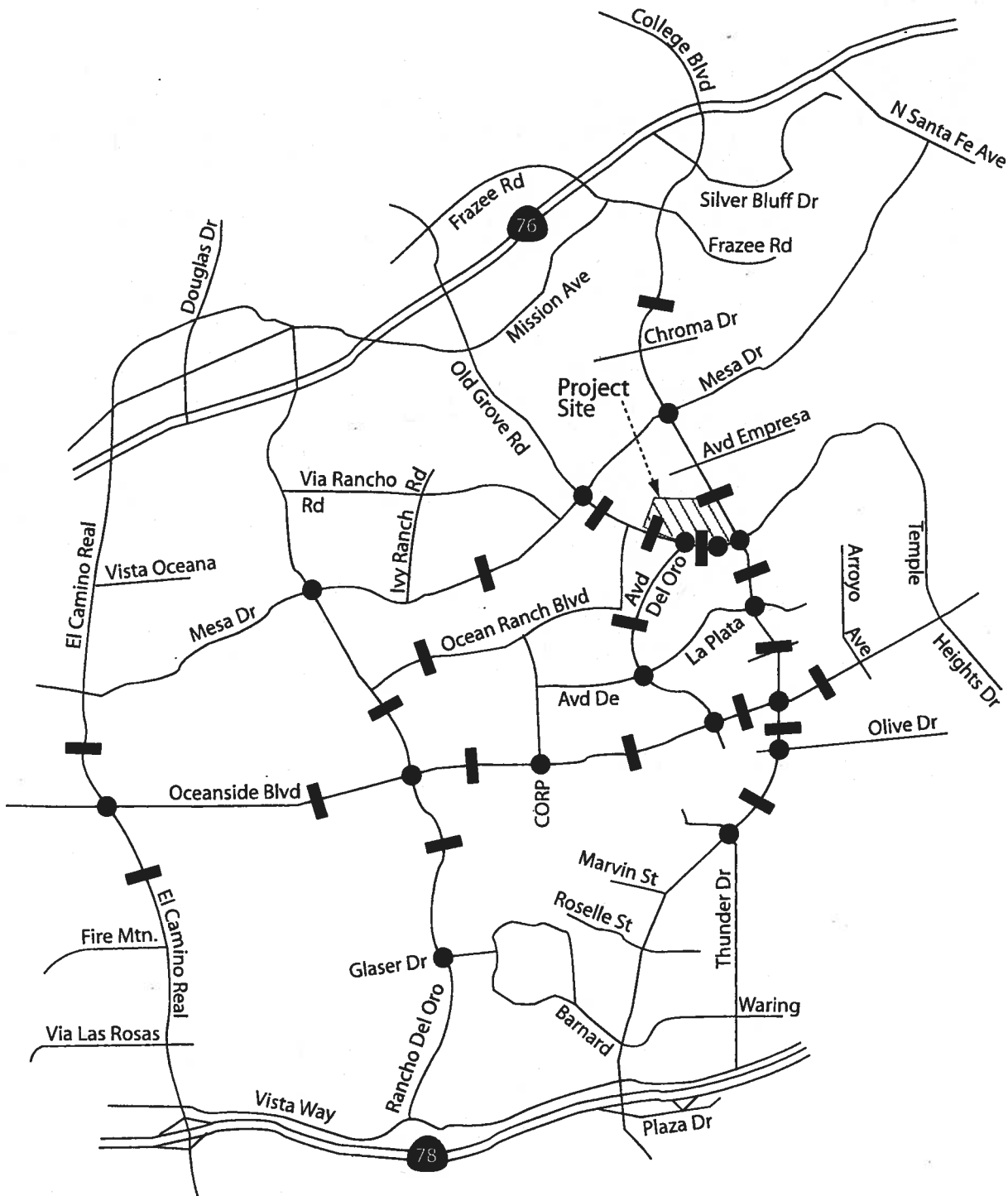


RBF

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PROJECT SITE PLAN

EXHIBIT 2



LEGEND:

- Study Segment
- Study Intersection



NOT TO SCALE



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APRIL 2013

PROJECT STUDY AREA

EXHIBIT 3

PROPOSED PROJECT

The proposed Terraza at Rancho Del Oro Village XII project consists of approximately 338 residential dwelling units consisting of one, two and three bedroom apartments. The project is located at the northwest quadrant of the College Boulevard and Old Grove Road, in the City of Oceanside.

Project Trip Generation

To determine the trips forecast to be generated by the proposed project, April 2002 SANDAG Trip Generation rates were utilized in accordance with the City of Oceanside and SANTEC/ITE Traffic Study Guidelines. The SANDAG (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region (April 2002) showing the trip generation rate for the proposed land use is provided in Appendix D. Table 6 summarizes the project trip generation rates and forecast project generated trips.

As summarized in Table 6, the proposed project is forecast to generate approximately 2,704 trips per day, which includes approximately 216 a.m. peak hour trips and approximately 270 p.m. peak hour trips.

Table 6
Proposed Project Trip Generation

Land Use	Unit	Daily (per unit)	AM Peak			PM Peak			
			Total (of daily)	Inbound (% AM)	Outbound (% AM)	Total (of daily)	Inbound (% PM)	Outbound (% PM)	
Trip Generation Rates									
Multi-Family (6-20 DU per acre)	DU	8	8%	20%	80%	10%	70%	30%	
Forecast Project Generated Trips									
Land Use	Size	Unit	Daily Trips	AM Peak			PM Peak		
				Total	Inbound	Outbound	Total	Inbound	Outbound
Multi-Family (6-20 DU per acre)	338	DU	2,704	216	43	173	270	189	81
TOTAL PROJECT TRIPS			2,704	216	43	173	270	189	81

Source: SANDAG, "Not So Brief Guide". April 2002

Source: SANDAG, "Not So Brief Guide", April 2002.

Note: DU = dwelling unit.

Project Trip Distribution

Project traffic was distributed on the roadway network based on discussions with City staff and a Select Zone Assignment model run conducted by SANDAG for the proposed project, using the SANDAG Year 2030 North County Subarea Model (Series 11).

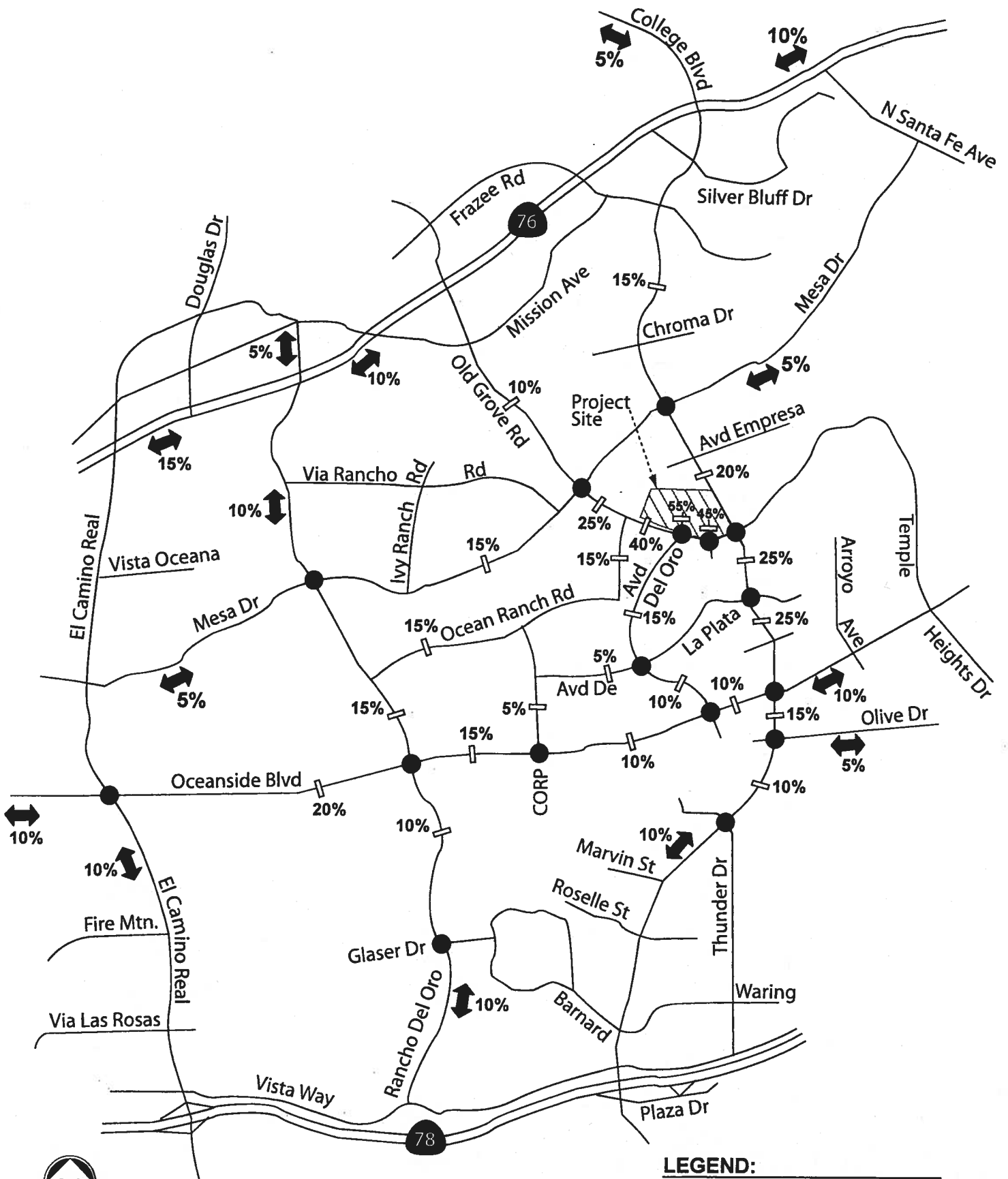
The Select Zone Assignment model used for this project was run under Horizon Year 2030 forecast conditions, which assumes that College Boulevard is improved to six lanes from Old Grove Road to SR-78, and that the Rancho Del Oro Drive (RDO)/SR-78 interchange is in place.

A separate trip distribution was developed for existing and existing plus cumulative conditions that is based on the roadway network under existing conditions. College Boulevard between Old Grove Road and Oceanside Boulevard is currently a four-lane roadway and is congested through the corridor during the peak hours. It is expected that a lower percentage of trips will use College Boulevard between Old Grove Road and Oceanside Boulevard under short-term conditions based on the existing four-lane configuration. By 2030, it is assumed that College Boulevard will be widened to six lanes, and the increase in capacity will improve traffic flow on College Boulevard and is likely to attract a higher percentage of trips from the proposed project site.

Exhibit 6 illustrates the project trip distribution under short-term conditions. **Exhibit 7** presents the project trip distribution under Horizon Year 2030 conditions.

Project Trip Assignment

Utilizing the project trip distribution shown in Exhibit 6 and Exhibit 7, project-generated trips were assigned to the roadway network. **Exhibit 8** illustrates the daily and peak hour project trip assignment under short-term conditions. The Horizon Year 2030 daily and peak hour project trip assignment is provided in **Exhibit 9**.



LEGEND:

XX% Trip Distribution Percentage

PROJECT TRIP DISTRIBUTION SHORT-TERM CONDITIONS

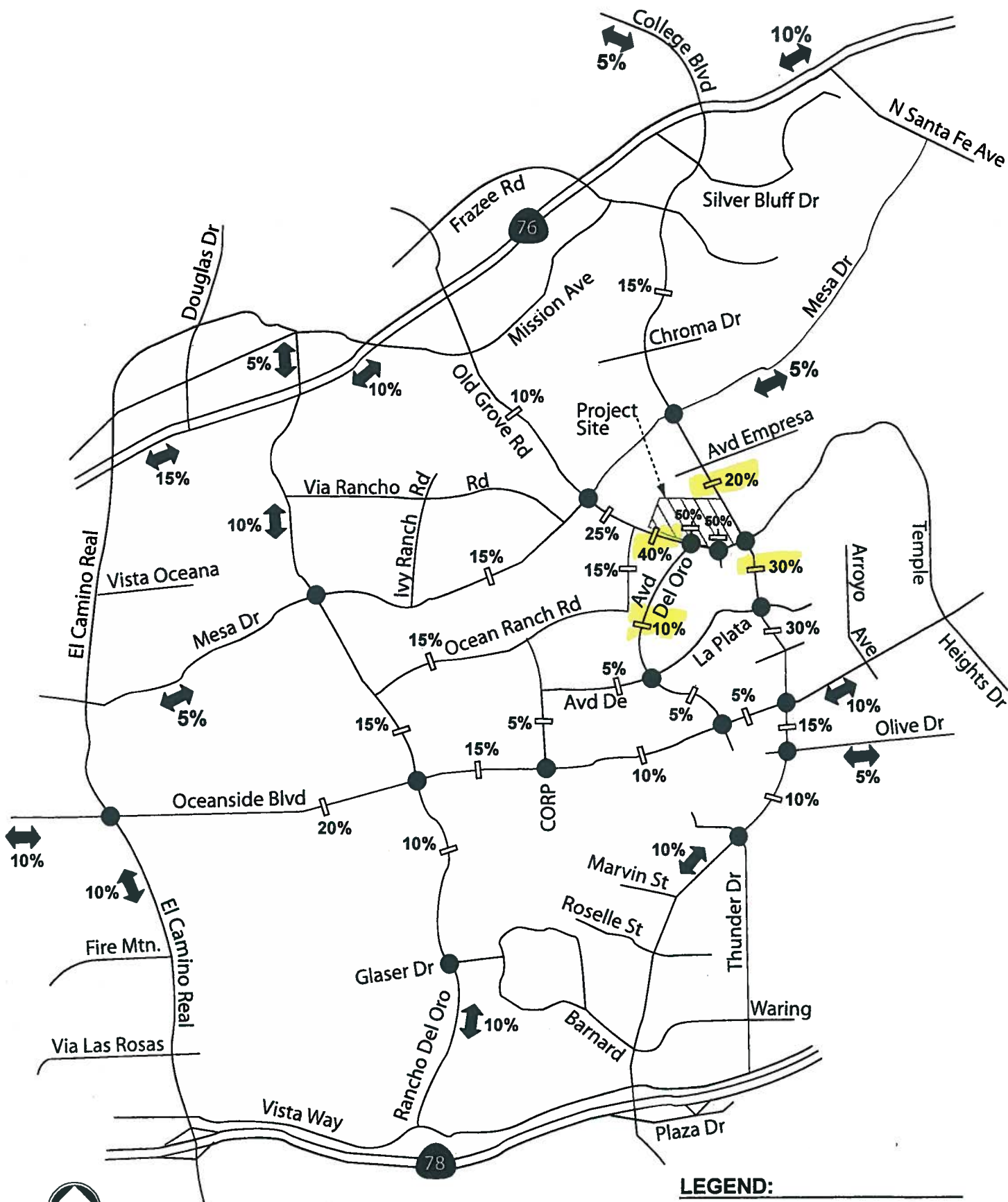
EXHIBIT 6



NOT TO SCALE

RBF

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LEGEND:

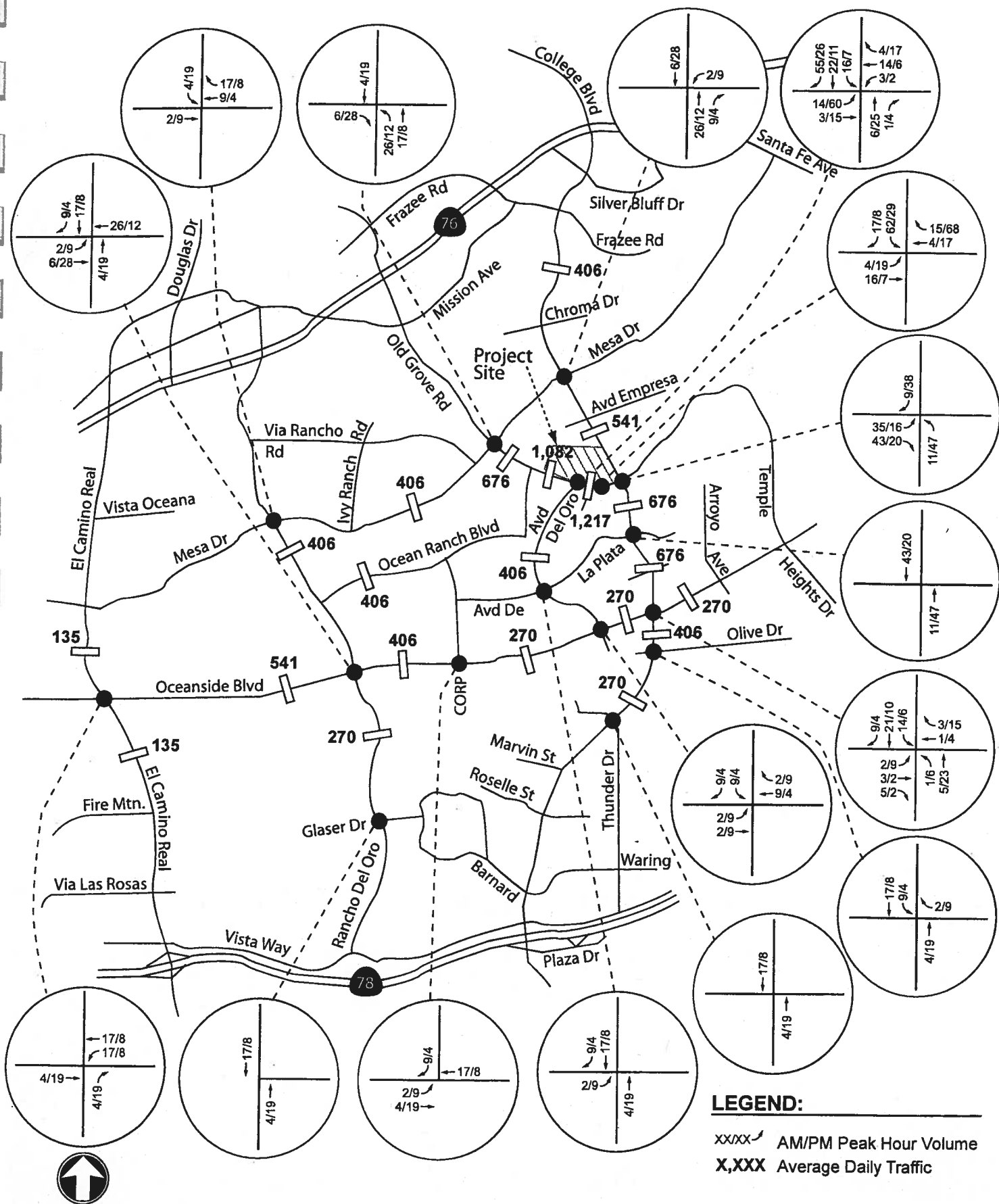
XX% Trip Distribution Percentage

**PROJECT TRIP DISTRIBUTION
HORIZON YEAR 2030 CONDITIONS**



NOT TO SCALE





DAILY AND PEAK HOUR PROJECT TRIP ASSIGNMENT SHORT-TERM CONDITIONS

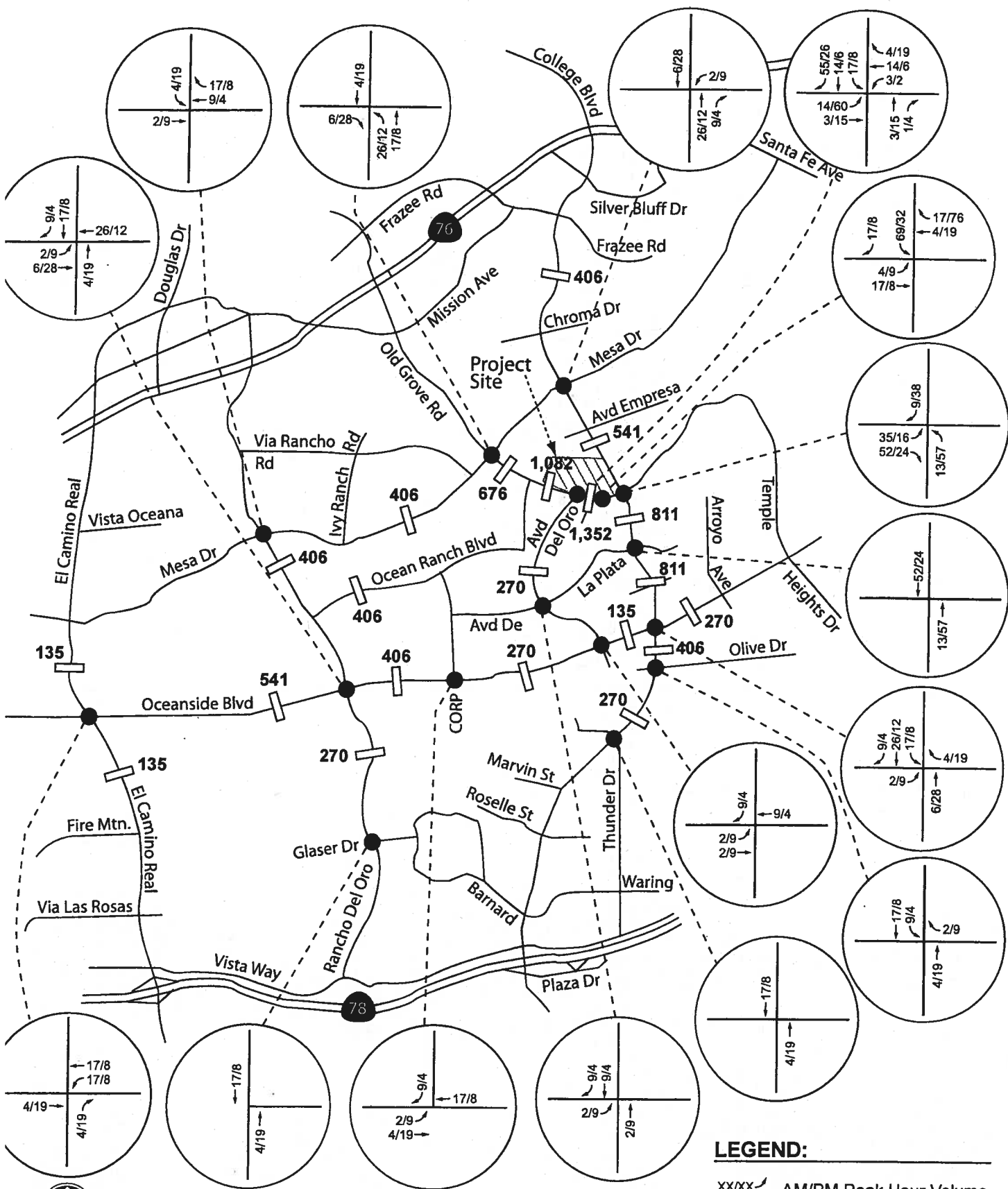
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55-100847.001

APRIL 2013

EXHIBIT 8



LEGEND:

XX/XX AM/PM Peak Hour Volume
 X,XXX Average Daily Traffic

NOT TO SCALE

DAILY AND PEAK HOUR PROJECT TRIP ASSIGNMENT HORIZON YEAR 2030 CONDITIONS

55-100847.001 APRIL 2013

EXHIBIT 9



2.0 PROJECT DESCRIPTION

2.1 Project Location

The Project area is located in the San Luis Rey neighborhood within the north-central portion of the City of Oceanside. The 35.59-acre site is centered north of the intersection of Mission Avenue and Academy Road and located within the Mission San Luis Rey Historic Area. The Project area is generally bisected into eastern and western portions by the Academy Road alignment with the land west of Academy Road located within the designated Historic Area 'Core'.

Single-family uses are adjacent to the site on the east and northeast. A medium density mobile home development, vacant land, and single-family residential properties are also located to the north. The Mission San Luis Rey Parish Church property borders the Project area on the west, with the Mission San Luis Rey grounds located west of the Parish. Ivey Ranch Park is located south across Mission Avenue. State Route 76 (SR 76) borders the Project area along the southeast with medium-density condominiums and a large commercial center located south of the highway alignment.

2.2 Project Description

The Project proposes to develop the approximately 35.59-acre vacant site with a mix of housing types up to a maximum of 420 residential units. For purposes of this report, the following was assumed in the traffic analysis:

- 62 single-family homes (density ≤ 6 dwelling units per acre)
- 258 multi-family attached homes (density ≤ 20 dwelling units per acre)
- 100 multi-family attached homes (density ≥ 20 dwelling units per acre)

Frazee Road borders the Project site along the northwesterly Project boundary. It is currently paved from Academy Road to Old Grove Road. However, two existing barricades prevent access between the residential neighborhood to the northeast and Academy Road. All baseline conditions without Project traffic assume the continued closure of this connection. The Project proposes to open this connection and allow full access from Frazee Road to Mission Avenue via Academy Road. Therefore, this open connection was assumed under the "Plus Project" conditions. *Section 4.2* provides more details on this connection. A separate analysis of the proposed Project with the continued closure of this connection is provided later in *Section 14.0*.

Access is proposed via Academy Road. A more detailed discussion on Project access is included in *Section 13.0* of this report.

Figure 2-1 shows the conceptual site plan.

7.0 TRIP GENERATION/DISTRIBUTION/ASSIGNMENT

As discussed in *Section 2.2* of this report, the Project proposes to develop the approximately 35.59-acre site with a unit cap of 420 residential units. The Project proposes a mix of housing types for the subject including single-family detached homes and multi-family attached homes. The following is a discussion on the traffic expected to be generated with the development of these homes.

7.1 Trip Generation

Trip generation for the proposed development was calculated using the SANDAG (*Not so*) *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002. With the changes in housing types proposed, three different residential trip rates were used to calculate the total Project trip generation. The residential trip rates were selected based on the density for each housing area.

Using the SANDAG trip rates, the Project is expected to generate 3,284 ADT with 263 AM peak hour trips (58 inbound/205 outbound) and 322 PM peak hour trips (225 inbound/97 outbound).

Table 7-1 shows the Project traffic generation.

previously 450 DU

**TABLE 7-1
PROJECT TRIP GENERATION**

Land Use	Size	Daily Trip Ends (ADTs) ^a		AM Peak Hour					PM Peak Hour				
		Rate ^b	Volume	% of ADT ^b	In:Out Split ^b	Volume			% of ADT ^b	In:Out Split ^b	Volume		
						In	Out	Total			In	Out	Total
Single-Family Detached Residential Units (≤ 6 DU per acre)	62 DU	10/DU	620	8%	3:7	15	35	50	10%	7:3	43	19	62
Multi-Family Attached Residential Units (≤ 20 DU per acre)	258 DU	8/DU	2,064	8%	2:8	33	132	165	10%	7:3	144	62	206
Multi-Family Attached Residential Units (≥ 20 DU per acre)	100 DU	6/DU	600	8%	2:8	10	38	48	9%	7:3	38	16	54
TOTAL TRIP GENERATION			3,284	—	—	58	205	263	—	—	225	97	322

Footnotes:

- a. ADT = Average Daily Traffic.
- b. Rates taken from SANDAG (*Not So*) *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, May 2003.

General Notes:

- 1. DU = dwelling units

7.2 Trip Distribution/Assignment

The Project-generated traffic was distributed to the street system based on site access parameters, roadway system characteristics, a SANDAG Select Zone Assignment (SZA) Traffic Model, and input from City of Oceanside staff.

The SANDAG model included the Project-proposed connection of Frazee Road between Mission Avenue and Old Grove Road. The traffic model distributed 25% of Project traffic to the Frazee Road/ Old Grove Road intersection and 75% of Project traffic to the Academy Road/ Mission Avenue intersection.

For the Project trip distribution without the connection of Frazee Road to Academy Road, 100% of Project trips were distributed to the Academy Road/Mission Avenue intersection. *Section 14.0* of this report provides further details on this alternative.

Approximately 23% of the trips were regionally distributed on SR 76 and Mission Avenue to the west, 10% on SR 76 to the east, 39% oriented to the south and 9% to the north. The remaining 19% were distributed to the local network as “local capture”. Local capture trips are trips that travel on the off-site street system but generally stay within the immediate area. These trips are typically attributed to grocery trips, school trips, and/or shopping trips.

Once the traffic distribution was established, the Project-generated traffic was assigned to the adjacent street system.

Figure 7-1 shows the regional and local distribution of Project trips. **Figure 7-2** depicts the Project traffic assignment and **Figure 7-3** depicts the Existing + Project traffic volumes, all with the proposed connection of Frazee Road to Academy Road.

Appendix E contains a copy of the SANDAG Select Zone Assignment traffic model.

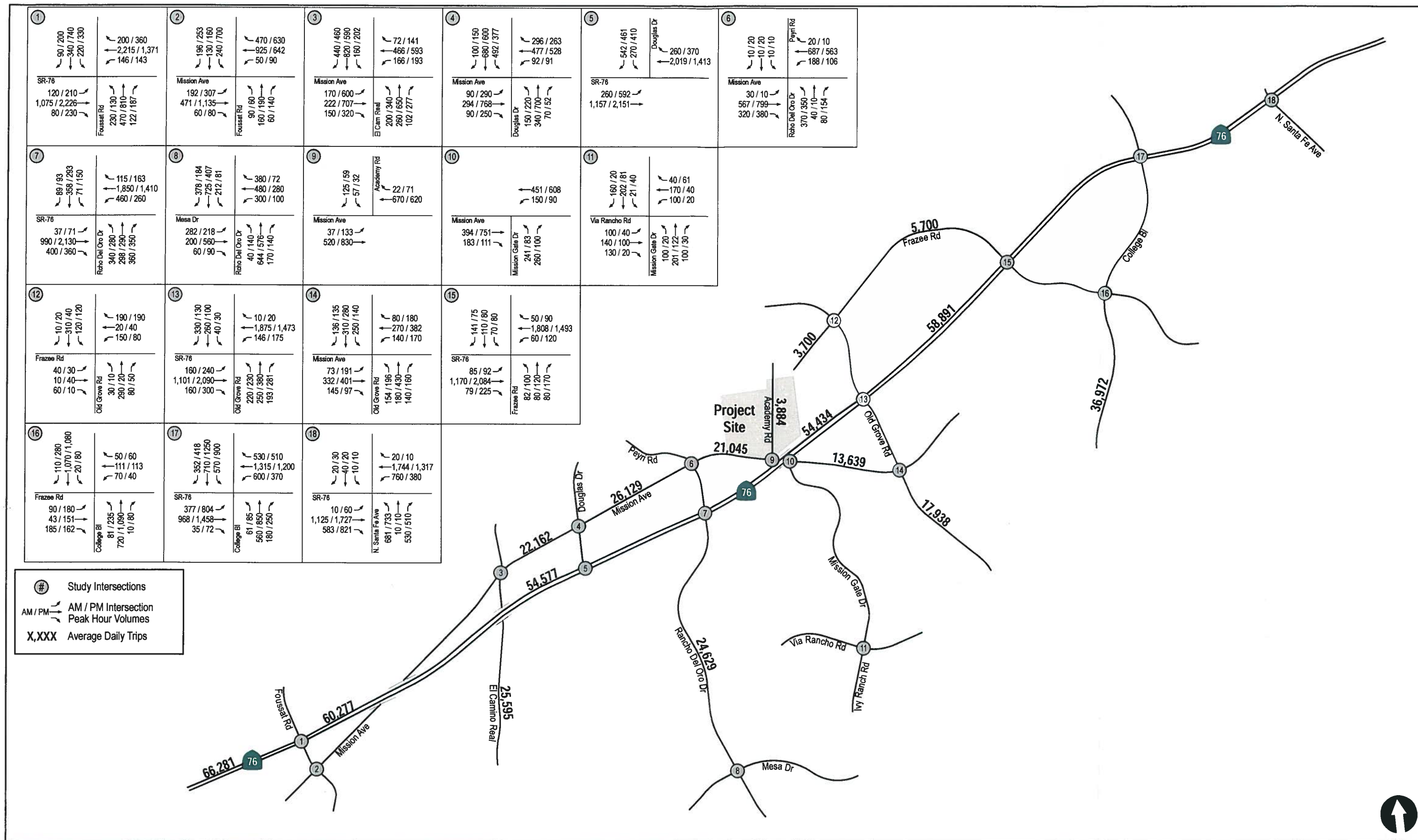


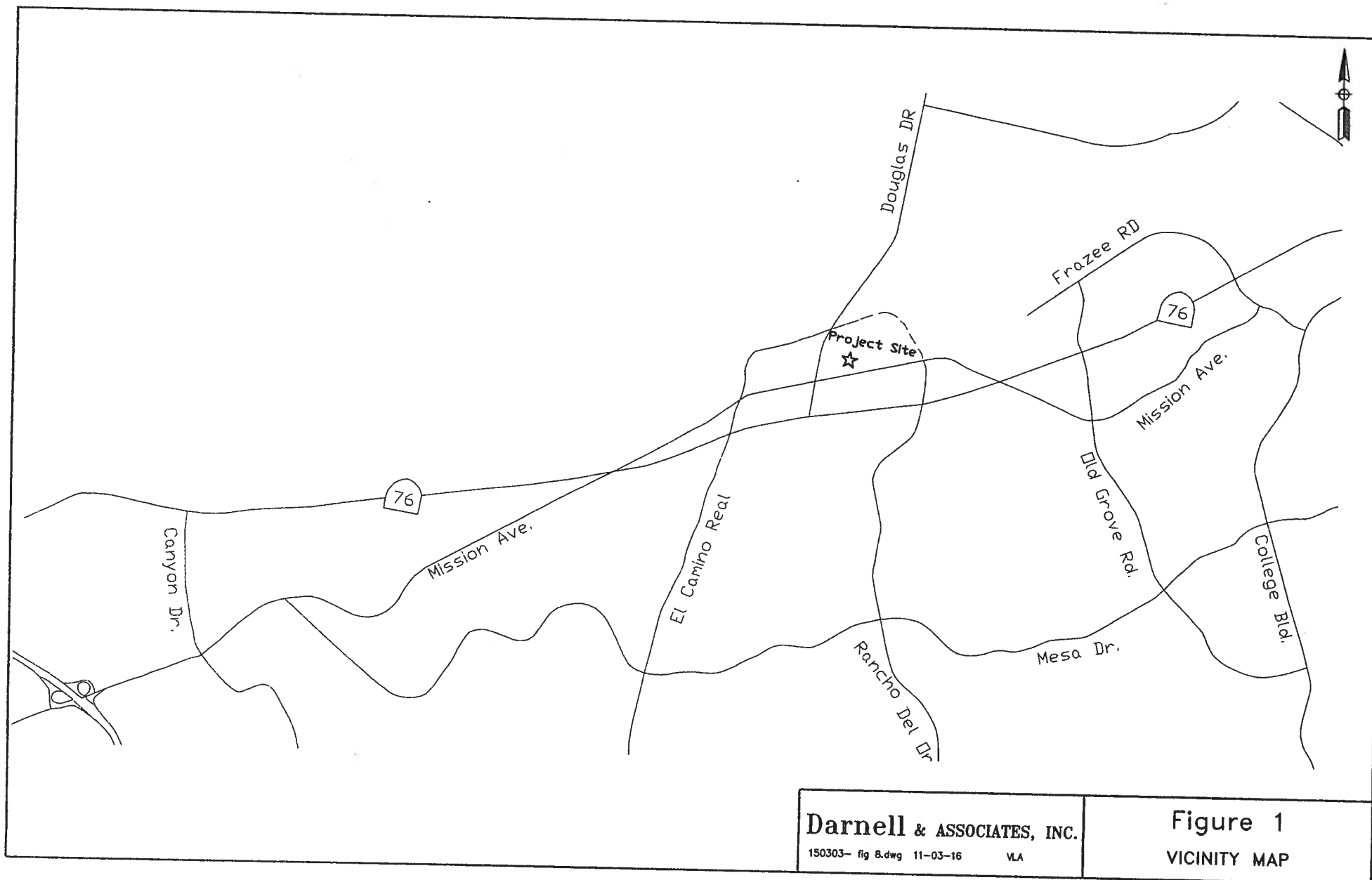
Figure 14-6
Buildout (Year 2030) With General Plan Amendment Land Use Traffic Volumes
(No Frazee Road Connection)

SECTION I - EXISTING CONDITIONS

PROJECT BACKGROUND

The applicant proposes to develop Area 9 (the southwest corner) of the Mission San Luis Rey Expansion Master Plan as the Villas at Mission San Luis Rey, a 222-unit retirement community. Of the 222 units, 92 are proposed to be supported independent living units, and 105 are proposed to be assisted care units and 25 memory care units. The proposed project is located on the north side of Mission Avenue between Douglas Drive and Rancho Del Oro Drive in the City of Oceanside. Figure 1 shows the vicinity map and Figure 2 presents a copy of the development site plan.

Section II analyzes methodology of the report. Section III analyzes the Existing conditions, Near Term Cumulative conditions and Year 2030 Build-out conditions. Section VI analyzes the roadway and intersection conditions and forecasted volumes under existing conditions plus near term cumulative projects plus project. Section VII analyzes the roadway conditions and forecasted volumes on roadway segments and at study intersections under build-out conditions. Section VIII evaluates the project's impacts under build-out plus project conditions. Section IX summarizes the project's impacts and recommended mitigation, and Section X provides a summary of the report's conclusions and recommendations.



SECTION IV – PROJECT RELATE TRAFFIC

TRIP GENERATION

Trip generation to and from the proposed development was calculated based on the trip generation rates published by the San Diego Association of Governments' (SANDAG) (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002. Table 7 summarizes the trip generation rates and calculations. A copy of the SANDAG trip generation rates is provided in Appendix A.

As shown in Table 7, the proposed project is estimated to generate a total of 694 daily trips, 32 AM peak hour trips, and 49 PM peak hour trips. The previously approved Mission San Luis Rey Expansion Master Plan assumed the proposed project site would consist of 200 retirement center units, generating 800 daily trips, 40 AM peak hour trips, and 56 PM peak hour trips. The net decrease between the approved project and the currently proposed project is 106 fewer daily trips, 8 fewer AM peak hour trip, and 8 fewer PM peak hour trips.

Table 7 - Trip Generation Rates and Calculations Summary								
Trip Generation Rates								
Land Use ^(a)	Daily (b)	AM Peak Hour			PM Peak Hour			
		Total % of Daily	% In	% Out	Total % of Daily	% In	% Out	
Retirement Center	4 trips/unit	5%	40%	60%	7%	60%	40%	
Assisted Living Care	2.5 trips/unit	4%	60%	40%	8%	50%	50%	
Proposed Project Trip Generation								
Land Use	Total No. of Units	Daily	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
Independent Living	92units	368	18	7	11	26	16	10
Assisted Living	105units	263	11	7	4	21	10	11
Memory Care	25 units	63	3	2	1	2	1	1
Total	222 units	694	32	16	16	49	27	22
a) Land use designations are based on SANDAG trip generation categories, Retirement community rates have been applied to the retirement center (92 supported independent living units). Congregate care rates have been applied to the assisted care area (92 assisted living units and 25 memory care units). b) Trip generation rates are based on SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* April 2002								

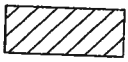
TRIP DISTRIBUTION

Trip distribution for the proposed project was determined based on D&A's April 13, 2007 Traffic Study for the Mission San Luis Rey Expansion Master Plan. The distribution for the Master Plan was based on the 2005 SANDAG Select Zone Forecast, existing travel patterns, and visitor trip purposes. The project trip distribution is illustrated in Figure 5.

PROJECT TRIP ASSIGNMENT

Project traffic was assigned to the roadway network using the distribution percentages illustrated in Figure 5. The project traffic assignment is shown in Figure 6.

LEGEND

-  - PROJECT SITE
 - DIRECTION OF TRAVEL
 XX%/YY% - DISTRIBUTION PERCENTAGE

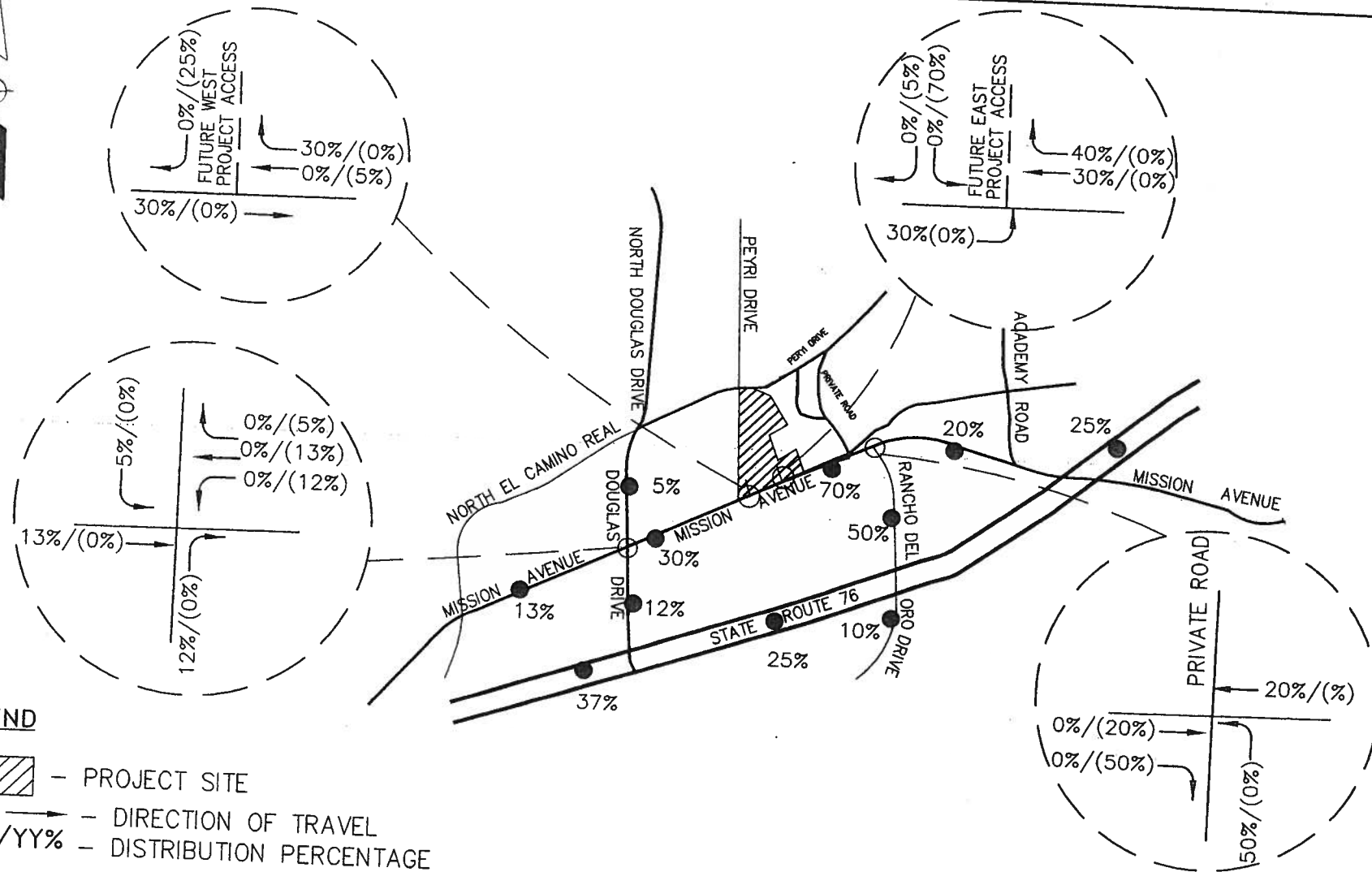
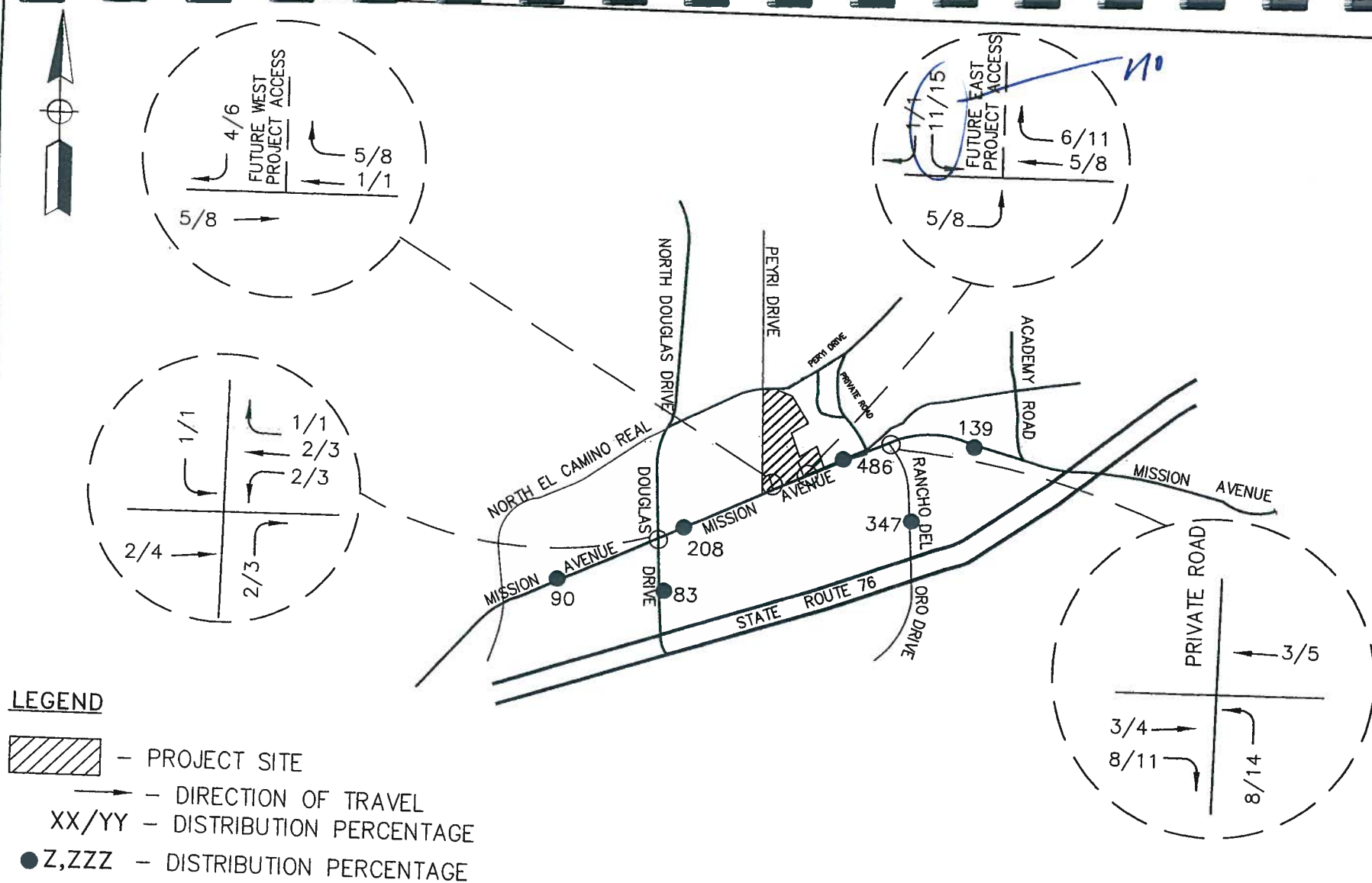


FIGURE 5
PROJECT TRAFFIC DISTRIBUTION

Darnell & ASSOCIATES, INC.

150303CC 11-07-16 JAM



Darnell & ASSOCIATES, INC.

150303CC 11-07-16 JAM

FIGURE 6
PROJECT RELATED TRAFFIC

APPENDIX C

TRAFFIC SIGNAL TIMING

INTERSECTION: Mission & Airport

Page 1 (of 5)

Group Assignment: **NONE**N/S Street Name: **Not Assigned**

Last Database Change: 3/6/2018 13:20

Field Master Assignment: **NONE**E/W Street Name: **Not Assigned**System Reference Number: **68**

Change Record					
Change	By	Date	Change	By	Date

Notes:

Drop Number	5	<C+0+0>
Zone Number		<C+0+1>
Area Number	1	<C+0+2>
Area Address	68	<C+0+3>
QuicNet Channel	Serial:COM40:	(QuicNet)

Communication Addresses

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

Manual Selection

Max Initial	30	<F+0+E>
Red Revert	2.0	<F+0+F>
All Red Start	5.0	<F+C+0>

Start / Revert Times

		Phase							
Column Numbers -->		1	2	3	4	5	6	7	8
Phase Names -->									
Row									
0	Ped Walk	0	7	0	0	0	7	5	5
1	Ped FDW	0	14	0	0	0	16	22	22
2	Min Green	5	10	3	5	5	10	8	8
3	Type 3 Limit	0	99	0	0	0	99	0	0
4	Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Veh Extension	3.0	6.7	0.5	4.0	3.0	6.7	4.0	4.0
6	Max Gap	3.0	9.0	0.5	4.0	3.0	9.0	4.0	4.0
7	Min Gap	3.0	3.0	0.5	4.0	3.0	3.0	4.0	4.0
8	Max Limit	20	50	17	30	30	50	30	30
9	Max Limit 2	30	70	30	30	30	70	30	30
A	-----	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0
D	Reduce Every	0.0	0.4	1.0	0.0	0.0	0.4	0.0	0.0
E	Yellow Change	4.4	5.2	3.0	3.5	4.4	5.2	3.6	3.6
F	Red Clear	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 1

<F Page>

E	
RR-1 Delay	0
RR-1 Clear	10
EV-A Delay	0
EV-A Clear	5
EV-B Delay	0
EV-B Clear	5
EV-C Delay	0
EV-C Clear	5
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	0
RR-2 Clear	10
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing

F	
Permit	12_5678
Red Lock	
Yellow Lock	
Min Recall	2_67_
Ped Recall	
View Set Peds	-----
Rest In Walk	
Red Rest	
Dual Entry	2_6_
Max Recall	
Soft Recall	
Max 2	
Cond. Service	
Man Cntrl Calls	
Yellow Start	1_5_
First Phases	2_6_

Phase Functions <F Page>

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

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

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

(* = Coordination Recall)

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

<C Page>

Sync Phases <C Page>

	F
RR Overlap A - Phases	
RR Overlap B - Phases	
RR Overlap C - Phases	
RR Overlap D - Phases	
Ped 2P	2
Ped 6P	6
Ped 4P	7
Ped 8P	8
Yellow Flash Phases	
Overlap A - Phases	
Overlap B - Phases	
Overlap C - Phases	
Overlap D - Phases	
Restricted Phases	
Assign 5 Outputs	

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

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

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

TBC Transition <C+D+D>

0 = Shortway
Non-zero = Lengthen

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

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

Lag Phases <C Page>

Row	Time	Plan	Offset	Day of Week
0	00:00	0	0	
1	06:30	4	A	23456
2	09:00	5	A	23456
3	15:00	6	A	23456
4	19:00	E	A	23456
5	00:00	0	0	
6	14:15	5	A	
7	15:00	6	A	
8	16:00	3	A	
9	00:00	0	0	
A	00:00	0	0	
B	00:00	0	0	
C	00:00	0	0	
D	00:00	0	0	
E	00:00	0	0	
F	00:00	0	0	

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

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

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

Time	Func.	Day of Week
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	

TOD Function
<7 Key>

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

Column F
Phases/Bits

<D Page>

Time	Plan	Offset	Day of Week
21:00	3	A	1234567
23:55	E	A	1234567
00:00	0	0	
00:00	0	0	
00:00	0	0	
00:00	0	0	
00:00	0	0	
00:00	0	0	
00:00	0	0	
00:00	0	0	
00:00	0	0	
00:00	0	0	
00:00	0	0	
00:00	0	0	
00:00	0	0	
00:00	0	0	

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

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

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

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

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

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

Row	Day	Year	Month	Day of Week
A	4	8	7	1234567
B	0	0	0	
C	0	0	0	

Holiday Dates
<8 Key>

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

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		J-1	13
1	0.0	0.0		J-2U	2
2	0.0	0.0		J-2L	6
3	0.0	0.0		J-3U	22
4	0.0	0.0		J-3L	26
5	2.0	0.0		J-4	10
6	2.0	0.0		J-5	15
7	2.0	0.0		J-6U	4
8	0.0	0.0		J-6L	8
9	0.0	0.0		J-7U	24
A	0.0	0.0		J-7L	28
B	0.0	0.0		J-8	12
C	0.0	0.0		J-9U	17
D	10.0	0.0		J-9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

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

Overlap Timing <F Page> <D Page>

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

Active Detectors <D Page>

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

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

System Detectors <D Page>

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

Detector Failure Monitor

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

Advance Warning Beacon - Sign 1

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

Advance Warning Beacon - Sign 2

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

Power Cycle Correction (Default = 0.5)

Disable Parity	0	<D+B+0>

Dial-Up Telephone Communications

(If set to a non-zero value, parity will be disabled)

INTERSECTION: Mission & Airport

Page 5 (of 5)

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

Phase Timing - Bank 2

<F Page>

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

Phase Timing - Bank 3

<F Page>

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

Special Event Schedule

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

← Limited Service Interval
(Set Dwell = 255)

INTERSECTION: Mission & Roymar

Group Assignment: **NONE**
 Field Master Assignment: **NONE**
 System Reference Number: **69**

N/S Street Name: **Not Assigned**
 E/W Street Name: **Not Assigned**

Page 1 (of 9)
 Last Database Change: **2/27/2018 13:52**

Change Record					
Change	By	Date	Change	By	Date

Notes:

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

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

Drop Number	6	<C/0+0+0>
Zone Number	0	<C/0+0+1>
Area Number	1	<C/0+0+2>
Area Address	69	<C/0+0+3>
QuicNet Channel	Serial:COM40:	(QuicNet)

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

Communication Addresses
Manual Selection

Flash Start	20	<F/1+0+E>
Red Revert	2.0	<F/1+0+F>
All Red Start	5.0	<F/1+C+0>

Start / Revert Times

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

Exclusive Ped Phase

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

		Phase							
Column Numbers —>		1	2	3	4	5	6	7	8
Row	Phase Names —>								
0	Ped Walk	0	7	0	6	0	7	0	6
1	Ped FDW	0	14	0	24	0	14	0	24
2	Min Green	5	10	4	8	5	10	4	8
3	Type 3 Disconnect	0	99	0	0	0	99	0	0
4	Added per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Veh Extension	3.0	7.0	2.0	3.0	3.0	7.0	2.0	3.0
6	Max Gap	3.0	9.0	3.0	3.0	3.0	9.0	3.0	3.0
7	Min Gap	3.0	3.0	0.5	3.0	3.0	3.0	0.5	3.0
8	Max Limit	20	50	20	30	25	50	20	30
9	Max Limit 2	30	50	30	40	30	50	30	40
A	Adv. / Delay Walk	0	0	0	0	0	0	0	0
B	PE Min Ped FDW	0	0	7	0	0	0	7	0
C	Cond Serv Check	0	0	0	0	0	0	0	0
D	Reduce Every	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0
E	Yellow Change	4.1	4.8	3.0	3.7	4.1	4.8	3.0	3.7
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 1

<C+0+F=1>

	9	A	B	C	D
Phase 1	0	0	0	0	0.0
Phase 2	20	0	0	0	0.0
Phase 3	0	0	0	0	0.0
Phase 4	20	0	0	0	0.0
Phase 5	0	0	0	0	0.0
Phase 6	20	0	0	0	0.0
Phase 7	0	0	0	0	0.0
Phase 8	20	0	0	0	0.0
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing <C+0+F=1>

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

Preempt Timing

	F	Row
Permit	12_456_8	0
Red Lock		1
Yellow Lock		2
Min Recall	2_6	3
Ped Recall		4
View Set Peds	-----	5
Rest In Walk		6
Red Rest		7
Dual Entry	2_4_6_8	8
Max Recall		9
Soft Recall		A
Max 2		B
Cond. Service		C
Man Cntrl Calls		D
Yellow Start	1_5	E
First Phases	2_6	F

Phase Functions <C+0+F=1>

Column Numbers ---->		Overlap							
Overlap Name ---->		1	2	3	4	5	6	7	8
0	Load Switch Number	0	0	0	0	0	0	0	0
1	Veh Set 1 - Phases								
2	Veh Set 2 - Phases								
3	Veh Set 3 - Phases								
4	Neg Veh Phases								
5	Neg Ped Phases								
6	Green Omit Phases								
7	Green Clear Omit Phs.								
8									
9									
A									
B									
C									
D	Green Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	Yellow Change	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
F	Red Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Overlap Assignments

<C+0+E=29>

Extra 1 Flags

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

Extra 2 Flags

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

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

Preempt Priority

<C+0+E=125>

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

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

Configuration

<C+0+E=125>

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

Configuration

<C+0+E=125>

Column Numbers ---->		F
	Fast Green Flash Phase	
	Green Flash Phases	
	Flashing Walk Phases	
	Guaranteed Passage	
	Simultaneous Gap Term	12345678
	Sequential Timing	
	Advance Walk Phases	
	Delay Walk Phases	
	External Recall	
	Start-up Overlap Green	
	Max Extension	
	Inhibit Ped Reservice	
	Semi-Actuated	
	Start-up Overlap Yellow	
	Start-up Vehicle Calls	12345678
	Start-up Ped Calls	12345678

Specials

<C+0+F=2>

Flash to PE &
PE Non-Lock

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

IC Select Flags

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

Column Numbers ---->		2	Row
	Phase 1	10	0
	Phase 2	10	1
	Phase 3	10	2
	Phase 4	10	3
	Phase 5	10	4
	Phase 6	10	5
	Phase 7	10	6
	Phase 8	10	7

Coordination

Transition Minimums

<C+0+C=5>

Column Numbers ---->		Plan								
Plan Name ---->		1	2	3	4	5	6	7	8	9
0	Cycle Length	80	90	100	100	100	120	100	100	100
1	Phase 1 - ForceOff	55	55	60	60	55	55	55	55	55
2	Phase 2 - ForceOff	0	0	0	0	0	0	0	0	0
3	Phase 3 - ForceOff	1	1	1	1	1	1	20	20	20
4	Phase 4 - ForceOff	30	30	30	34	34	32	40	40	40
5	Phase 5 - ForceOff	55	55	60	60	55	60	55	55	55
6	Phase 6 - ForceOff	0	0	0	0	0	0	0	0	0
7	Phase 7 - ForceOff	1	1	1	1	1	1	20	20	20
8	Phase 8 - ForceOff	30	30	30	34	34	32	40	40	40
9	Ring Offset	0	0	0	0	0	0	0	0	0
A	Offset 1	24	59	5	72	37	48	0	0	0
B	Offset 2	0	0	0	0	0	0	0	0	0
C	Offset 3	0	0	0	0	0	0	0	0	0
D	Perm 1 - End	15	15	15	15	15	15	15	15	15
E	Hold Release	255	255	255	90	90	110	255	255	255
F	Zone Offset	0	0	0	0	0	0	0	0	0

Coordination - Bank 1 <C+0+C=1>

Row										
0	Ped Adjustment	5	5	5	2	2	2	0	0	0
1	Perm 2 - Start	0	0	0	0	0	0	0	0	0
2	Perm 2 - End	0	0	0	0	0	0	0	0	0
3	Perm 3 - Start	0	0	0	0	0	0	0	0	0
4	Perm 3 - End	0	0	0	0	0	0	0	0	0
5	Reservice Time	0	0	0	0	0	0	0	0	0
6	Reservice Phases									
7										
8	Pretimed Phases									
9	Max Recall									
A	Perm 1 Veh Phase	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678
B	Perm 1 Ped Phase	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678
C	Perm 2 Veh Phase									
D	Perm 2 Ped Phase									
E	Perm 3 Veh Phase									
F	Perm 3 Ped Phase									

Coordination - Bank 2 <C+0+C=2>

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

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

Sync Phases <C+0+C=1>

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

Lag Phases <C+0+C=1>

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

Assignable Inputs

<C+0+E=126>

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

Assignable Outputs

<C+0+E=127>

Column Numbers -->		Phase							
Phase Names -->		1	2	3	4	5	6	7	8
0	Ped Walk	0	7	0	7	0	7	0	7
1	Ped FDW	0	15	0	15	0	15	0	15
2	Min Green	4	7	4	4	4	7	4	4
3	Type 3 Disconnect	0	20	0	20	0	20	0	20
4	Added per Vehicle	0.0	2.0	0.0	2.0	0.0	2.0	0.0	2.0
5	Veh Extension	2.0	4.0	2.0	2.5	2.0	4.0	2.0	2.5
6	Max Gap	3.0	6.0	3.0	3.0	3.0	6.0	3.0	3.0
7	Min Gap	0.5	2.0	0.5	1.5	0.5	2.0	0.5	1.5
8	Max Limit	20	30	20	25	20	30	20	25
9	Max Limit 2	30	50	30	40	30	50	30	40
A	Adv. / Delay Walk	0	0	0	0	0	0	0	0
B	PE Min Ped FDW	7	7	7	7	7	7	7	7
C	Cond Serv Check	10	10	10	10	10	10	10	10
D	Reduce Every	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
E	Yellow Change	3.0	4.0	3.0	3.0	3.0	4.0	3.0	3.0
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 2 <C+0+F=2>

Column Numbers -->		1	2	3	4	5	6	7	8
0	Ped Walk	0	7	0	7	0	7	0	7
1	Ped FDW	0	15	0	15	0	15	0	15
2	Min Green	4	7	4	4	4	7	4	4
3	Type 3 Disconnect	0	20	0	20	0	20	0	20
4	Added per Vehicle	0.0	2.0	0.0	2.0	0.0	2.0	0.0	2.0
5	Veh Extension	2.0	4.0	2.0	2.5	2.0	4.0	2.0	2.5
6	Max Gap	3.0	6.0	3.0	3.0	3.0	6.0	3.0	3.0
7	Min Gap	0.5	2.0	0.5	1.5	0.5	2.0	0.5	1.5
8	Max Limit	20	30	20	25	20	30	20	25
9	Max Limit 2	30	50	30	40	30	50	30	40
A	Adv. / Delay Walk	0	0	0	0	0	0	0	0
B	PE Min Ped FDW	7	7	7	7	7	7	7	7
C	Cond Serv Check	10	10	10	10	10	10	10	10
D	Reduce Every	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
E	Yellow Change	3.0	4.0	3.0	3.0	3.0	4.0	3.0	3.0
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 3 <C+0+F=3>

	9	A	B	C	D
Phase 1	0	0	0	0	0.0
Phase 2	20	0	0	0	0.0
Phase 3	0	0	0	0	0.0
Phase 4	20	0	0	0	0.0
Phase 5	0	0	0	0	0.0
Phase 6	20	0	0	0	0.0
Phase 7	0	0	0	0	0.0
Phase 8	20	0	0	0	0.0
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing

	9	A	B	C	D
Phase 1	0	0	0	0	0.0
Phase 2	20	0	0	0	0.0
Phase 3	0	0	0	0	0.0
Phase 4	20	0	0	0	0.0
Phase 5	0	0	0	0	0.0
Phase 6	20	0	0	0	0.0
Phase 7	0	0	0	0	0.0
Phase 8	20	0	0	0	0.0
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing

Transition Type
 0.X = Shortway
 1.X = Lengthen
 X.1 thru X.4 =
 Number of
 cycles when
 lengthening

Transition Type **0.3** <C/5+1+9>
TBC Transition

Lag Hold Phases **0** <C/5+1+A>
Coordinated Lag Hold Phases

Sync Output Time **0.0** <C/5+1+C>
7-Wire Master

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

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

Daylight Savings Time

Time B4 Yellow **0.0** <F/1+C+E>
 Phase Number **0** <F/1+C+F>

Advance Warning Beacon - Sign 1

Time B4 Yellow **0.0** <F/1+D+E>
 Phase Number **0** <F/1+D+F>

Advance Warning Beacon - Sign 2

Long Failure **0.0** <F/1+0+6>
 Short Failure **0.0** <F/1+0+7>

Power Cycle Correction (Default = 0.7)

Column Numbers →		0	1	2	3	1	3
Row	Detector Name	C1 Pin Number	Attributes	Phase(s)	Assign	Delay	Carry-over
0		39	45 7	2	123 8	0.0	0.0
1		40	45 7	6	123 8	0.0	0.0
2		41	45 7	4	123 8	0.0	0.0
3		42	45 7	8	123 8	0.0	0.0
4		43	45 7	2	123 8	0.0	0.0
5		44	45 7	6	123 8	0.0	0.0
6		45	45 7	4	123 8	0.0	0.0
7		46	45 7	8	123 8	2.0	0.0
8		47	67	2	123 8	0.0	0.0
9		48	67	6	123 8	0.0	0.0
A		49	67	4	123 8	0.0	0.0
B		50	67	8	123 8	8.0	0.0
C		55	45 7	5	123 8	0.0	0.0
D		56	45 7	1	123 8	0.0	0.0
E		57	45 7	7	123 8	0.0	0.0
F		58	45 7	3	123 8	0.0	0.0

Column Numbers →		4	5	6	7	2	4
Row	Detector Name	C1 Pin Number	Attributes	Phase(s)	Assign	Delay	Carry-over
0		59	45 7	5	123 8	0.0	0.0
1		60	45 7	1	123 8	0.0	0.0
2		61	45 7	7	123 8	0.0	0.0
3		62	45 7	3	123 8	0.0	0.0
4		63	45 7	2	123 8	0.0	0.0
5		64	45 7	6	123 8	0.0	0.0
6		65	45 7	4	123 8	0.0	0.0
7		66	45 7	8	123 8	2.0	0.0
8		67	2	2	123 8	0.0	0.0
9		68	2	6	123 8	0.0	0.0
A		69	2	4	123 8	0.0	0.0
B		70	2	8	123 8	8.0	0.0
C		76	45 7	2	123 8	0.0	0.0
D		77	45 7	6	123 8	0.0	0.0
E		78	45 7	4	123 8	0.0	0.0
F		79	45 7	8	123 8	0.0	0.0

Detector Assignments <C+0+E=126>

<C+0+D=0>

Detector Attributes

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

Det. Assignments

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

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

Redirect Phase Outputs <C+0+E=127>

Cabinet Type 0 <E/125+D+0>

Enable Redirection

(Enable Redirection = 30)

Max OFF (minutes) 255 <D/0+0+1>

Max ON (minutes) 7 <D/0+0+2>

Detector Failure Monitor

Number of Digits	D
1 st Digit	0
2 ed Digit	0
3 ed Digit	0
4 th Digit	0
5 th Digit	0
6 th Digit	0
7 th Digit	0
8 th Digit	0
9 th Digit	0
10 th Digit	0
11 th Digit	0
12 th Digit	0
13 th Digit	0
14 th Digit	0
15 th Digit	0

Disable Alarms

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

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

Delay Logic Times

<C+0+D=0> (seconds)

Omit Alarm 0 <C/5+F+0>

Disable Alarm Reporting

Time 0 <C/5+C+0>

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

Dial-Back Telephone Number

Row	Time	Plan	Offset	Day of Week
0	00 : 00	0	0	
1	06 : 30	4	A	23456
2	09 : 00	5	A	23456
3	15 : 00	6	A	23456
4	19 : 00	E	A	23456
5	00 : 00	0	0	
6	14 : 15	5	A	
7	15 : 00	6	A	
8	16 : 00	3	A	
9	00 : 00	0	0	
A	00 : 00	0	0	
B	00 : 00	0	0	
C	00 : 00	0	0	
D	00 : 00	0	0	
E	00 : 00	0	0	
F	00 : 00	0	0	

TOD Coordination <C+0+9=0.1>
(Bank 1)

Time	Funct.	Day of Week
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	

TOD Function <C+0+7=0.1>

Column 4
Phases/Bits

<C+0+E=27>

Day	Year	Month	Holiday Type
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	

Holiday Dates <C+0+8=1.1>
(Bank 1)

Time	Plan	Offset	Holiday Type
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	

Holiday Events <C+0+9=1.1>
(Bank 1)

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

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

TOD Coordination <C+0+9=0.2>
(Bank 2)

Time	Funct.	Holiday Type
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	

Holiday TOD Function <C+0+7=0.2>

Column 4
Phases/Bits

<C+0+E=28>

Day	Year	Month	Holiday Type
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	

Holiday Dates <C+0+8=1.2>
(Bank 2)

Time	Plan	Offset	Holiday Type
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	

Holiday Events <C+0+9=1.2>
(Bank 2)

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

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

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

Row	6	7	8	9	A	B	C	D	E	F
	Clear	Time	Ped Call	Hold	Advance	Force Off	Vehicle Call	Permit Phases	Ped Omit	Output
0		0								
1		0								
2		0								
3		0								
4		0								
5		0								
6		0								
7		0								
8		0								
9		0								
A		0								
B		0								
C		0								
D		0								
E		0								
F		0								

Special Event Schedule -- Table 1

<C+0+E=27>

Notes:

0 <E/27+5+F>

Limited Service Interval

Row	6	7	8	9	A	B	C	D	E	F
	Clear	Time	Ped Call	Hold	Advance	Force Off	Vehicle Call	Permit Phases	Ped Omit	Output
0		0								
1		0								
2		0								
3		0								
4		0								
5		0								
6		0								
7		0								
8		0								
9		0								
A		0								
B		0								
C		0								
D		0								
E		0								
F		0								

Special Event Schedule -- Table 2

<C+0+E=28>

Notes:

0 <E/28+5+F>

Limited Service Interval

Min Time (seconds) <F/1+0+8>**Min Green Before PE Force Off**Max Time (minutes) <F/1+0+9>**Max Preempt Time Before Failure**Min Time (seconds) <F/1+0+A>**Min Time Between Same Preempts**

(Does Not Apply To Railroad Preempt)

Low Pri. Channel <E/125+C+8>**Disable Low Priority Channel**Low Priority

- 1 = Channel A
 2 = Channel B
 3 = Channel C
 4 = Channel D

Delay Time (seconds) <F/1+A+D>**Bus Delay**Max Time (seconds) <F/1+A+E>**Max Early Green**Max Time (seconds) <F/1+A+F>**Max Green Extension**

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

Headway <C+0+9=2.1>

Headway Time
 (minutes)
 1 thru 9 = 1 thru 9
 A = 10
 B = 11
 C = 12
 D = 13
 E = 14
 F = 15

Low Priority Preemption (Bus Priority)Only available with *Program 233RV2.B* (and above)

Note: Also see "Time of Day Functions", Function E, Bit 5 (Disable Low Priority)

INTERSECTION: Mission & Foussat

Page 1 (of 5)

Group Assignment: NONE

N/S Street Name: Not Assigned

Last Database Change: 2/27/2018 10:49

Field Master Assignment: NONE

E/W Street Name: Not Assigned

System Reference Number: 70

Change Record					
Change	By	Date	Change	By	Date

Notes:

Drop Number	7	<C+0+0>
Zone Number		<C+0+1>
Area Number	1	<C+0+2>
Area Address	70	<C+0+3>
QuicNet Channel	Serial:COM40: (QuicNet)	

Communication Addresses

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

Manual Selection

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

Start / Revert Times

Column Numbers -->		Phase							
		1	2	3	4	5	6	7	8
Phase Names -->									
0	Ped Walk	0	5	0	0	0	5	0	4
1	Ped FDW	0	18	0	0	0	28	0	25
2	Min Green	5	10	5	5	5	10	5	5
3	Type 3 Limit	0	99	0	0	0	99	0	0
4	Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Veh Extension	3.0	7.0	3.0	3.0	3.0	7.0	3.0	3.0
6	Max Gap	3.0	9.0	3.0	3.0	3.0	9.0	3.0	3.0
7	Min Gap	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
8	Max Limit	25	50	15	30	30	50	25	25
9	Max Limit 2	30	70	30	70	30	70	30	70
A	-----	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
D	Reduce Every	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.0
E	Yellow Change	4.1	4.8	3.6	4.1	4.1	4.8	3.6	4.1
F	Red Clear	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0

Phase Timing - Bank 1

<F Page>

E	
RR-1 Delay	0
RR-1 Clear	10
EV-A Delay	0
EV-A Clear	5
EV-B Delay	0
EV-B Clear	5
EV-C Delay	0
EV-C Clear	5
EV-D Delay	0
EV-D Clear	5
RR-2 Delay	0
RR-2 Clear	10
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing

F	
Permit	12345678
Red Lock	3 8
Yellow Lock	3 8
Min Recall	2 6
Ped Recall	
View Set Peds	-----
Rest In Walk	
Red Rest	
Dual Entry	2 4 6 8
Max Recall	
Soft Recall	
Max 2	
Cond. Service	
Man Cntrl Calls	
Yellow Start	2 6
First Phases	3 7

Phase Functions <F Page>

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

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

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

Column Numbers -->		Plan								
		1	2	3	4	5	6	7	8	9
Row	Plan Name -->									
0	Cycle Length	80	90	100	100	100	120	100	100	100
1	Phase 1 - ForceOff	75	80	80	85	85	100	65	65	65
2	Phase 2 - ForceOff	0	0	0	0	0	0	0	0	0
3	Phase 3 - ForceOff	35	40	45	40	40	50	25	25	25
4	Phase 4 - ForceOff	60	65	65	70	70	80	40	40	40
5	Phase 5 - ForceOff	15	17	20	20	20	25	65	65	65
6	Phase 6 - ForceOff	0	0	0	0	0	0	0	0	0
7	Phase 7 - ForceOff	35	37	40	40	40	50	25	25	25
8	Phase 8 - ForceOff	60	65	65	70	70	80	40	40	40
9	Ring Offset	0	0	0	0	0	0	0	0	0
A	Offset 1	10	45	70	52	28	27	0	0	0
B	Offset 2	0	0	0	0	0	0	0	0	0
C	Offset 3	0	0	0	0	0	0	0	0	0
D	Permissive	17	20	22	22	22	27	12	12	0
E	Hold Release	255	255	255	255	255	255	255	255	0
F	Zone Offset	0	0	0	0	0	0	0	0	0

Coordination

<C Page>

(* = Coordination Recall)

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

Sync Phases <C Page>

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

Configuration

<E Page>

		F
Row		
	RR Overlap A - Phases	
	RR Overlap B - Phases	
	RR Overlap C - Phases	
	RR Overlap D - Phases	
	Ped 2P	2
	Ped 6P	6
	Ped 4P	
	Ped 8P	8
	Yellow Flash Phases	
	Overlap A - Phases	
	Overlap B - Phases	
	Overlap C - Phases	45
	Overlap D - Phases	
	Restricted Phases	
	Assign 5 Outputs	

Configuration

<E Page>

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

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

Force-Off Adjust	5
Coord Force-Off Adjust	
for Ped Service <C+D+F>	
Transition Type	0
TBC Transition <C+D+D>	

Transition Type
 0 = Shortway
 Non-zero = Lengthen

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

		F	Row
0			0
1	Free Lag	2 4 6 8	1
2	Plan 1 - Lag	2 45 8	2
3	Plan 2 - Lag	2 45 8	3
4	Plan 3 - Lag	2 45 8	4
5	Plan 4 - Lag	2 45 8	5
6	Plan 5 - Lag	2 45 8	6
7	Plan 6 - Lag	2 45 8	7
8	Plan 7 - Lag	2 4 6 8	8
9	Plan 8 - Lag	2 4 6 8	9
A	Plan 9 - Lag	2 4 6 8	A
B	Coord Max *		B
C	Coord Lag *	5	C
D			D
E			E
F			F

Lag Phases <C Page>

Row	Time	Plan	Offset	Day of Week
0	00:00	0	0	
1	06:30	4	A	23456
2	09:00	5	A	23456
3	15:00	6	A	23456
4	19:00	E	A	23456
5	00:00	0	0	
6	14:15	5	A	
7	15:00	6	A	
8	16:00	3	A	
9	00:00	0	0	
A	00:00	0	0	
B	00:00	0	0	
C	00:00	0	0	
D	00:00	0	0	
E	00:00	0	0	
F	00:00	0	0	

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

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

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

Time	Funct.	Day of Week
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	

TOD Function
<7 Key>

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

Column F	Phases/Bits

<D Page>

Time	Plan	Offset	Day of Week
21:00	3	A	1234567
23:55	E	A	1234567
00:00	0	0	
00:00	0	0	
00:00	0	0	
00:00	0	0	
00:00	0	0	
00:00	0	0	
00:00	0	0	
00:00	0	0	
00:00	0	0	
00:00	0	0	
00:00	0	0	
00:00	0	0	
00:00	0	0	
00:00	0	0	

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

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

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

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

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

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

Row	Day	Year	Month	Day of Week
A	4	8	7	1234567
B	0	0	0	
C	0	0	0	

Holiday Dates
<8 Key>

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		I-1	14
1	0.0	0.0		I-2U	1
2	0.0	0.0		I-2L	5
3	0.0	0.0		I-3U	21
4	0.0	0.0		I-3L	25
5	0.0	0.0		I-4	9
6	0.0	0.0		I-5	16
7	2.0	2.0		I-6U	3
8	2.0	2.0		I-6L	7
9	0.0	0.0		I-7U	23
A	0.0	0.0		I-7L	27
B	0.0	0.0		I-8	11
C	0.0	0.0		I-9U	18
D	0.0	0.0		I-9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		J-1	13
1	0.0	0.0		J-2U	2
2	0.0	0.0		J-2L	6
3	0.0	0.0		J-3U	22
4	0.0	0.0		J-3L	26
5	0.0	0.0		J-4	10
6	2.0	1.0		J-5	15
7	2.0	2.0		J-6U	4
8	2.0	2.0		J-6L	8
9	0.0	0.0		J-7U	24
A	0.0	0.0		J-7L	28
B	0.0	0.0		J-8	12
C	0.0	0.0		J-9U	17
D	0.0	0.0		J-9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

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

Overlap Timing <F Page> <D Page>

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

Active Detectors <D Page>

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

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

System Detectors <D Page>

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

Detector Failure Monitor

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

Advance Warning Beacon - Sign 1

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

Advance Warning Beacon - Sign 2

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

Power Cycle Correction (Default = 0.5)

Disable Parity	0	<D+B+0>

Dial-Up Telephone Communications

(If set to a non-zero value, parity will be disabled)

INTERSECTION: Mission & Foussat

Page 5 (of 5)

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

Phase Timing - Bank 2

<F Page>

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

Phase Timing - Bank 3

<F Page>

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

Special Event Schedule

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

← Limited Service Interval
(Set Dwell = 255)

INTERSECTION: Mission & Copperwood

Page 1 (of 5)

Group Assignment: NONE

N/S Street Name: Not Assigned

Last Database Change: 3/6/2018 13:22

Field Master Assignment: NONE

E/W Street Name: Not Assigned

System Reference Number: 71

Change Record					
Change	By	Date	Change	By	Date

Notes:

Drop Number	8	<C+0+0>
Zone Number		<C+0+1>
Area Number	1	<C+0+2>
Area Address	71	<C+0+3>
QuicNet Channel	Serial:COM40:	(QuicNet)

Communication Addresses

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

Manual Selection

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

Start / Revert Times

		Phase							
Column Numbers —>		1	2	3	4	5	6	7	8
Phase Names —>									
0	Ped Walk	0	5	0	7	0	5	0	4
1	Ped FDW	0	10	0	10	0	10	0	22
2	Min Green	3	10	3	7	3	10	5	5
3	Type 3 Limit	0	99	0	0	0	99	0	0
4	Added Initial	0.0	1.2	0.0	1.2	0.0	1.2	0.0	0.0
5	Veh Extension	2.0	7.0	0.5	3.5	3.0	7.0	3.0	3.0
6	Max Gap	2.0	9.0	0.5	5.0	3.0	9.0	3.0	3.0
7	Min Gap	2.0	3.0	0.5	2.0	3.0	3.0	3.0	3.0
8	Max Limit	20	50	17	40	15	50	20	25
9	Max Limit 2	30	70	30	70	30	70	30	70
A	-----	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.0
D	Reduce Every	0.0	1.0	1.0	1.0	0.0	1.0	0.0	0.0
E	Yellow Change	4.1	4.8	3.0	4.0	4.1	4.8	3.6	3.6
F	Red Clear	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 1

<F Page>

E	
RR-1 Delay	0
RR-1 Clear	10
EV-A Delay	0
EV-A Clear	5
EV-B Delay	0
EV-B Clear	5
EV-C Delay	0
EV-C Clear	5
EV-D Delay	0
EV-D Clear	5
RR-2 Delay	0
RR-2 Clear	10
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing

F	
Permit	12_5678
Red Lock	
Yellow Lock	
Min Recall	2_6
Ped Recall	
View Set Peds	-----
Rest In Walk	
Red Rest	
Dual Entry	2_6
Max Recall	
Soft Recall	
Max 2	
Cond. Service	
Man Cntrl Calls	
Yellow Start	2_6
First Phases	7

Phase Functions <F Page>

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

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

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

Column Numbers →		Plan								
Row	Plan Name →	1	2	3	4	5	6	7	8	9
0	Cycle Length	80	90	100	100	100	120	100	100	100
1	Phase 1 - ForceOff	55	55	55	65	65	65	65	65	65
2	Phase 2 - ForceOff	0	0	0	0	0	0	0	0	0
3	Phase 3 - ForceOff	1	1	1	1	1	1	25	25	25
4	Phase 4 - ForceOff	1	1	1	1	1	1	40	40	40
5	Phase 5 - ForceOff	55	55	55	65	65	65	65	65	65
6	Phase 6 - ForceOff	0	0	0	0	0	0	0	0	0
7	Phase 7 - ForceOff	15	15	15	15	15	15	25	25	25
8	Phase 8 - ForceOff	35	35	35	45	45	45	40	40	40
9	Ring Offset	0	0	0	0	0	0	0	0	0
A	Offset 1	28	44	27	60	95	91	0	0	0
B	Offset 2	0	0	0	0	0	0	0	0	0
C	Offset 3	0	0	0	0	0	0	0	0	0
D	Permissive	12	12	12	12	12	12	12	12	0
E	Hold Release	255	80	90	255	255	110	255	255	0
F	Zone Offset	0	0	0	0	0	0	0	0	0

Coordination

<C Page>

(* = Coordination Recall)

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

Sync Phases <C Page>

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

Configuration

<E Page>

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

Configuration

<E Page>

Extra 1 Flags

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

Assign 5 Outputs

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

Force-Off Adjust 5

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

Transition Type 0

TBC Transition <C+D+D>

Transition Type

- 0 = Shortway
- Non-zero = Lengthen

IC Select Flags

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

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

Lag Phases <C Page>

Row	Time	Plan	Offset	Day of Week
0	00:00	0	0	
1	06:30	4	A	23456
2	09:00	5	A	23456
3	15:00	6	A	23456
4	19:00	E	A	23456
5	00:00	0	0	
6	14:15	5	A	
7	15:00	6	A	
8	16:00	3	A	
9	00:00	0	0	
A	00:00	0	0	
B	00:00	0	0	
C	00:00	0	0	
D	00:00	0	0	
E	00:00	0	0	
F	00:00	0	0	

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

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

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

Time	Funct.	Day of Week
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	

TOD Function
<7 Key>

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

Column F
Phases/Bits

<D Page>

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

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

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

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

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

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

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

Row	Day	Year	Month	Day of Week
A				
B				
C				

Holiday # 1 Date	Day	Year	Month
	0	0	0
Holiday # 2 Date	0	0	0
Holiday # 3 Date	0	0	0

Holiday Dates
<8 Key>

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

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		J-1	13
1	0.0	0.0		J-2U	2
2	0.0	0.0		J-2L	6
3	0.0	0.0		J-3U	22
4	0.0	0.0		J-3L	26
5	0.0	0.0		J-4	10
6	0.0	0.0		J-5	15
7	0.0	0.0		J-6U	4
8	12.0	0.0		J-6L	8
9	0.0	0.0		J-7U	24
A	0.0	0.0		J-7L	28
B	0.0	0.0		J-8	12
C	0.0	0.0		J-9U	17
D	0.0	0.0		J-9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

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

Overlap Timing <F Page> <D Page>

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

Active Detectors <D Page>

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

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

System Detectors <D Page>

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

Detector Failure Monitor

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

Advance Warning Beacon - Sign 1

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

Advance Warning Beacon - Sign 2

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

Power Cycle Correction (Default = 0.5)

Disable Parity	0	<D+B+0>

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

Column Numbers →		Phase							
Row	Phase Names →	1	2	3	4	5	6	7	8
0	Ped Walk	0	5	0	7	0	0	0	4
1	Ped FDW	0	10	0	10	0	0	0	22
2	Min Green	3	30	3	7	3	30	3	5
3	Type 3 Limit	0	99	0	0	0	99	0	0
4	Added Initial	0.0	1.2	0.0	1.2	0.0	1.2	0.0	0.0
5	Veh Extension	2.0	7.0	0.5	3.5	0.5	7.0	0.5	3.0
6	Max Gap	2.0	9.0	0.5	5.0	0.5	9.0	0.5	3.0
7	Min Gap	2.0	3.0	0.5	2.0	0.5	3.0	0.5	3.0
8	Max Limit	20	50	17	40	17	50	17	35
9	Max Limit 2	30	70	30	70	30	70	30	70
A	-----	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0
D	Reduce Every	0.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
E	Yellow Change	3.2	4.3	3.0	4.0	3.0	4.3	3.0	3.6
F	Red Clear	1.0	1.0	0.0	1.0	0.0	1.0	0.0	1.0

Phase Timing - Bank 2

<F Page>

Column Numbers →		Phase							
Row	Phase Names →	1	2	3	4	5	6	7	8
0	Ped Walk	0	5	0	7	0	0	0	4
1	Ped FDW	0	10	0	10	0	0	0	22
2	Min Green	3	30	3	7	3	30	3	5
3	Type 3 Limit	0	99	0	0	0	99	0	0
4	Added Initial	0.0	1.2	0.0	1.2	0.0	1.2	0.0	0.0
5	Veh Extension	2.0	7.0	0.5	3.5	0.5	7.0	0.5	3.0
6	Max Gap	2.0	9.0	0.5	5.0	0.5	9.0	0.5	3.0
7	Min Gap	2.0	3.0	0.5	2.0	0.5	3.0	0.5	3.0
8	Max Limit	20	50	17	40	17	50	17	35
9	Max Limit 2	30	70	30	70	30	70	30	70
A	-----	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0
D	Reduce Every	0.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
E	Yellow Change	3.2	4.3	3.0	4.0	3.0	4.3	3.0	3.6
F	Red Clear	1.0	1.0	0.0	1.0	0.0	1.0	0.0	1.0

Phase Timing - Bank 3

<F Page>

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

Special Event Schedule

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

← Limited
Service
Interval
(Set Dwell = 255)

INTERSECTION: Mission & Frontier

Page 1 (of 5)

Group Assignment: **NONE**N/S Street Name: **Not Assigned**Last Database Change: **2/27/2018 10:42**Field Master Assignment: **NONE**E/W Street Name: **Not Assigned**System Reference Number: **72**

Change Record					
Change	By	Date	Change	By	Date

Notes:

Drop Number	9	<C+0+0>
Zone Number		<C+0+1>
Area Number	1	<C+0+2>
Area Address	72	<C+0+3>
QuicNet Channel	Serial:COM40:	(QuicNet)

Communication Addresses

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

Manual Selection

Max Initial	25	<F+0+E>
Red Revert	2.0	<F+0+F>
All Red Start	5.0	<F+C+0>

Start / Revert Times

		Phase							
Column Numbers —>		1	2	3	4	5	6	7	8
Row	Phase Names —>								
0	Ped Walk	0	5	0	7	0	0	0	4
1	Ped FDW	0	10	0	10	0	0	0	22
2	Min Green	4	10	3	7	3	10	3	5
3	Type 3 Limit	0	99	0	0	0	99	0	0
4	Added Initial	0.0	2.2	0.0	1.2	0.0	1.2	0.0	0.0
5	Veh Extension	2.0	7.0	0.5	3.5	0.5	7.0	0.5	3.0
6	Max Gap	2.0	9.0	0.5	5.0	0.5	9.0	0.5	3.0
7	Min Gap	2.0	3.0	0.5	2.0	0.5	3.0	0.5	3.0
8	Max Limit	25	50	17	40	17	50	17	35
9	Max Limit 2	30	70	30	70	30	70	30	70
A	-----	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0
D	Reduce Every	0.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
E	Yellow Change	4.1	4.8	3.0	4.0	3.0	4.8	3.0	3.6
F	Red Clear	1.0	1.0	0.0	1.0	0.0	1.0	0.0	1.0

Phase Timing - Bank 1

<F Page>

E	
RR-1 Delay	0
RR-1 Clear	10
EV-A Delay	0
EV-A Clear	5
EV-B Delay	0
EV-B Clear	1
EV-C Delay	0
EV-C Clear	5
EV-D Delay	0
EV-D Clear	1
RR-2 Delay	0
RR-2 Clear	10
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing

F	
Permit	12_6_8
Red Lock	1
Yellow Lock	
Min Recall	2_6
Ped Recall	
View Set Peds	-----
Rest In Walk	
Red Rest	
Dual Entry	2_6
Max Recall	
Soft Recall	
Max 2	
Cond. Service	
Man Cntrl Calls	
Yellow Start	2_6
First Phases	8

Phase Functions <F Page>

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

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

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

Column Numbers —>		Plan								
Row	Plan Name —>	1	2	3	4	5	6	7	8	9
0	Cycle Length	80	90	100	100	100	120	100	100	100
1	Phase 1 - ForceOff	55	55	55	60	60	60	65	65	65
2	Phase 2 - ForceOff	0	0	0	0	0	0	0	0	0
3	Phase 3 - ForceOff	1	1	1	1	1	1	25	25	25
4	Phase 4 - ForceOff	1	1	1	1	1	1	40	40	40
5	Phase 5 - ForceOff	1	1	1	1	1	1	65	65	65
6	Phase 6 - ForceOff	0	0	0	0	0	0	0	0	0
7	Phase 7 - ForceOff	1	1	1	1	1	1	25	25	25
8	Phase 8 - ForceOff	30	30	30	30	30	30	40	40	40
9	Ring Offset	0	0	0	0	0	0	0	0	0
A	Offset 1	36	31	18	58	4	100	0	0	0
B	Offset 2	0	0	0	0	0	0	0	0	0
C	Offset 3	0	0	0	0	0	0	0	0	0
D	Permissive	12	12	12	12	12	12	12	12	0
E	Hold Release	255	80	255	90	90	110	255	255	0
F	Zone Offset	0	0	0	0	0	0	0	0	0

Coordination

<C Page>

(* = Coordination Recall)

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

Sync Phases <C Page>

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

Configuration

<E Page>

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

Configuration

<E Page>

Extra 1 Flags

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

Assign 5 Outputs

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

Force-Off Adjust 3

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

Transition Type 0

TBC Transition <C+D+D>

Transition Type
0 = Shortway
Non-zero = Lengthen

IC Select Flags

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

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

Lag Phases <C Page>

Row	Time	Plan	Offset	Day of Week
0	00:00	0	0	
1	06:30	4	A	23456
2	09:00	5	A	23456
3	15:00	6	A	23456
4	19:00	E	A	23456
5	00:00	0	0	
6	14:15	5	A	
7	15:00	6	A	
8	16:00	3	A	
9	00:00	0	0	
A	00:00	0	0	
B	00:00	0	0	
C	00:00	0	0	
D	00:00	0	0	
E	00:00	0	0	
F	00:00	0	0	

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

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

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

Time	Funct.	Day of Week
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	

TOD Function
<7 Key>

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

Column F
Phases/Bits

<D Page>

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

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

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

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

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

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

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

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

Holiday Dates
<8 Key>

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

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

Detector Delay & Carryover <D Page>

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

Overlap Timing <F Page> <D Page>

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

Active Detectors <D Page>

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

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

System Detectors <D Page>

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

Detector Failure Monitor

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

Advance Warning Beacon - Sign 1

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

Advance Warning Beacon - Sign 2

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

Power Cycle Correction (Default = 0.5)

Disable Parity	0	<D+B+0>

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

Column Numbers →		Phase							
Row	Phase Names →	1	2	3	4	5	6	7	8
0	Ped Walk	0	5	0	7	0	0	0	4
1	Ped FDW	0	10	0	10	0	0	0	19
2	Min Green	3	10	3	7	3	10	3	5
3	Type 3 Limit	0	99	0	0	0	99	0	0
4	Added Initial	0.0	2.2	0.0	1.2	0.0	1.2	0.0	0.0
5	Veh Extension	2.0	7.0	0.5	3.5	0.5	7.0	0.5	3.0
6	Max Gap	2.0	9.0	0.5	5.0	0.5	9.0	0.5	3.0
7	Min Gap	2.0	3.0	0.5	2.0	0.5	3.0	0.5	3.0
8	Max Limit	25	50	17	40	17	50	17	35
9	Max Limit 2	30	70	30	70	30	70	30	70
A	-----	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0
D	Reduce Every	0.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
E	Yellow Change	3.2	4.3	3.0	4.0	3.0	4.3	3.0	3.6
F	Red Clear	1.0	1.0	0.0	1.0	0.0	1.0	0.0	1.0

Phase Timing - Bank 2

<F Page>

Column Numbers →		Phase							
Row	Phase Names →	1	2	3	4	5	6	7	8
0	Ped Walk	0	5	0	7	0	0	0	4
1	Ped FDW	0	10	0	10	0	0	0	19
2	Min Green	3	10	3	7	3	10	3	5
3	Type 3 Limit	0	99	0	0	0	99	0	0
4	Added Initial	0.0	2.2	0.0	1.2	0.0	1.2	0.0	0.0
5	Veh Extension	2.0	7.0	0.5	3.5	0.5	7.0	0.5	3.0
6	Max Gap	2.0	9.0	0.5	5.0	0.5	9.0	0.5	3.0
7	Min Gap	2.0	3.0	0.5	2.0	0.5	3.0	0.5	3.0
8	Max Limit	25	50	17	40	17	50	17	35
9	Max Limit 2	30	70	30	70	30	70	30	70
A	-----	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0
D	Reduce Every	0.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
E	Yellow Change	3.2	4.3	3.0	4.0	3.0	4.3	3.0	3.6
F	Red Clear	1.0	1.0	0.0	1.0	0.0	1.0	0.0	1.0

Phase Timing - Bank 3

<F Page>

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

Special Event Schedule

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

← Limited
Service
Interval
(Set Dwell = 255)

INTERSECTION: Mission & Fireside

Page 1 (of 5)

Group Assignment: NONE
Field Master Assignment: NONE
System Reference Number: 74

N/S Street Name: Not Assigned
E/W Street Name: Not Assigned

Last Database Change: 3/6/2018 13:24

Change Record					
Change	By	Date	Change	By	Date

Notes:

Drop Number	10	<C+0+0>
Zone Number		<C+0+1>
Area Number	1	<C+0+2>
Area Address	74	<C+0+3>
QuicNet Channel	Serial:COM40:	(QuicNet)

Communication Addresses

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

Manual Selection

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

Start / Revert Times

Column Numbers —>		Phase							
Phase Names —>		1	2	3	4	5	6	7	8
0	Ped Walk	0	0	0	4	0	5	0	7
1	Ped FDW	0	0	0	22	0	10	0	10
2	Min Green	3	10	3	5	3	10	3	7
3	Type 3 Limit	0	99	0	0	0	99	0	0
4	Added Initial	0.0	1.2	0.0	0.0	0.0	1.2	0.0	1.2
5	Veh Extension	2.0	7.0	0.5	3.0	2.0	7.0	0.5	3.5
6	Max Gap	2.0	9.0	0.5	3.0	2.0	9.0	0.5	5.0
7	Min Gap	2.0	3.0	0.5	3.0	2.0	3.0	0.5	2.0
8	Max Limit	20	50	17	35	20	50	17	40
9	Max Limit 2	30	70	30	70	30	70	30	70
A	-----	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.1
D	Reduce Every	0.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0
E	Yellow Change	4.1	4.8	3.0	3.6	4.1	4.8	3.0	4.0
F	Red Clear	1.0	1.0	0.0	1.0	1.0	1.0	0.0	1.0

Phase Timing - Bank 1

<F Page>

E	
RR-1 Delay	0
RR-1 Clear	10
EV-A Delay	0
EV-A Clear	5
EV-B Delay	0
EV-B Clear	5
EV-C Delay	0
EV-C Clear	5
EV-D Delay	0
EV-D Clear	1
RR-2 Delay	0
RR-2 Clear	10
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing

F	
Permit	12_456_
Red Lock	1_5_
Yellow Lock	
Min Recall	2_6_
Ped Recall	
View Set Peds	-----
Rest In Walk	
Red Rest	
Dual Entry	2_6_
Max Recall	
Soft Recall	
Max 2	
Cond. Service	
Man Cntrl Calls	
Yellow Start	2_6_
First Phases	4_

Phase Functions <F Page>

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

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

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

Column Numbers →		Plan								
Row	Plan Name →	1	2	3	4	5	6	7	8	9
0	Cycle Length	80	90	100	100	100	120	100	100	100
1	Phase 1 - ForceOff	55	55	55	55	55	55	65	65	65
2	Phase 2 - ForceOff	0	0	0	0	0	0	0	0	0
3	Phase 3 - ForceOff	25	25	25	1	1	1	25	25	25
4	Phase 4 - ForceOff	30	30	30	30	30	30	40	40	40
5	Phase 5 - ForceOff	60	60	60	60	60	65	65	65	65
6	Phase 6 - ForceOff	0	0	0	0	0	0	0	0	0
7	Phase 7 - ForceOff	1	1	1	1	1	1	25	25	25
8	Phase 8 - ForceOff	1	1	1	1	1	1	40	40	40
9	Ring Offset	0	0	0	0	0	0	0	0	0
A	Offset 1	57	6	41	8	97	5	0	0	0
B	Offset 2	0	0	0	0	0	0	0	0	0
C	Offset 3	0	0	0	0	0	0	0	0	0
D	Permissive	12	12	12	12	12	12	12	12	0
E	Hold Release	255	80	90	90	90	110	255	255	0
F	Zone Offset	0	0	0	0	0	0	0	0	0

Coordination

<C Page>

(* = Coordination Recall)

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

Sync Phases <C Page>

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

Configuration

<E Page>

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

Configuration

<E Page>

Extra 1 Flags

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

Assign 5 Outputs

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

Force-Off Adjust 5

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

Transition Type 0

TBC Transition <C+D+D>

Transition Type

- 0 = Shortway
- Non-zero = Lengthen

IC Select Flags

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

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

Lag Phases <C Page>

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		I-1	14
1	0.0	0.0		I-2U	1
2	0.0	0.0		I-2L	5
3	0.0	0.0		I-3U	21
4	0.0	0.0		I-3L	25
5	0.0	0.0		I-4	9
6	0.0	0.0		I-5	16
7	12.0	0.0		I-6U	3
8	0.0	0.0		I-6L	7
9	0.0	0.0		I-7U	23
A	0.0	0.0		I-7L	27
B	0.0	0.0		I-8	11
C	0.0	0.0		I-9U	18
D	0.0	0.0		I-9L	20
E	---	---	---	---	---
F	---	---	---	---	---

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

Detector Delay & Carryover <D Page>

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

Overlap Timing <F Page> <D Page>

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

Active Detectors <D Page>

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

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

System Detectors <D Page>

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

Detector Failure Monitor

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

Advance Warning Beacon - Sign 1

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

Advance Warning Beacon - Sign 2

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

Power Cycle Correction (Default = 0.5)

Disable Parity	0	<D+B+0>

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

INTERSECTION: Mission & Fireside

Page 5 (of 5)

Column Numbers ---->		Phase							
Phase Names ---->		1	2	3	4	5	6	7	8
0	Ped Walk	0	0	0	4	0	5	0	7
1	Ped FDW	0	0	0	18	0	10	0	10
2	Min Green	3	10	3	5	3	10	3	7
3	Type 3 Limit	0	99	0	0	0	99	0	0
4	Added Initial	0.0	1.2	0.0	0.0	0.0	1.2	0.0	1.2
5	Veh Extension	2.0	7.0	0.5	3.0	2.0	7.0	0.5	3.5
6	Max Gap	2.0	9.0	0.5	3.0	2.0	9.0	0.5	5.0
7	Min Gap	2.0	3.0	0.5	3.0	2.0	3.0	0.5	2.0
8	Max Limit	20	50	17	35	20	50	17	40
9	Max Limit 2	30	70	30	70	30	70	30	70
A	-----	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.1
D	Reduce Every	0.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0
E	Yellow Change	3.2	4.3	3.0	3.6	3.2	4.3	3.0	4.0
F	Red Clear	1.0	1.0	0.0	1.0	1.0	1.0	0.0	1.0

Phase Timing - Bank 2

<F Page>

Column Numbers ---->		Phase							
Phase Names ---->		1	2	3	4	5	6	7	8
Ped Walk	0	0	0	4	0	5	0	7	
Ped FDW	0	0	0	18	0	10	0	10	
Min Green	3	10	3	5	3	10	3	7	
Type 3 Limit	0	99	0	0	0	99	0	0	
Added Initial	0.0	1.2	0.0	0.0	0.0	1.2	0.0	1.2	
Veh Extension	2.0	7.0	0.5	3.0	2.0	7.0	0.5	3.5	
Max Gap	2.0	9.0	0.5	3.0	2.0	9.0	0.5	5.0	
Min Gap	2.0	3.0	0.5	3.0	2.0	3.0	0.5	2.0	
Max Limit	20	50	17	35	20	50	17	40	
Max Limit 2	30	70	30	70	30	70	30	70	
-----	0	0	0	0	0	0	0	0	
Call To Phase	0	0	0	0	0	0	0	0	
Reduce By	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.1	
Reduce Every	0.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0	
Yellow Change	3.2	4.3	3.0	3.6	3.2	4.3	3.0	4.0	
Red Clear	1.0	1.0	0.0	1.0	1.0	1.0	0.0	1.0	

Phase Timing - Bank 3

<F Page>

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

Special Event Schedule

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

← Limited Service Interval
(Set Dwell = 255)

INTERSECTION: El Camino & Mission

Page 1 (of 5)

 Group Assignment: **NONE**

 N/S Street Name: **Not Assigned**

Last Database Change: 1/22/2018 12:17

 Field Master Assignment: **NONE**

 E/W Street Name: **Not Assigned**

 System Reference Number: **24**

Change Record					
Change	By	Date	Change	By	Date

Notes:

Drop Number	18	<C+0+0>
Zone Number		<C+0+1>
Area Number	1	<C+0+2>
Area Address	24	<C+0+3>
QuicNet Channel	Serial:COM40:	(QuicNet)

Communication Addresses

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

Manual Selection

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

Start / Revert Times

		Phase							
Column Numbers —>		1	2	3	4	5	6	7	8
Row	Phase Names —>								
0	Ped Walk	0	7	0	7	0	7	0	7
1	Ped FDW	0	37	0	48	0	37	0	10
2	Min Green	10	10	10	10	10	10	3	7
3	Type 3 Limit	0	99	0	0	0	99	0	0
4	Added Initial	0.0	2.0	0.0	0.0	0.0	2.0	0.0	1.2
5	Veh Extension	3.0	7.0	3.0	3.0	3.0	7.0	0.5	3.5
6	Max Gap	3.0	9.0	3.0	3.0	3.0	9.0	0.5	5.0
7	Min Gap	3.0	5.0	3.0	3.0	3.0	5.0	0.5	2.0
8	Max Limit	30	50	35	35	35	50	17	40
9	Max Limit 2	30	70	30	70	40	70	30	70
A	-----	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1
D	Reduce Every	0.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0
E	Yellow Change	4.3	4.8	4.8	4.3	4.3	4.8	3.0	4.0
F	Red Clear	3.0	2.0	2.0	2.0	3.0	2.0	0.0	1.0

Phase Timing - Bank 1

<F Page>

E	
RR-1 Delay	0
RR-1 Clear	10
EV-A Delay	0
EV-A Clear	5
EV-B Delay	0
EV-B Clear	5
EV-C Delay	0
EV-C Clear	5
EV-D Delay	0
EV-D Clear	5
RR-2 Delay	0
RR-2 Clear	10
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing

F	
Permit	123456
Red Lock	1 5
Yellow Lock	
Min Recall	2 6
Ped Recall	
View Set Peds	-----
Rest In Walk	
Red Rest	
Dual Entry	2 6
Max Recall	
Soft Recall	
Max 2	
Cond. Service	
Man Cntrl Calls	
Yellow Start	1 5
First Phases	2 6

Phase Functions <F Page>

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

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

Column Numbers →		Plan								
Plan Name →		1	2	3	4	5	6	7	8	9
0	Cycle Length	100	100	100	100	100	100	100	100	100
1	Phase 1 - ForceOff	65	65	65	65	65	65	65	65	65
2	Phase 2 - ForceOff	0	0	0	0	0	0	0	0	0
3	Phase 3 - ForceOff	25	25	25	25	25	25	25	25	25
4	Phase 4 - ForceOff	40	40	40	40	40	40	40	40	40
5	Phase 5 - ForceOff	65	65	65	65	65	65	65	65	65
6	Phase 6 - ForceOff	0	0	0	0	0	0	0	0	0
7	Phase 7 - ForceOff	25	25	25	25	25	25	25	25	25
8	Phase 8 - ForceOff	40	40	40	40	40	40	40	40	40
9	Ring Offset	0	0	0	0	0	0	0	0	0
A	Offset 1	0	0	0	0	0	0	0	0	0
B	Offset 2	0	0	0	0	0	0	0	0	0
C	Offset 3	0	0	0	0	0	0	0	0	0
D	Permissive	12	12	12	12	12	12	12	12	0
E	Hold Release	255	255	255	255	255	255	255	255	0
F	Zone Offset	0	0	0	0	0	0	0	0	0

Coordination

<C Page>

(* = Coordination Recall)

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

Sync Phases <C Page>

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

Configuration

<E Page>

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

Configuration

<E Page>

Extra 1 Flags

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

Assign 5 Outputs

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

Force-Off Adjust 0

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

Transition Type 0

TBC Transition <C+D+D>

Transition Type
0 = Shortway
Non-zero = Lengthen

IC Select Flags

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

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

Lag Phases <C Page>

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

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

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

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

Time	Funct.	Day of Week
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	

TOD Function
<7 Key>

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

Column F
Phases/Bits

<D Page>

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

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

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

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

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

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

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

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

Holiday Dates
<8 Key>

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

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

Detector Delay & Carryover <D Page>

Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
A	0.0	0.0	0.0	0
B	0.0	0.0	0.0	0
C	0.0	0.0	0.0	7
D	0.0	0.0	0.0	0

Overlap Timing <F Page>

<D Page>

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

Active Detectors <D Page>

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

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

System Detectors <D Page>

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

Detector Failure Monitor

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

Advance Warning Beacon - Sign 1

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

Advance Warning Beacon - Sign 2

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

Power Cycle Correction (Default = 0.5)

Disable Parity	0	<D+B+0>

Dial-Up Telephone Communications

(If set to a non-zero value, parity will be disabled)

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

Phase Timing - Bank 2

<F Page>

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

Phase Timing - Bank 3

<F Page>

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

Special Event Schedule

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

← Limited
Service
Interval
(Set Dwell = 255)

INTERSECTION: Mission & Douglas

Page 1 (of 5)

Group Assignment: NONE

N/S Street Name: Not Assigned

Last Database Change: 8/8/2017 10:55

Field Master Assignment: NONE

E/W Street Name: Not Assigned

System Reference Number: 76

Change Record					
Change	By	Date	Change	By	Date

Notes:

Drop Number	12	<C+0+0>
Zone Number		<C+0+1>
Area Number	1	<C+0+2>
Area Address	76	<C+0+3>
QuicNet Channel	Serial:COM40: (QuicNet)	

Communication Addresses

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

Manual Selection

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

Start / Revert Times

		Phase							
Column Numbers ---->		1	2	3	4	5	6	7	8
Row	Phase Names ---->								
0	Ped Walk	0	7	0	7	0	7	0	7
1	Ped FDW	0	20	0	28	0	22	0	26
2	Min Green	5	8	5	8	5	8	5	8
3	Type 3 Limit	0	99	0	0	0	99	0	99
4	Added Initial	0.0	1.2	0.0	0.0	0.0	1.2	0.0	0.0
5	Veh Extension	3.0	5.0	3.0	4.0	3.0	5.0	3.0	4.0
6	Max Gap	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0
7	Min Gap	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
8	Max Limit	20	10	20	40	20	20	40	40
9	Max Limit 2	30	30	50	70	30	30	30	70
A	-----	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0
D	Reduce Every	0.0	1.0	0.0	1.5	0.0	1.0	0.0	0.0
E	Yellow Change	4.1	4.8	4.1	4.4	4.1	4.8	4.1	4.4
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 1

<F Page>

E	
RR-1 Delay	0
RR-1 Clear	10
EV-A Delay	0
EV-A Clear	5
EV-B Delay	0
EV-B Clear	5
EV-C Delay	0
EV-C Clear	5
EV-D Delay	0
EV-D Clear	5
RR-2 Delay	0
RR-2 Clear	10
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing

F	
Permit	12345678
Red Lock	
Yellow Lock	
Min Recall	4 8
Ped Recall	
View Set Peds	-----
Rest In Walk	
Red Rest	
Dual Entry	2 4 6 8
Max Recall	
Soft Recall	
Max 2	
Cond. Service	3
Man Cntrl Calls	
Yellow Start	3 7
First Phases	4 8

Phase Functions <F Page>

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

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

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

Column Numbers →		Plan								
		1	2	3	4	5	6	7	8	9
Row	Plan Name →									
0	Cycle Length	80	80	75	100	100	100	80	100	100
1	Phase 1 - ForceOff	65	65	60	65	65	65	65	65	65
2	Phase 2 - ForceOff	0	0	0	0	0	0	0	0	0
3	Phase 3 - ForceOff	25	25	23	25	25	25	25	25	25
4	Phase 4 - ForceOff	50	50	45	40	40	40	50	40	40
5	Phase 5 - ForceOff	65	65	60	65	65	65	65	65	65
6	Phase 6 - ForceOff	0	0	0	0	0	0	0	0	0
7	Phase 7 - ForceOff	1	1	1	25	25	25	1	25	25
8	Phase 8 - ForceOff	1	1	1	40	40	40	1	40	40
9	Ring Offset	0	0	0	0	0	0	0	0	0
A	Offset 1	48	14	20	0	0	0	48	0	0
B	Offset 2	0	0	0	0	0	0	0	0	0
C	Offset 3	0	0	0	0	0	0	0	0	0
D	Permissive	12	12	12	12	12	12	12	12	0
E	Hold Release	70	70	70	255	255	255	70	255	0
F	Zone Offset	0	0	0	0	0	0	0	0	0

Coordination

<C Page>

(* = Coordination Recall)

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

Sync Phases <C Page>

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

Configuration

<E Page>

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

Configuration

<E Page>

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

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

Force-Off Adjust 5
Coord Force-Off Adjust
for Ped Service <C+D+F>

Transition Type 0
TBC Transition <C+D+D>

Transition Type
 0 = Shortway
 Non-zero = Lengthen

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

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

Lag Phases <C Page>

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

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

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

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

Time	Func	Day of Week
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	
00:00	0	

TOD Function
<7 Key>

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

Column F
Phases/Bits

<D Page>

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

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

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

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

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

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

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

Row	Day	Year	Month	Day of Week
A				
B				
C				

Holiday # 1 Date	Day	Year	Month
	0	0	0
Holiday # 2 Date	Day	Year	Month
	0	0	0
Holiday # 3 Date	Day	Year	Month
	0	0	0

Holiday Dates
<8 Key>

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

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

Detector Delay & Carryover <D Page>

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

Overlap Timing <F Page> <D Page>

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

Active Detectors <D Page>

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

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

System Detectors <D Page>

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

Detector Failure Monitor

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

Advance Warning Beacon - Sign 1

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

Advance Warning Beacon - Sign 2

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

Power Cycle Correction (Default = 0.5)

Disable Parity	0	<D+B+0>

Dial-Up Telephone Communications

(If set to a non-zero value, parity will be disabled)

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

Phase Timing - Bank 2

<F Page>

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

Phase Timing - Bank 3

<F Page>

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

Special Event Schedule

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

← Limited Service Interval
(Set Dwell = 255)

APPENDIX D

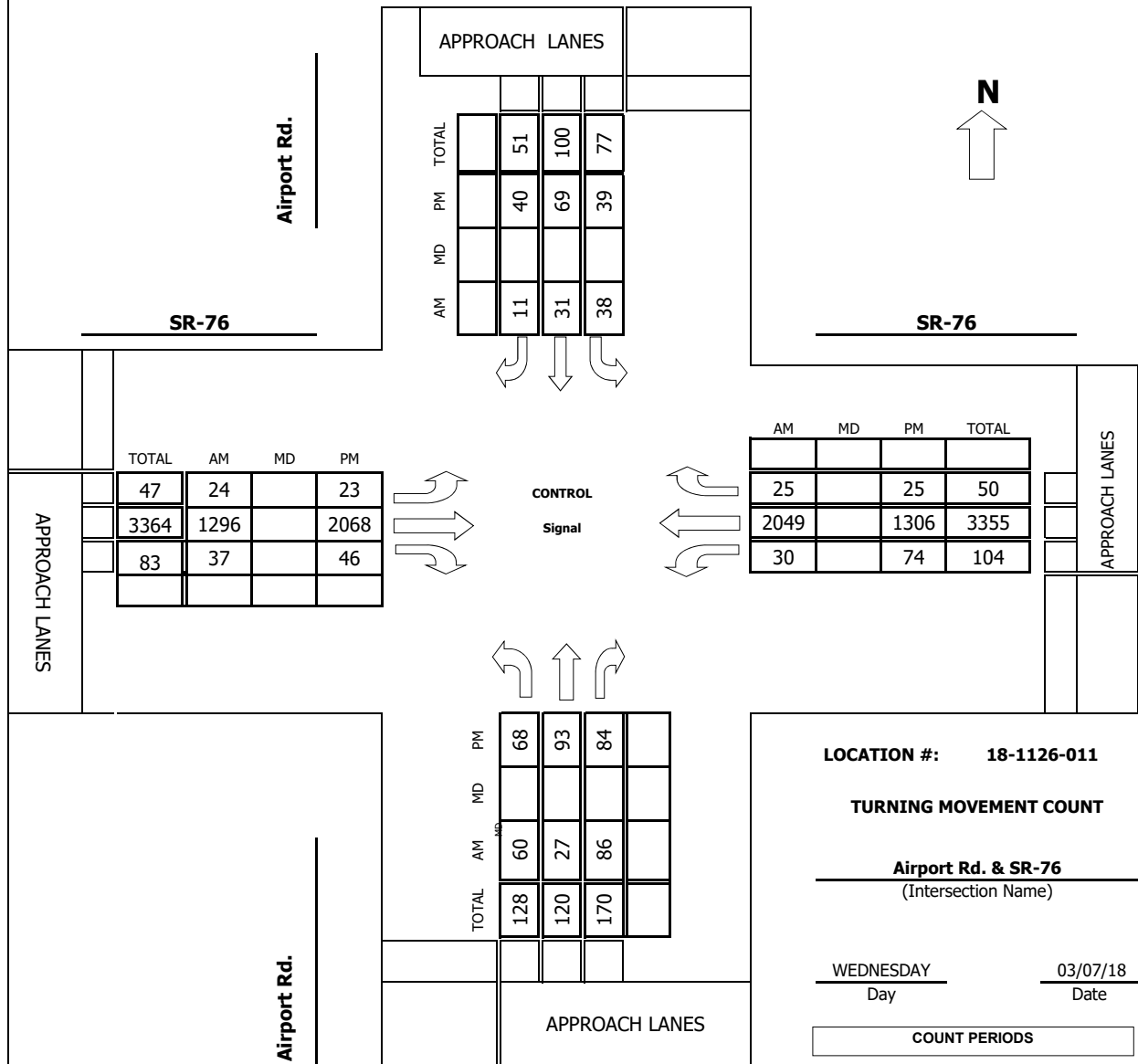
EXISTING TRAFFIC COUNT SHEETS

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

TMC SUMMARY OF Airport Rd. & SR-76



LOCATION #: 18-1126-011

TURNING MOVEMENT COUNT

Airport Rd. & SR-76

(Intersection Name)

WEDNESDAY

Day

03/07/18

Date _____

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 745 AM

NOON PEAK HOUR

PM PEAK HOUR 500 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: Airport Rd.

DATE: 03/07/18

LOCATION: Oceanside

E-W STREET: SR-76

DAY: WEDNESDAY

PROJECT# 18-1126-011

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 1	EL 1	ET 2	ER 1	WL 1	WT 2	WR 1	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	9	6	23	7	4	6	2	229	6	6	328	8	634
7:15 AM	5	9	17	10	12	2	2	224	10	4	369	11	675
7:30 AM	10	4	20	8	8	2	7	287	7	3	344	15	715
7:45 AM	9	8	22	11	8	1	6	286	9	7	528	9	904
8:00 AM	14	5	27	13	10	5	8	328	3	10	522	12	957
8:15 AM	19	9	17	9	5	3	4	319	11	5	479	2	882
8:30 AM	18	5	20	5	8	2	6	363	14	8	520	2	971
8:45 AM	10	2	11	3	4	1	2	285	8	3	519	4	852
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	94	48	157	66	59	22	37	2321	68	46	3609	63	6590
Approach %	31.44	16.05	52.51	44.90	40.14	14.97	1.53	95.67	2.80	1.24	97.07	1.69	
App/Depart	299	/	148	147	/	173	2426	/	2544	3718	/	3725	

AM Peak Hr Begins at: 745 AM

PEAK

Volumes	60	27	86	38	31	11	24	1296	37	30	2049	25	3714
Approach %	34.68	15.61	49.71	47.50	38.75	13.75	1.77	95.50	2.73	1.43	97.39	1.19	

PEAK HR.

FACTOR:	0.940	0.714	0.886	0.967	0.956

CONTROL: Signal

COMMENT 1:

GPS: 33.216466, -117.351093

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: **Airport Rd.** DATE: **03/07/18** LOCATION: **Oceanside**
E-W STREET: **SR-76** DAY: **WEDNESDAY** PROJECT#: **18-1126-011**

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 1	EL 1	ET 2	ER 1	WL 1	WT 2	WR 1	TOTAL
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	19	22	11	4	5	8	2	298	11	9	269	5	663
4:15 PM	16	20	13	4	9	8	2	322	10	11	277	3	695
4:30 PM	15	27	17	8	10	7	6	363	14	17	302	8	794
4:45 PM	18	30	11	8	13	10	3	428	8	19	316	6	870
5:00 PM	15	26	28	12	16	11	8	502	14	22	314	10	978
5:15 PM	17	28	25	13	22	16	4	496	11	19	328	5	984
5:30 PM	20	23	11	6	19	9	6	579	9	17	343	7	1049
5:45 PM	16	16	20	8	12	4	5	491	12	16	321	3	924
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	136	192	136	63	106	73	36	3479	89	130	2470	47	6957
Approach %	29.31	41.38	29.31	26.03	43.80	30.17	1.00	96.53	2.47	4.91	93.31	1.78	
App/Depart	464	/	275	242	/	325	3604	/	3678	2647	/	2679	

PM Peak Hr Begins at: 500 PM

PEAK

Volumes	68	93	84	39	69	40	23	2068	46	74	1306	25	3935
Approach %	27.76	37.96	34.29	26.35	46.62	27.03	1.08	96.77	2.15	5.27	92.95	1.78	

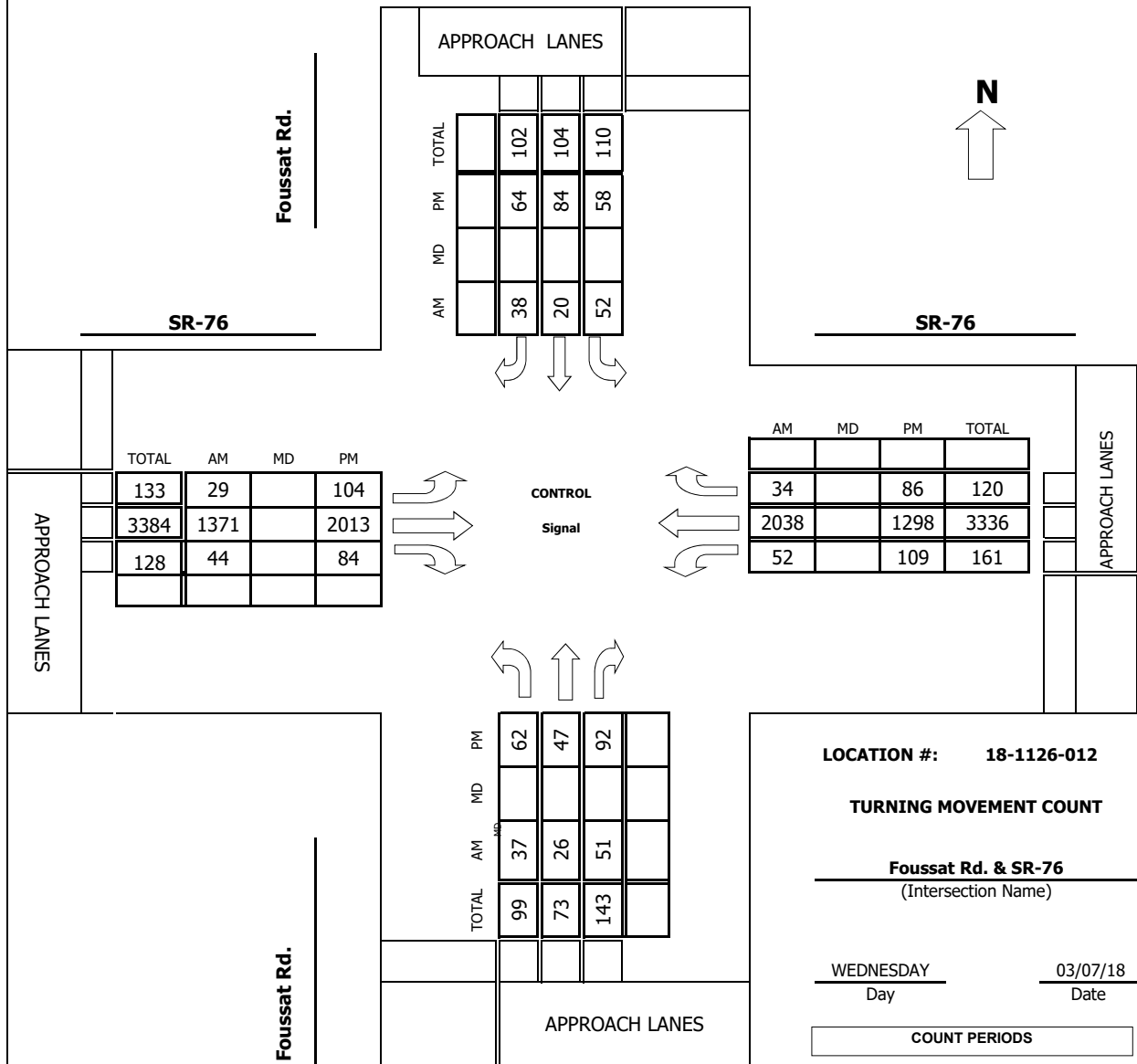
PEAK HR.

FACTOR:	0.875	0.725	0.899	0.957	0.938

CONTROL: **Signal**
COMMENT 1: **0**
GPS: **33.216466, -117.351093**

Project #: 18-1126-012

TMC SUMMARY OF Foussat Rd. & SR-76



LOCATION #: **18-1126-012**

TURNING MOVEMENT COUNT

Foussat Rd. & SR-76

(Intersection Name)

WEDNESDAY

Day

03/07/18

Date

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 745 AM

NOON PEAK HOUR

PM PEAK HOUR 445 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: Foussat Rd.

DATE: 03/07/18

LOCATION: Oceanside

E-W STREET: SR-76

DAY: WEDNESDAY

PROJECT#: 18-1126-012

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 1	SL 2	ST 2	SR 2	EL 2	ET 2	ER 1	WL 2	WT 2	WR 1	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	9	11	24	8	9	6	15	245	8	24	349	19	727
7:15 AM	12	9	15	6	6	8	10	239	13	13	363	13	707
7:30 AM	11	5	22	7	8	6	11	285	7	13	345	8	728
7:45 AM	9	6	12	14	4	10	5	311	13	12	528	11	935
8:00 AM	8	7	15	11	6	5	7	328	12	12	542	8	961
8:15 AM	6	7	15	16	4	8	11	363	13	14	469	9	935
8:30 AM	14	6	9	11	6	15	6	369	6	14	499	6	961
8:45 AM	5	7	7	9	0	11	8	297	19	16	528	5	912
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	74	58	119	82	43	69	73	2437	91	118	3623	79	6866
Approach %	29.48	23.11	47.41	42.27	22.16	35.57	2.81	93.69	3.50	3.09	94.84	2.07	
App/Depart	251	/	210	194	/	252	2601	/	2638	3820	/	3766	

AM Peak Hr Begins at: 745 AM

PEAK

Volumes	37	26	51	52	20	38	29	1371	44	52	2038	34	3792
Approach %	32.46	22.81	44.74	47.27	18.18	34.55	2.01	94.94	3.05	2.45	95.95	1.60	

PEAK HR.

FACTOR:	0.950	0.859	0.933	0.945	0.986

CONTROL: Signal

COMMENT 1:

GPS: 33.218397, -117.344083

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: Foussat Rd. 0 DATE: 03/07/18 LOCATION: Oceanside
E-W STREET: SR-76 DAY: WEDNESDAY PROJECT#: 18-1126-012

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 1	SL 2	ST 2	SR 2	EL 2	ET 2	ER 1	WL 2	WT 2	WR 1	TOTAL
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	9	9	11	5	11	6	20	322	6	18	279	14	710
4:15 PM	12	5	14	8	14	12	28	328	9	23	269	21	743
4:30 PM	15	9	23	11	17	14	26	341	13	27	322	22	840
4:45 PM	13	11	19	15	26	18	30	422	18	32	319	18	941
5:00 PM	17	16	21	17	23	15	26	528	20	28	333	27	1071
5:15 PM	20	12	27	12	19	19	23	519	21	26	305	22	1025
5:30 PM	12	8	25	14	16	12	25	544	25	23	341	19	1064
5:45 PM	7	6	20	5	11	7	27	469	16	19	328	16	931
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	105	76	160	87	137	103	205	3473	128	196	2496	159	7325
Approach %	30.79	22.29	46.92	26.61	41.90	31.50	5.39	91.25	3.36	6.87	87.55	5.58	
App/Depart	341	/	440	327	/	461	3806	/	3720	2851	/	2704	

PM Peak Hr Begins at: 445 PM

PEAK

Volumes	62	47	92	58	84	64	104	2013	84	109	1298	86	4101
Approach %	30.85	23.38	45.77	28.16	40.78	31.07	4.73	91.46	3.82	7.30	86.94	5.76	

PEAK HR.

FACTOR:	0.852	0.873	0.926	0.962	0.957

CONTROL:

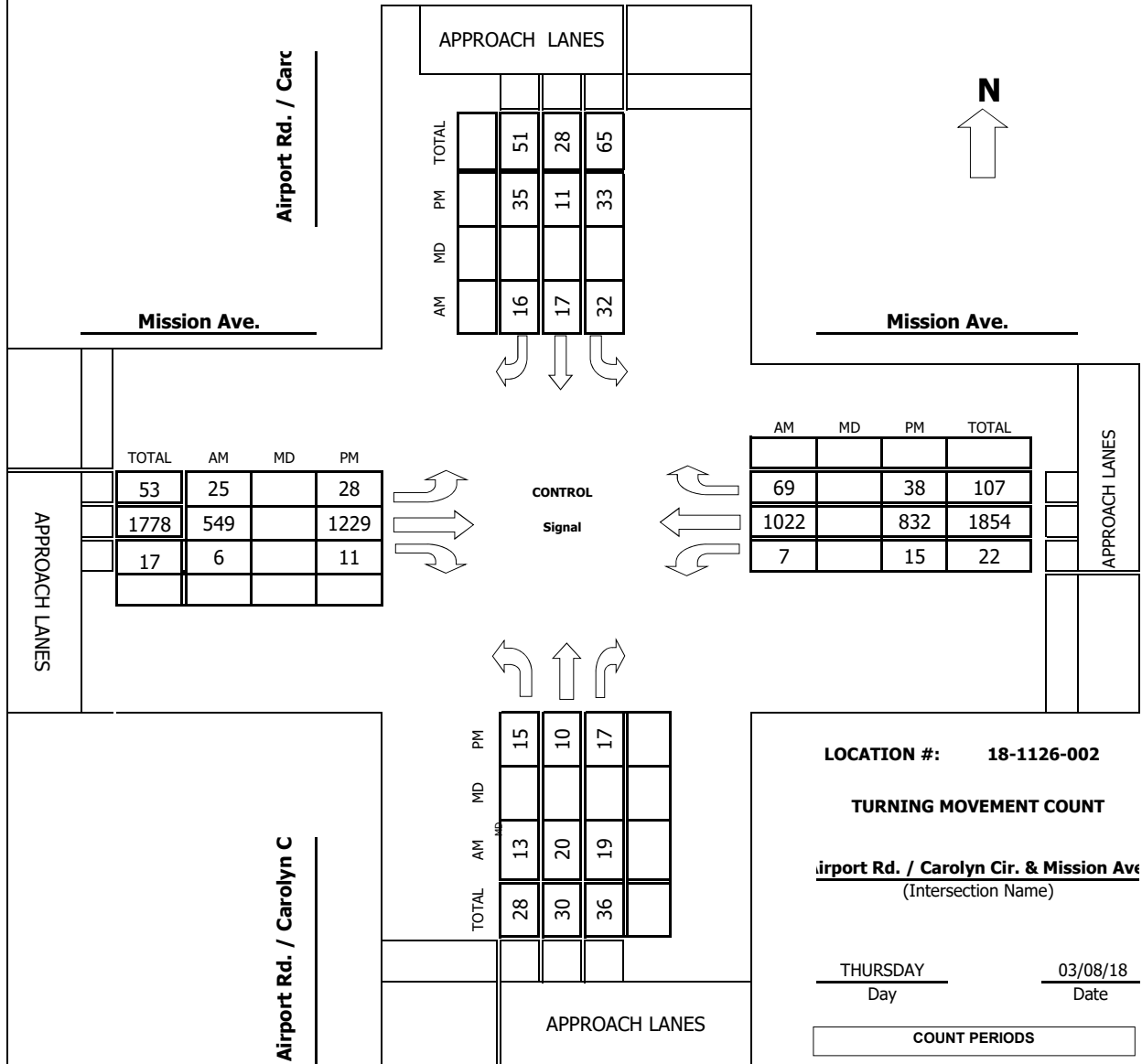
COMMENT 1:

GPS:

Signal
0
33.218397, -117.344083

Project #: 18-1126-002

TMC SUMMARY OF Airport Rd. / Carolyn Cir. & Mission Ave.



LOCATION #: 18-1126-002

TURNING MOVEMENT COUNT

Airport Rd. / Carolyn Cir. & Mission Ave.
(Intersection Name)

THURSDAY 03/08/18
Day Date

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 445 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: Airport Rd. / Carolyn Cir.

DATE: 03/08/18

LOCATION: Oceanside

E-W STREET: Mission Ave.

DAY: THURSDAY

PROJECT# 18-1126-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	1.5	0.5	1	1	2	0	1	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	6	17	11	7	5	13	6	71	4	3	207	11	361
7:15 AM	3	8	7	12	2	4	14	69	3	0	204	22	348
7:30 AM	4	10	7	7	4	3	7	76	1	2	198	16	335
7:45 AM	3	3	7	10	4	6	8	78	2	0	233	18	372
8:00 AM	2	2	7	8	6	3	5	122	0	1	280	18	454
8:15 AM	5	6	7	8	5	5	5	154	0	1	249	16	461
8:30 AM	0	5	3	9	4	4	10	143	3	2	252	21	456
8:45 AM	6	7	2	7	2	4	5	130	3	3	241	14	424
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	29	58	51	68	32	42	60	843	16	12	1864	136	3211
Approach %	21.01	42.03	36.96	47.89	22.54	29.58	6.53	91.73	1.74	0.60	92.64	6.76	
App/Depart	138	/	254	142	/	60	919	/	962	2012	/	1935	

AM Peak Hr Begins at: 800 AM

PEAK

Volumes	13	20	19	32	17	16	25	549	6	7	1022	69	1795
Approach %	25.00	38.46	36.54	49.23	26.15	24.62	4.31	94.66	1.03	0.64	93.08	6.28	

PEAK HR.

FACTOR:	0.722	0.903	0.912	0.918	0.973

CONTROL: Signal

COMMENT 1:

GPS: 33.213386, -117.348291

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: Airport Rd. / Carolyn Cir.
0

DATE: 03/08/18

LOCATION: Oceanside

E-W STREET: Mission Ave.

DAY: THURSDAY

PROJECT# 18-1126-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	1.5	0.5	1	1	2	0	1	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	4	3	5	15	4	7	4	230	2	4	199	5	482
4:15 PM	2	2	5	12	3	8	5	254	7	5	208	7	518
4:30 PM	3	3	6	10	5	5	6	241	4	5	214	9	511
4:45 PM	5	1	11	9	2	5	3	292	4	2	223	7	564
5:00 PM	2	3	3	11	6	4	5	349	2	4	214	9	612
5:15 PM	5	3	1	5	3	12	12	289	4	8	196	18	556
5:30 PM	3	3	2	8	0	14	8	299	1	1	199	4	542
5:45 PM	4	3	6	8	2	14	5	287	4	6	164	7	510
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	28	21	39	78	25	69	48	2241	28	35	1617	66	4295
Approach %	31.82	23.86	44.32	45.35	14.53	40.12	2.07	96.72	1.21	2.04	94.12	3.84	
App/Depart	88	/	135	172	/	88	2317	/	2358	1718	/	1714	

PM Peak Hr Begins at: 445 PM

PEAK

Volumes	15	10	17	33	11	35	28	1229	11	15	832	38	2274
Approach %	35.71	23.81	40.48	41.77	13.92	44.30	2.21	96.92	0.87	1.69	94.01	4.29	

PEAK HR.

FACTOR:	0.618	0.898	0.890	0.954	0.929

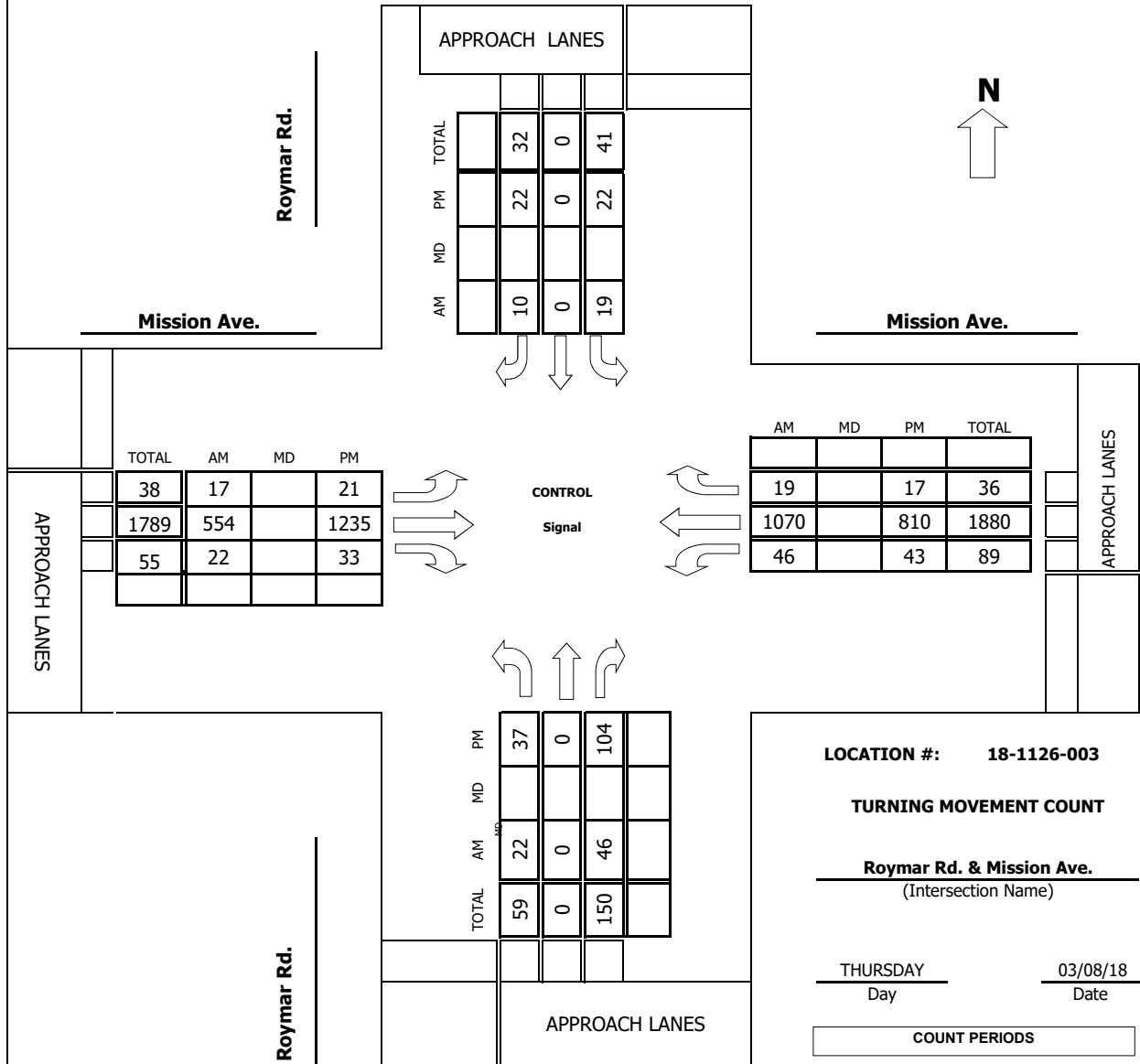
CONTROL: Signal

COMMENT 1: 0

GPS: 33.213386, -117.348291

Project #: 18-1126-003

TMC SUMMARY OF Roymar Rd. & Mission Ave.



LOCATION #: 18-1126-003

TURNING MOVEMENT COUNT

Roymar Rd. & Mission Ave.
(Intersection Name)

THURSDAY **03/08/18**
Day Date

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 445 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: Roymar Rd.

DATE: 03/08/18

LOCATION: Oceanside

E-W STREET: Mission Ave.

DAY: THURSDAY

PROJECT# 18-1126-003

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	1	1	1	0	1	2	0	0	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	5	0	2	1	0	4	6	63	12	5	223	3	324
7:15 AM	5	0	12	5	0	1	4	69	15	11	219	3	344
7:30 AM	6	0	16	5	0	2	3	67	10	11	204	4	328
7:45 AM	7	0	9	5	0	3	5	80	5	11	239	3	367
8:00 AM	5	0	8	5	0	3	6	122	6	12	299	3	469
8:15 AM	6	0	11	5	0	3	3	154	8	14	254	5	463
8:30 AM	7	0	14	4	0	2	3	149	4	10	263	4	460
8:45 AM	4	0	13	5	0	2	5	129	4	10	254	7	433
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	45	0	85	35	0	20	35	833	64	84	1955	32	3188
Approach %	34.62	0.00	65.38	63.64	0.00	36.36	3.76	89.38	6.87	4.06	94.40	1.55	
App/Depart	130	/	67	55	/	148	932	/	953	2071	/	2020	

AM Peak Hr Begins at: 800 AM

PEAK

Volumes	22	0	46	19	0	10	17	554	22	46	1070	19	1825
Approach %	32.35	0.00	67.65	65.52	0.00	34.48	2.87	93.42	3.71	4.05	94.27	1.67	

PEAK HR.

FACTOR:	0.810	0.906	0.898	0.904	0.973

CONTROL: Signal

COMMENT 1:

GPS: 33.215411, -117.345373

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: Roymar Rd. 0 DATE: 03/08/18 LOCATION: Oceanside
E-W STREET: Mission Ave. DAY: THURSDAY PROJECT#: 18-1126-003

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	1	1	1	0	1	2	0	0	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	3	0	12	3	0	4	2	249	5	5	198	3	484
4:15 PM	4	0	16	3	0	5	2	263	9	6	221	3	532
4:30 PM	8	0	17	5	0	7	3	265	7	8	210	6	536
4:45 PM	11	0	22	6	0	3	4	308	4	13	219	5	595
5:00 PM	11	0	27	6	0	6	7	349	12	8	199	4	629
5:15 PM	7	0	30	5	0	6	5	282	10	13	205	5	568
5:30 PM	8	0	25	5	0	7	5	296	7	9	187	3	552
5:45 PM	8	0	20	3	0	3	5	299	4	10	167	2	521
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	60	0	169	36	0	41	33	2311	58	72	1606	31	4417
Approach %	26.20	0.00	73.80	46.75	0.00	53.25	1.37	96.21	2.41	4.21	93.97	1.81	
App/Depart	229	/	64	77	/	130	2402	/	2516	1709	/	1707	

PM Peak Hr Begins at: 445 PM

PEAK

Volumes	37	0	104	22	0	22	21	1235	33	43	810	17	2344
Approach %	26.24	0.00	73.76	50.00	0.00	50.00	1.63	95.81	2.56	4.94	93.10	1.95	

PEAK HR.

FACTOR:	0.928	0.917	0.876	0.918	0.932

CONTROL:

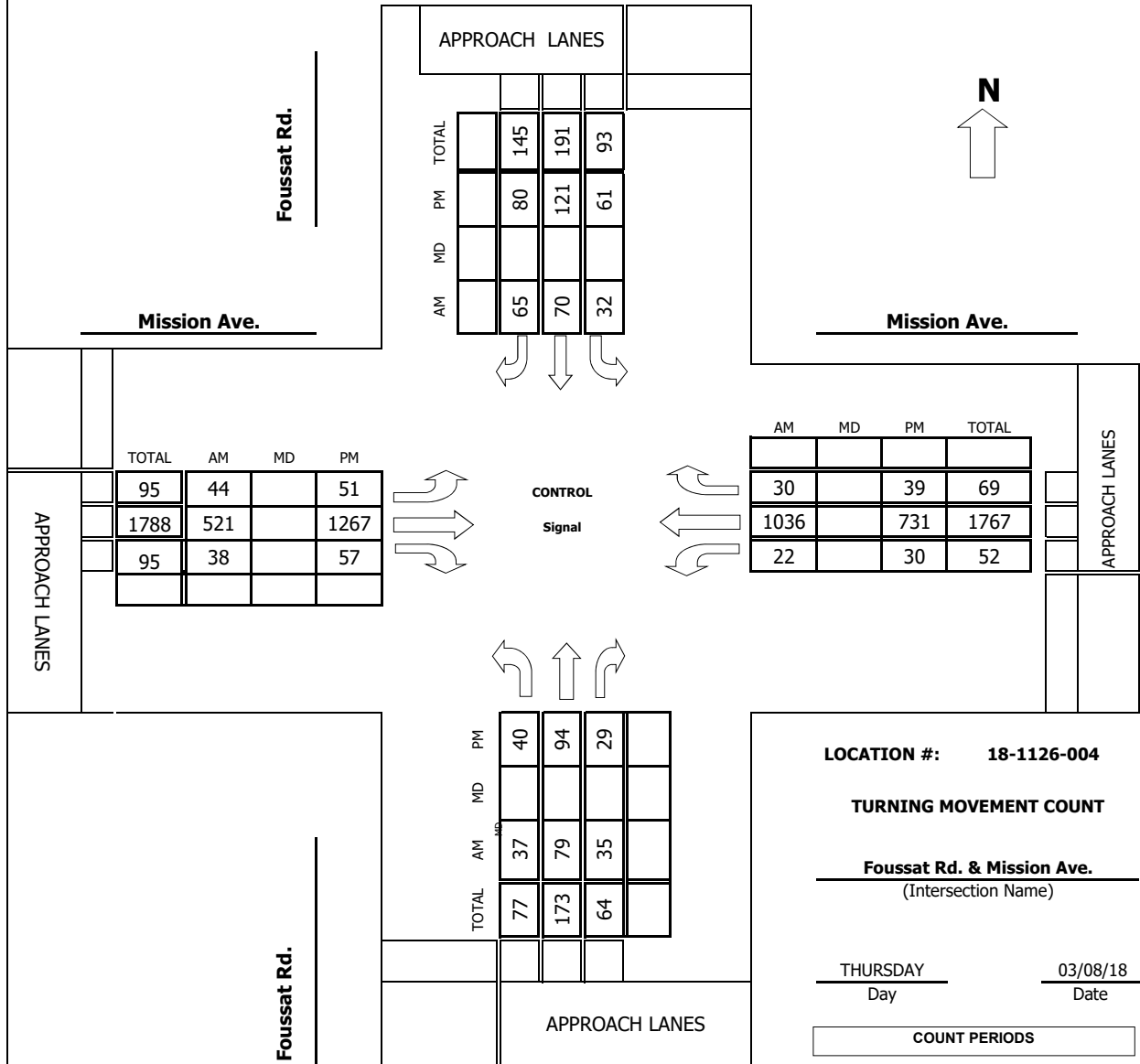
COMMENT 1:

GPS:

Signal
0
33.215411, -117.345373

Project #: 18-1126-004

TMC SUMMARY OF Foussat Rd. & Mission Ave.



LOCATION #: 18-1126-004

TURNING MOVEMENT COUNT

Foussat Rd. & Mission Ave.
(Intersection Name)

THURSDAY
Day

03/08/18
Date

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 445 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: Foussat Rd.

DATE: 03/08/18

LOCATION: Oceanside

E-W STREET: Mission Ave.

DAY: THURSDAY

PROJECT# 18-1126-004

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 2	NR 0	SL 2	ST 2	SR 2	EL 1	ET 2	ER 0	WL 1	WT 2	WR 1	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	12	22	4	8	20	15	11	49	10	6	199	4	360
7:15 AM	13	19	5	10	22	12	12	65	7	4	203	6	378
7:30 AM	6	22	2	6	20	15	9	64	10	11	196	11	372
7:45 AM	11	33	6	6	19	14	7	79	8	5	219	10	417
8:00 AM	10	28	9	8	16	16	10	109	11	7	296	4	524
8:15 AM	6	16	9	8	13	17	10	145	11	8	249	5	497
8:30 AM	9	16	10	9	20	15	16	139	8	1	252	13	508
8:45 AM	12	19	7	7	21	17	8	128	8	6	239	8	480
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	79	175	52	62	151	121	83	778	73	48	1853	61	3536
Approach %	25.82	57.19	16.99	18.56	45.21	36.23	8.89	83.30	7.82	2.45	94.44	3.11	
App/Depart	306	/	319	334	/	272	934	/	892	1962	/	2053	

AM Peak Hr Begins at: 800 AM

PEAK

Volumes	37	79	35	32	70	65	44	521	38	22	1036	30	2009
Approach %	24.50	52.32	23.18	19.16	41.92	38.92	7.30	86.40	6.30	2.02	95.22	2.76	

PEAK HR.

FACTOR:	0.803	0.928	0.908	0.886	0.958

CONTROL: Signal

COMMENT 1:

GPS: 33.216893, -117.343312

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: Foussat Rd. 0 DATE: 03/08/18 LOCATION: Oceanside
E-W STREET: Mission Ave. DAY: THURSDAY PROJECT#: 18-1126-004

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	2	2	0	2	2	2	1	2	0	1	2	1	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	7	16	3	13	19	13	7	251	8	6	187	12	542
4:15 PM	7	14	3	12	22	13	11	269	9	10	216	11	597
4:30 PM	10	20	8	9	20	15	9	267	10	8	196	14	586
4:45 PM	10	21	6	15	26	25	7	328	8	5	199	10	660
5:00 PM	10	28	4	17	33	19	13	363	10	7	181	8	693
5:15 PM	7	24	8	20	30	20	14	287	21	7	186	11	635
5:30 PM	13	21	11	9	32	16	17	289	18	11	165	10	612
5:45 PM	12	14	6	8	25	14	15	301	12	8	149	10	574
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	76	158	49	103	207	135	93	2355	96	62	1479	86	4899
Approach %	26.86	55.83	17.31	23.15	46.52	30.34	3.66	92.57	3.77	3.81	90.90	5.29	
App/Depart	283	/	337	445	/	365	2544	/	2507	1627	/	1690	

PM Peak Hr Begins at: 445 PM

PEAK

Volumes	40	94	29	61	121	80	51	1267	57	30	731	39	2600
Approach %	24.54	57.67	17.79	23.28	46.18	30.53	3.71	92.15	4.15	3.75	91.38	4.88	

PEAK HR.

FACTOR:	0.906	0.936	0.891	0.935	0.938

CONTROL:

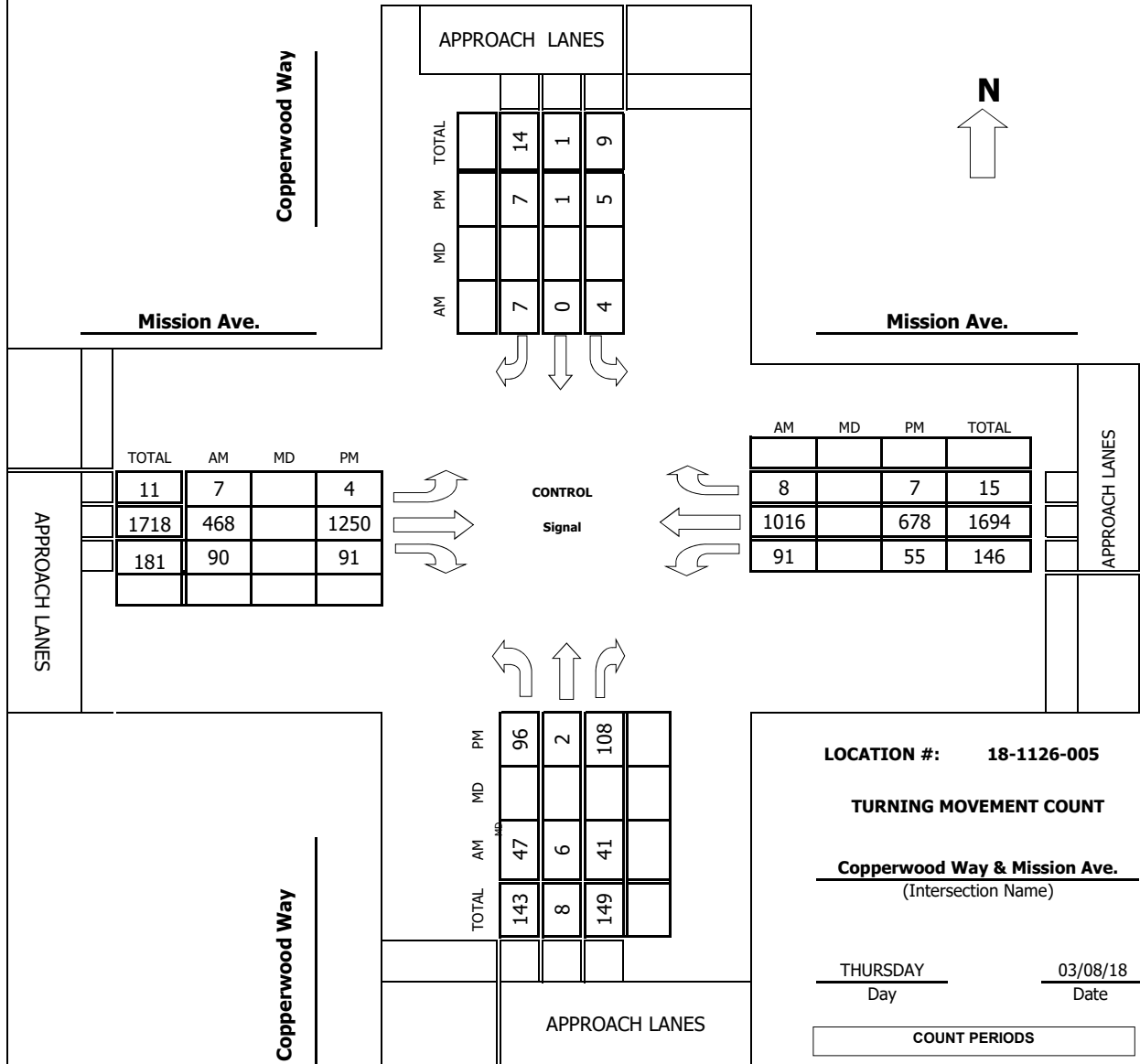
COMMENT 1:

GPS:

Signal
0
33.216893, -117.343312

Project #: 18-1126-005

TMC SUMMARY OF Copperwood Way & Mission Ave.



LOCATION #: **18-1126-005**

TURNING MOVEMENT COUNT

Copperwood Way & Mission Ave.
(Intersection Name)

THURSDAY 03/08/18
Day Date

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 445 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: Copperwood Way

DATE: 03/08/18

LOCATION: Oceanside

E-W STREET: Mission Ave.

DAY: THURSDAY

PROJECT# 18-1126-005

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0.5	NT 0.5	NR 1	SL 0	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	23	0	4	5	0	8	0	49	14	8	179	2	292
7:15 AM	13	2	2	1	0	2	2	50	23	14	196	1	306
7:30 AM	14	0	16	1	0	2	3	54	17	12	199	3	321
7:45 AM	22	0	7	1	0	1	1	70	19	19	210	1	351
8:00 AM	12	2	8	1	0	1	3	96	22	25	289	2	461
8:15 AM	10	0	19	0	0	5	2	133	25	11	243	3	451
8:30 AM	18	2	9	2	0	0	1	125	24	30	245	1	457
8:45 AM	7	2	5	1	0	1	1	114	19	25	239	2	416
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	119	8	70	12	0	20	13	691	163	144	1800	15	3055
Approach %	60.41	4.06	35.53	37.50	0.00	62.50	1.50	79.70	18.80	7.35	91.88	0.77	
App/Depart	197	/	36	32	/	307	867	/	773	1959	/	1939	

AM Peak Hr Begins at: 800 AM

PEAK

Volumes	47	6	41	4	0	7	7	468	90	91	1016	8	1785
Approach %	50.00	6.38	43.62	36.36	0.00	63.64	1.24	82.83	15.93	8.16	91.12	0.72	

PEAK HR.

FACTOR:	0.810	0.550	0.883	0.882	0.968

CONTROL: Signal

COMMENT 1:

GPS: 33.218368, -117.341141

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: Copperwood Way
0

DATE: 03/08/18

LOCATION: Oceanside

E-W STREET: Mission Ave.

DAY: THURSDAY

PROJECT# 18-1126-005

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0.5	0.5	1	0	1	0	1	2	0	1	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	17	1	25	2	0	1	1	243	30	16	179	0	515
4:15 PM	43	0	13	2	1	1	0	252	30	9	181	1	533
4:30 PM	30	1	17	2	0	1	1	259	26	14	169	0	520
4:45 PM	27	1	16	1	0	4	1	312	27	9	182	3	583
5:00 PM	24	0	27	1	0	1	2	371	20	14	167	1	628
5:15 PM	27	0	35	2	1	1	0	289	21	12	163	3	554
5:30 PM	18	1	30	1	0	1	1	278	23	20	166	0	539
5:45 PM	16	0	27	2	0	2	0	292	21	27	145	1	533
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	202	4	190	13	2	12	6	2296	198	121	1352	9	4405
Approach %	51.01	1.01	47.98	48.15	7.41	44.44	0.24	91.84	7.92	8.16	91.23	0.61	
App/Depart	396	/	19	27	/	321	2500	/	2499	1482	/	1566	

PM Peak Hr Begins at: 445 PM

PEAK

Volumes	96	2	108	5	1	7	4	1250	91	55	678	7	2304
Approach %	46.60	0.97	52.43	38.46	7.69	53.85	0.30	92.94	6.77	7.43	91.62	0.95	

PEAK HR.

FACTOR:	0.831	0.650	0.856	0.954	0.917

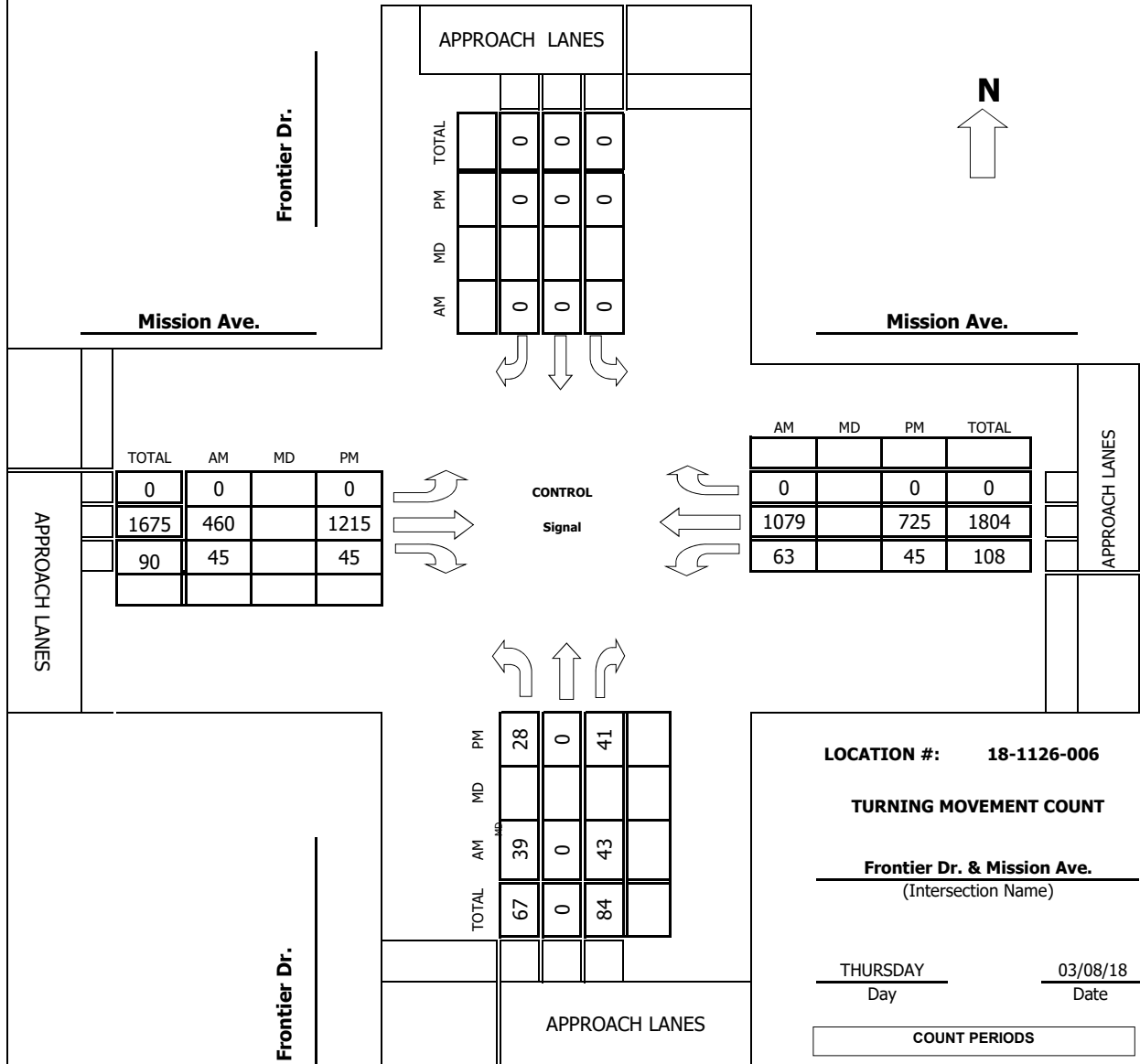
CONTROL: Signal

COMMENT 1: 0

GPS: 33.218368, -117.341141

Project #: 18-1126-006

TMC SUMMARY OF Frontier Dr. & Mission Ave.



TOTAL	AM	MD	PM
0	0		0
1675	460		1215
90	45		45

AM	MD	PM	TOTAL
0		0	0
1079		725	1804
63		45	108

TOTAL	AM	MD	PM
67	39	0	28
0	0	0	0
84	43	0	41

LOCATION #: **18-1126-006**

TURNING MOVEMENT COUNT

Frontier Dr. & Mission Ave.
(Intersection Name)

THURSDAY 03/08/18
Day Date

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 445 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: **Frontier Dr.**

DATE: **03/08/18**

LOCATION: **Oceanside**

E-W STREET: **Mission Ave.**

DAY: **THURSDAY**

PROJECT# **18-1126-006**

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	0	0	0	2	0	1	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	9	0	4	0	0	0	0	47	2	2	183	0	247
7:15 AM	4	0	6	0	0	0	0	45	2	1	211	0	269
7:30 AM	6	0	4	0	0	0	0	68	5	4	197	0	284
7:45 AM	12	0	7	0	0	0	0	73	5	3	217	0	317
8:00 AM	19	0	8	0	0	0	0	90	8	12	304	0	441
8:15 AM	5	0	3	0	0	0	0	138	10	7	249	0	412
8:30 AM	3	0	14	0	0	0	0	133	7	17	276	0	450
8:45 AM	12	0	18	0	0	0	0	99	20	27	250	0	426
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	70	0	64	0	0	0	0	693	59	73	1887	0	2846
Approach %	52.24	0.00	47.76	####	####	####	0.00	92.15	7.85	3.72	96.28	0.00	
App/Depart	134	/	0	0	/	132	752	/	757	1960	/	1957	

AM Peak Hr Begins at: 800 AM

PEAK

Volumes	39	0	43	0	0	0	0	460	45	63	1079	0	1729
Approach %	47.56	0.00	52.44	####	####	####	0.00	91.09	8.91	5.52	94.48	0.00	

PEAK HR.

FACTOR:	0.683	0.000	0.853	0.903	0.961

CONTROL: **Signal**

COMMENT 1:

GPS: **33.219311, -117.339772**

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: **Frontier Dr.** DATE: **03/08/18** LOCATION: **Oceanside**
E-W STREET: **Mission Ave.** DAY: **THURSDAY** PROJECT#: **18-1126-006**

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	0	0	0	2	0	1	2	0	

1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	24	0	31	0	0	0	0	262	9	9	176	0	511
4:15 PM	7	0	10	0	0	0	0	257	7	10	185	0	476
4:30 PM	9	0	9	0	0	0	0	258	8	8	177	0	469
4:45 PM	6	0	9	0	0	0	0	311	12	12	193	0	543
5:00 PM	5	0	10	0	0	0	0	293	13	11	177	0	509
5:15 PM	11	0	9	0	0	0	0	310	9	6	175	0	520
5:30 PM	6	0	13	0	0	0	0	301	11	16	180	0	527
5:45 PM	6	0	11	0	0	0	0	310	8	11	164	0	510
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	74	0	102	0	0	0	0	2302	77	83	1427	0	4065
Approach %	42.05	0.00	57.95	####	####	####	0.00	96.76	3.24	5.50	94.50	0.00	
App/Depart	176	/	0	0	/	160	2379	/	2404	1510	/	1501	

PM Peak Hr Begins at: 445 PM

PEAK

Volumes	28	0	41	0	0	0	0	1215	45	45	725	0	2099
Approach %	40.58	0.00	59.42	####	####	####	0.00	96.43	3.57	5.84	94.16	0.00	

PEAK HR.

FACTOR:	0.863	0.000	0.975	0.939	0.966

CONTROL:

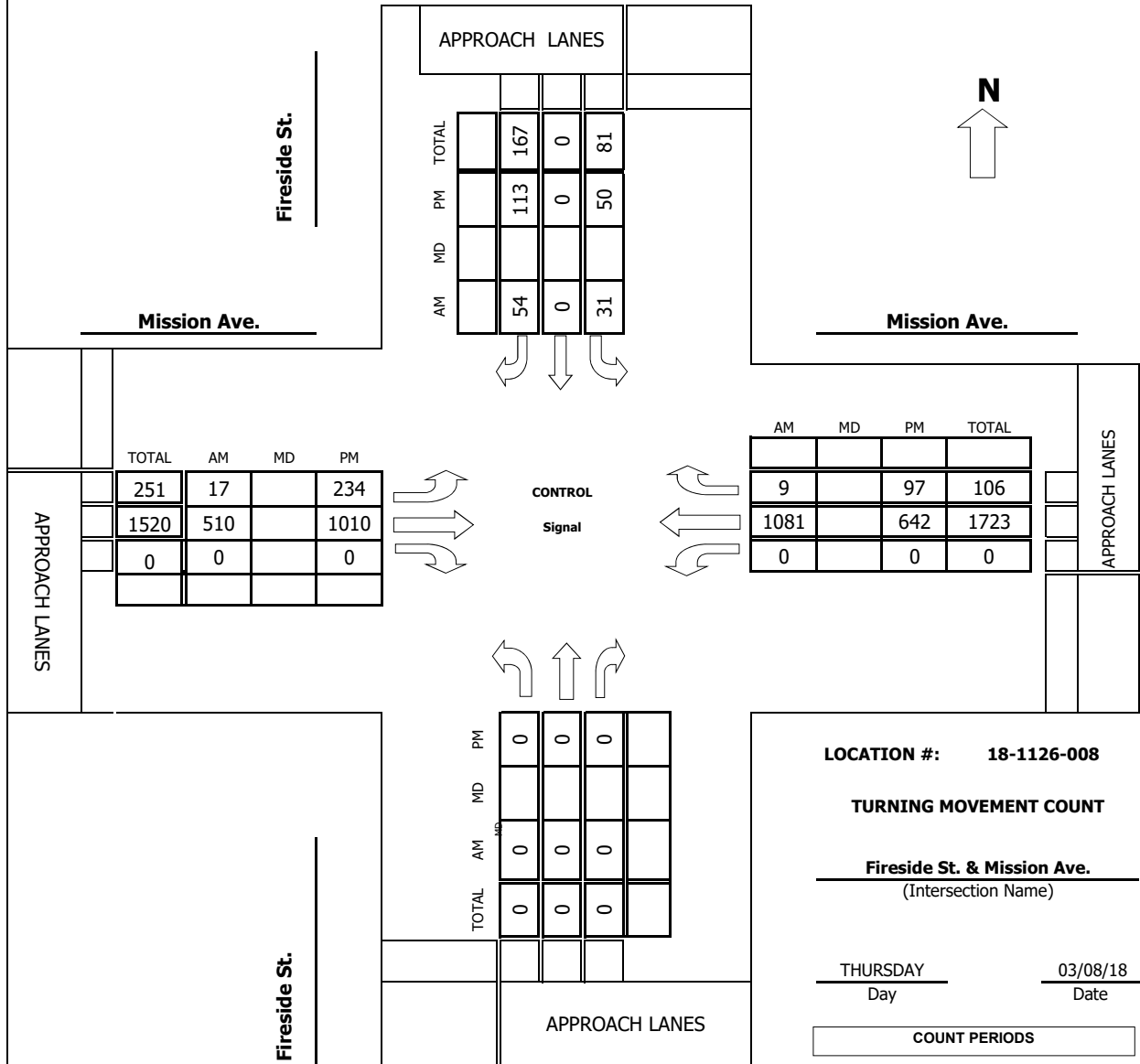
COMMENT 1:

GPS:

Signal
0
33.219311, -117.339772

Project #: 18-1126-008

TMC SUMMARY OF Fireside St. & Mission Ave.



LOCATION #: 18-1126-008

TURNING MOVEMENT COUNT

Fireside St. & Mission Ave.
(Intersection Name)

THURSDAY 03/08/18
Day Date

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 445 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: **Fireside St.**

DATE: **03/08/18**

LOCATION: **Oceanside**

E-W STREET: **Mission Ave.**

DAY: **THURSDAY**

PROJECT# **18-1126-008**

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	0	0	1	0	1	1	2	0	1	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	0	0	8	0	4	1	45	0	0	189	2	249
7:15 AM	0	0	0	6	0	11	3	50	0	0	196	4	270
7:30 AM	0	0	0	4	0	9	2	74	0	0	199	4	292
7:45 AM	0	0	0	9	0	5	4	79	0	0	206	4	307
8:00 AM	0	0	0	7	0	13	4	96	0	0	298	7	425
8:15 AM	0	0	0	6	0	13	6	136	0	0	249	2	412
8:30 AM	0	0	0	11	0	16	7	145	0	0	269	0	448
8:45 AM	0	0	0	7	0	12	0	133	0	0	265	0	417
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	0	0	0	58	0	83	27	758	0	0	1871	23	2820
Approach %	####	####	####	41.13	0.00	58.87	3.44	96.56	0.00	0.00	98.79	1.21	
App/Depart	0	/	50	141	/	0	785	/	816	1894	/	1954	

AM Peak Hr Begins at: 800 AM

PEAK

Volumes	0	0	0	31	0	54	17	510	0	0	1081	9	1702
Approach %	####	####	####	36.47	0.00	63.53	3.23	96.77	0.00	0.00	99.17	0.83	

PEAK HR.

FACTOR:	0.000	0.787	0.867	0.893	0.950

CONTROL: **Signal**

COMMENT 1:

GPS: **33.222391, -117.335396**

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: **Fireside St.** DATE: **03/08/18** LOCATION: **Oceanside**
E-W STREET: **Mission Ave.** DAY: **THURSDAY** PROJECT#: **18-1126-008**

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	0	0	1	0	1	1	2	0	1	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	0	0	8	0	28	35	263	0	0	149	10	493
4:15 PM	0	0	0	14	0	27	45	219	0	0	163	14	482
4:30 PM	0	0	0	10	0	29	49	220	0	0	154	21	483
4:45 PM	0	0	0	11	0	33	50	263	0	0	173	24	554
5:00 PM	0	0	0	13	0	32	59	254	0	0	149	19	526
5:15 PM	0	0	0	14	0	30	65	249	0	0	151	29	538
5:30 PM	0	0	0	12	0	18	60	244	0	0	169	25	528
5:45 PM	0	0	0	11	0	24	33	279	0	0	143	23	513
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	0	0	0	93	0	221	396	1991	0	0	1251	165	4117
Approach %	####	####	####	29.62	0.00	70.38	16.59	83.41	0.00	0.00	88.35	11.65	
App/Depart	0	/	561	314	/	0	2387	/	2084	1416	/	1472	

PM Peak Hr Begins at: 445 PM

PEAK

Volumes	0	0	0	50	0	113	234	1010	0	0	642	97	2146
Approach %	####	####	####	30.67	0.00	69.33	18.81	81.19	0.00	0.00	86.87	13.13	

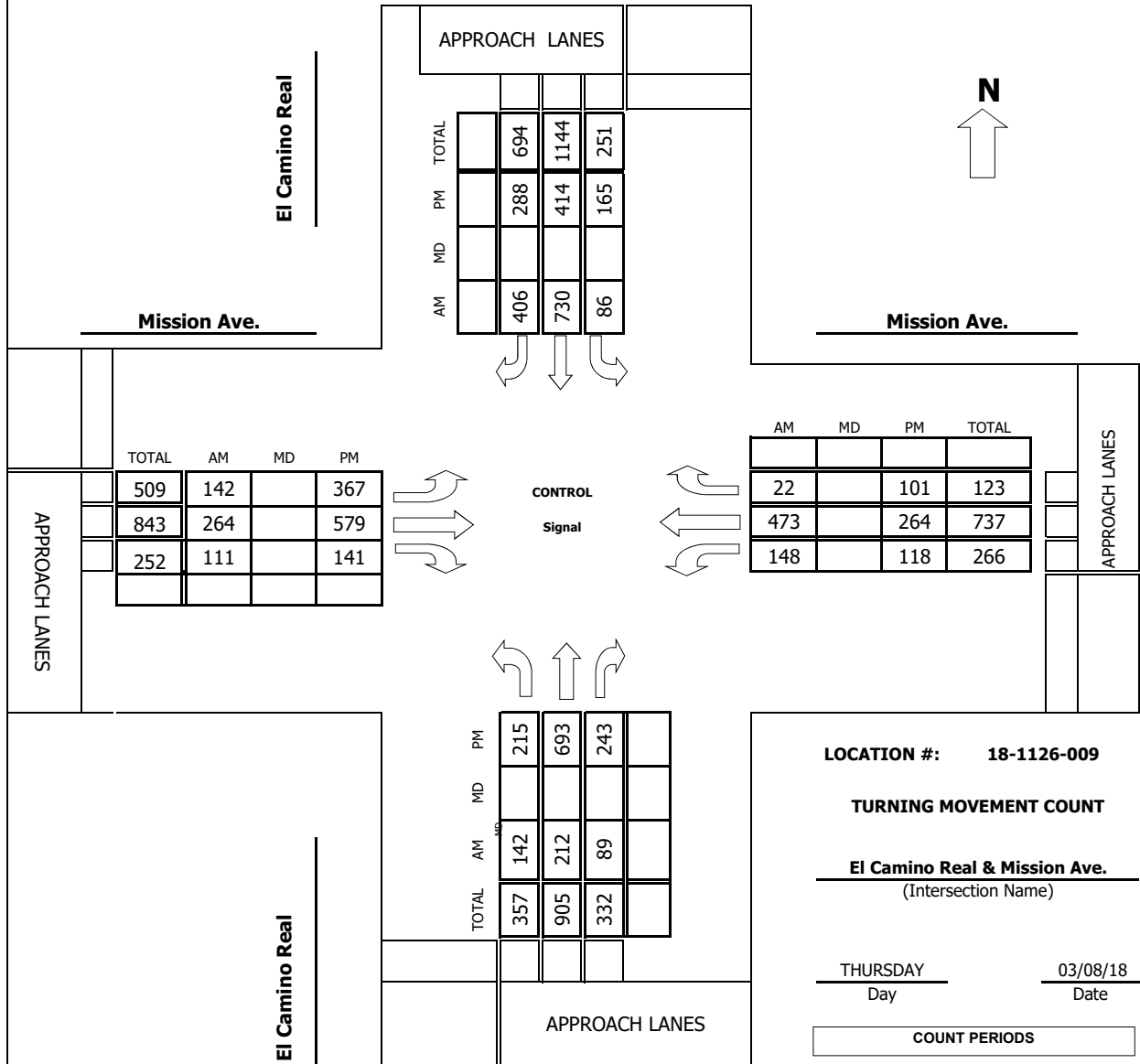
PEAK HR.

FACTOR:	0.000	0.906	0.990	0.938	0.968

CONTROL: **Signal**
COMMENT 1: **0**
GPS: **33.222391, -117.335396**

Project #: 18-1126-009

TMC SUMMARY OF El Camino Real & Mission Ave.



AM PEAK HOUR 745 AM

NOON PEAK HOUR

PM PEAK HOUR 445 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: El Camino Real

DATE: 03/08/18

LOCATION: Oceanside

E-W STREET: Mission Ave.

DAY: THURSDAY

PROJECT# 18-1126-009

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1.5	NT 1.5	NR 1	SL 1	ST 2	SR 1	EL 2	ET 2	ER 1	WL 2	WT 2	WR 0	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	32	54	19	28	196	87	43	22	8	28	82	9	608
7:15 AM	43	41	12	26	221	75	39	20	11	24	74	7	593
7:30 AM	37	60	15	33	226	127	40	24	19	47	59	19	706
7:45 AM	34	48	23	22	214	126	45	43	25	41	55	4	680
8:00 AM	31	49	30	18	183	94	31	49	33	25	157	9	709
8:15 AM	31	52	16	21	183	90	29	76	34	40	128	4	704
8:30 AM	46	63	20	25	150	96	37	96	19	42	133	5	732
8:45 AM	30	24	18	37	161	93	22	72	21	31	145	2	656
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	284	391	153	210	1534	788	286	402	170	278	833	59	5388
Approach %	34.30	47.22	18.48	8.29	60.58	31.12	33.33	46.85	19.81	23.76	71.20	5.04	
App/Depart	828	/	736	2532	/	1982	858	/	765	1170	/	1905	

AM Peak Hr Begins at: 745 AM

PEAK

Volumes	142	212	89	86	730	406	142	264	111	148	473	22	2825
Approach %	32.05	47.86	20.09	7.04	59.74	33.22	27.47	51.06	21.47	23.02	73.56	3.42	

PEAK HR.

FACTOR:	0.859	0.844	0.850	0.842	0.965

CONTROL: Signal

COMMENT 1:

GPS: 33.225847, -117.331027

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: El Camino Real
0

DATE: 03/08/18

LOCATION: Oceanside

E-W STREET: Mission Ave.

DAY: THURSDAY

PROJECT# 18-1126-009

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1.5	1.5	1	1	2	1	2	2	1	2	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	54	132	65	49	94	70	99	122	43	45	44	27	844
4:15 PM	53	217	53	47	147	87	110	96	49	38	59	13	969
4:30 PM	42	158	46	26	66	37	82	111	40	47	87	21	763
4:45 PM	59	141	62	40	102	78	73	154	28	26	89	15	867
5:00 PM	64	209	67	27	90	57	125	129	63	44	60	39	974
5:15 PM	49	158	60	55	118	77	91	141	26	27	58	23	883
5:30 PM	43	185	54	43	104	76	78	155	24	21	57	24	864
5:45 PM	32	149	41	40	111	60	80	169	29	19	74	25	829
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	396	1349	448	327	832	542	738	1077	302	267	528	187	6993
Approach %	18.06	61.51	20.43	19.22	48.91	31.86	34.86	50.87	14.27	27.19	53.77	19.04	
App/Depart	2193	/	2274	1701	/	1401	2117	/	1852	982	/	1466	

PM Peak Hr Begins at: 445 PM

PEAK

Volumes	215	693	243	165	414	288	367	579	141	118	264	101	3588
Approach %	18.68	60.21	21.11	19.03	47.75	33.22	33.76	53.27	12.97	24.43	54.66	20.91	

PEAK HR.

FACTOR:	0.846	0.867	0.857	0.844	0.921

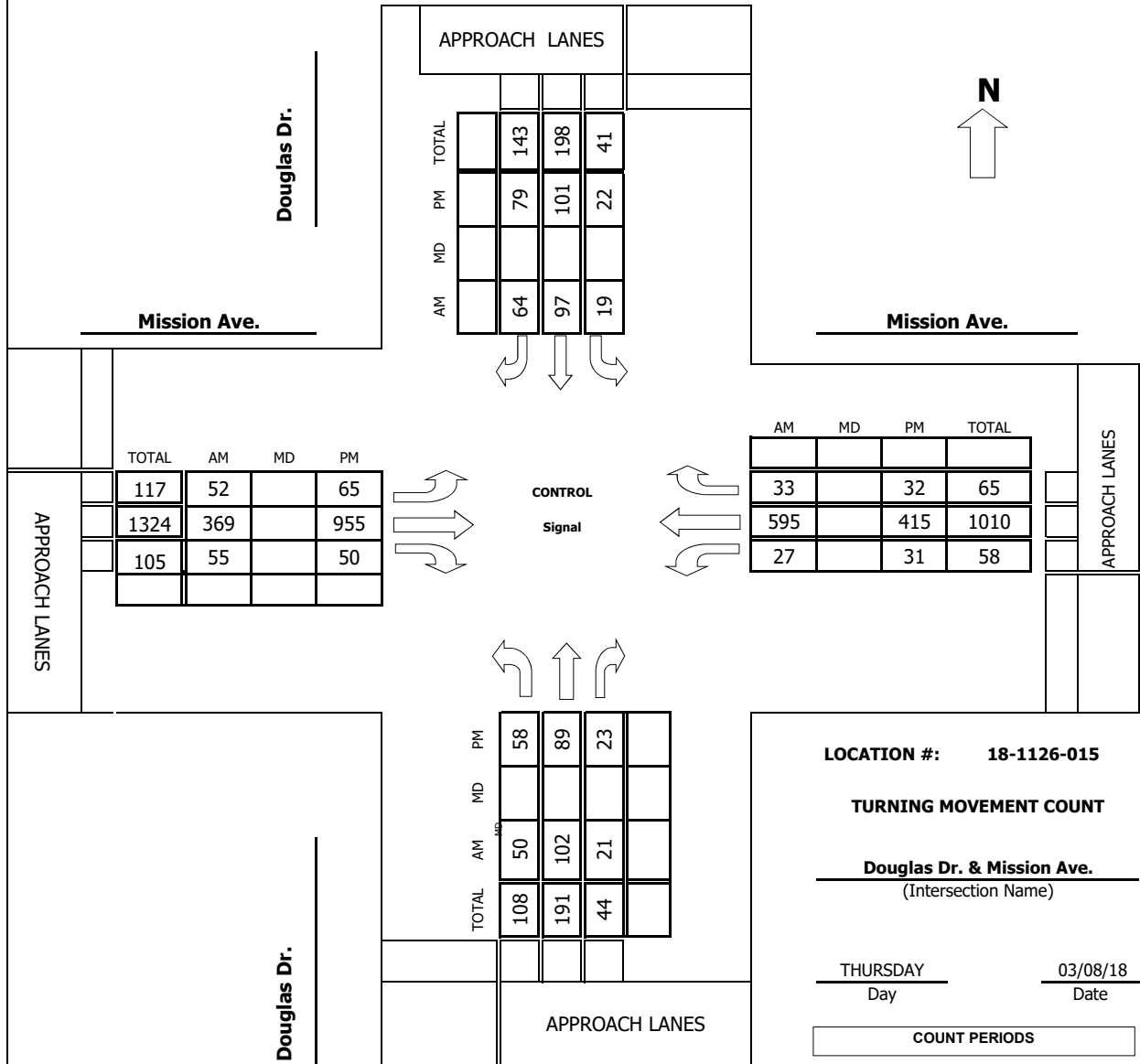
CONTROL: Signal

COMMENT 1: 0

GPS: 33.225847, -117.331027

Project #: 18-1126-015

TMC SUMMARY OF Douglas Dr. & Mission Ave.



LOCATION #: 18-1126-015

TURNING MOVEMENT COUNT

Douglas Dr. & Mission Ave.
(Intersection Name)

THURSDAY
Day

03/08/18
Date

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 445 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: Douglas Dr.

DATE: 03/08/18

LOCATION: Oceanside

E-W STREET: Mission Ave.

DAY: THURSDAY

PROJECT# 18-1126-015

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1.5	NR 0.5	SL 1	ST 1.5	SR 0.5	EL 2	ET 2	ER 1	WL 1	WT 2	WR 0	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	15	44	4	17	37	26	8	54	10	10	82	6	313
7:15 AM	13	21	4	11	29	24	22	44	13	7	69	12	269
7:30 AM	13	17	4	7	27	19	11	40	17	15	99	12	281
7:45 AM	13	14	2	3	27	14	16	59	13	5	90	10	266
8:00 AM	15	25	4	5	27	19	11	69	16	10	149	8	358
8:15 AM	13	21	7	2	26	16	15	87	14	3	145	7	356
8:30 AM	13	35	9	5	19	13	13	102	13	9	152	9	392
8:45 AM	9	21	1	7	25	16	13	111	12	5	149	9	378
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	104	198	35	57	217	147	109	566	108	64	935	73	2613
Approach %	30.86	58.75	10.39	13.54	51.54	34.92	13.92	72.29	13.79	5.97	87.22	6.81	
App/Depart	337	/	380	421	/	389	783	/	658	1072	/	1186	

AM Peak Hr Begins at: 800 AM

PEAK

Volumes	50	102	21	19	97	64	52	369	55	27	595	33	1484
Approach %	28.90	58.96	12.14	10.56	53.89	35.56	10.92	77.52	11.55	4.12	90.84	5.04	

PEAK HR.

FACTOR:	0.759	0.882	0.875	0.963	0.946

CONTROL: Signal

COMMENT 1:

GPS: 33.227839, -117.326054

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: Douglas Dr. 0 DATE: 03/08/18 LOCATION: Oceanside
E-W STREET: Mission Ave. DAY: THURSDAY PROJECT#: 18-1126-015

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	1.5	0.5	1	1.5	0.5	2	2	1	1	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	15	11	3	4	18	18	2	229	13	7	99	11	430
4:15 PM	14	20	10	4	19	22	17	181	15	8	98	4	412
4:30 PM	12	18	2	5	25	24	13	187	14	8	111	11	430
4:45 PM	15	26	6	6	20	11	15	241	12	6	122	12	492
5:00 PM	13	24	5	5	29	26	16	219	11	10	110	5	473
5:15 PM	16	17	7	5	23	20	15	252	15	9	87	8	474
5:30 PM	14	22	5	6	29	22	19	243	12	6	96	7	481
5:45 PM	11	22	4	5	21	19	18	236	11	5	82	6	440
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	110	160	42	40	184	162	115	1788	103	59	805	64	3632
Approach %	35.26	51.28	13.46	10.36	47.67	41.97	5.73	89.13	5.13	6.36	86.75	6.90	
App/Depart	312	/	339	386	/	346	2006	/	1870	928	/	1077	

PM Peak Hr Begins at: 445 PM

PEAK

Volumes	58	89	23	22	101	79	65	955	50	31	415	32	1920
Approach %	34.12	52.35	13.53	10.89	50.00	39.11	6.07	89.25	4.67	6.49	86.82	6.69	

PEAK HR.

FACTOR:	0.904	0.842	0.949	0.854	0.976

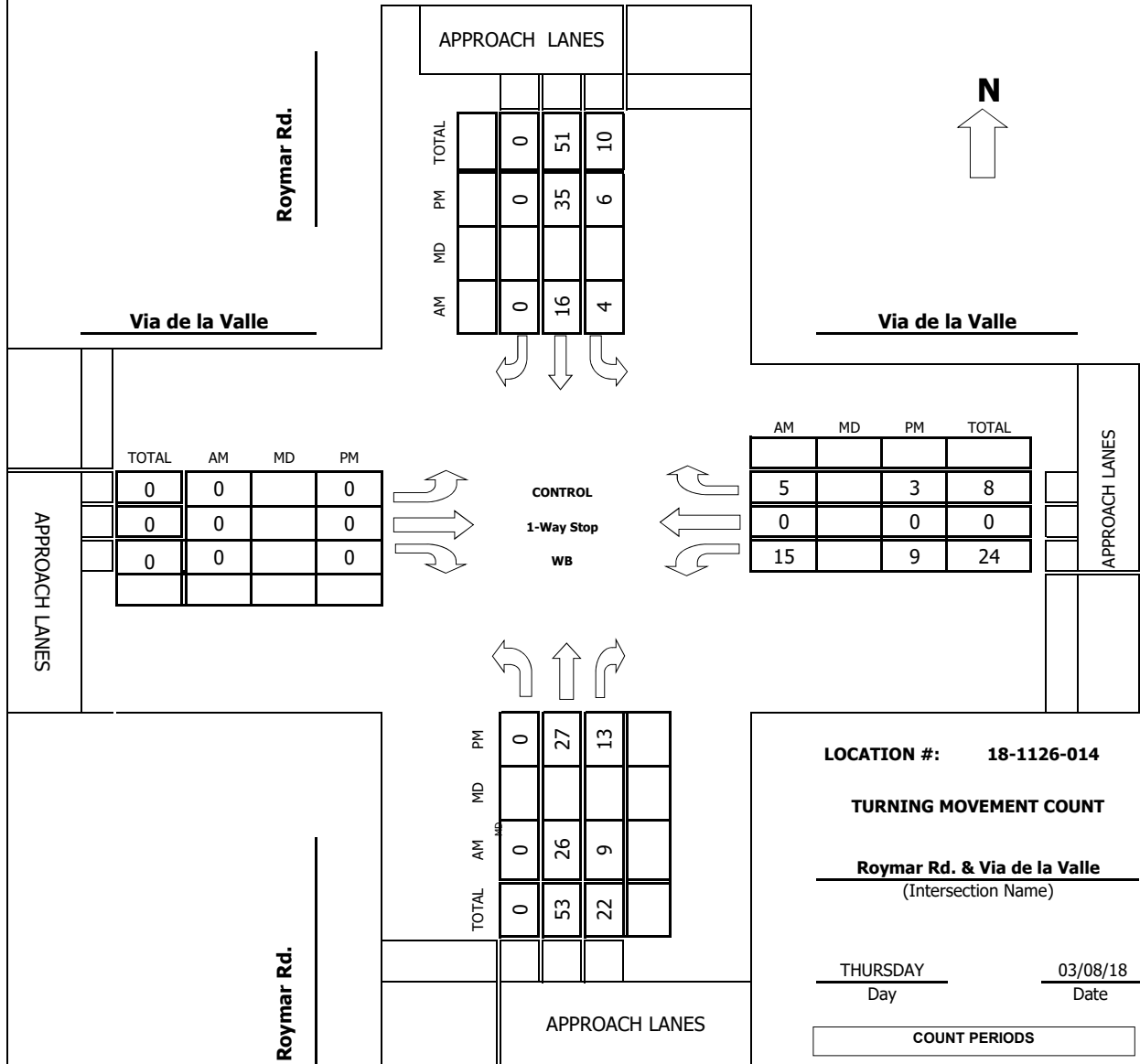
CONTROL: Signal

COMMENT 1: 0

GPS: 33.227839, -117.326054

Project #: 18-1126-014

TMC SUMMARY OF Roymar Rd. & Via de la Valle



LOCATION #: **18-1126-014**

TURNING MOVEMENT COUNT

Roymar Rd. & Via de la Valle
(Intersection Name)

THURSDAY
Day

03/08/18
Date

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 430 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: Roymar Rd.

DATE: 03/08/18

LOCATION: Oceanside

E-W STREET: Via de la Valle

DAY: THURSDAY

PROJECT# 18-1126-014

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	1	0	0	0	0	0	1	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	7	0	0	2	0	0	0	0	2	0	0	11
7:15 AM	0	6	2	0	4	0	0	0	0	2	0	0	14
7:30 AM	0	4	2	0	3	0	0	0	0	4	0	1	14
7:45 AM	0	6	1	0	4	0	0	0	0	3	0	1	15
8:00 AM	0	6	2	1	2	0	0	0	0	6	0	1	18
8:15 AM	0	5	2	1	5	0	0	0	0	3	0	1	17
8:30 AM	0	6	3	1	4	0	0	0	0	3	0	2	19
8:45 AM	0	9	2	1	5	0	0	0	0	3	0	1	21
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	0	49	14	4	29	0	0	0	0	26	0	7	129
Approach %	0.00	77.78	22.22	12.12	87.88	0.00	####	####	####	78.79	0.00	21.21	
App/Depart	63	/	56	33	/	55	0	/	18	33	/	0	

AM Peak Hr Begins at: 800 AM

PEAK

Volumes	0	26	9	4	16	0	0	0	0	15	0	5	75
Approach %	0.00	74.29	25.71	20.00	80.00	0.00	####	####	####	75.00	0.00	25.00	

PEAK HR.

FACTOR:	0.795	0.833	0.000	0.714	0.893

CONTROL: 1-Way Stop (WB)

COMMENT 1:

GPS: 33.216229, -117.346181

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: Roymar Rd. DATE: 03/08/18 LOCATION: Oceanside
E-W STREET: Via de la Valle DAY: THURSDAY PROJECT#: 18-1126-014

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	1	0	0	0	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	5	1	1	7	0	0	0	0	2	0	1	17
4:15 PM	0	4	2	0	8	0	0	0	0	3	0	1	18
4:30 PM	0	6	4	1	9	0	0	0	0	2	0	1	23
4:45 PM	0	6	3	1	9	0	0	0	0	2	0	0	21
5:00 PM	0	9	3	2	6	0	0	0	0	3	0	1	24
5:15 PM	0	6	3	2	11	0	0	0	0	2	0	1	25
5:30 PM	0	7	1	1	9	0	0	0	0	2	0	0	20
5:45 PM	0	6	2	1	5	0	0	0	0	3	0	0	17
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	0	49	19	9	64	0	0	0	0	19	0	5	165
Approach %	0.00	72.06	27.94	12.33	87.67	0.00	####	####	####	79.17	0.00	20.83	
App/Depart	68	/	54	73	/	83	0	/	28	24	/	0	

PM Peak Hr Begins at: 430 PM

PEAK

Volumes	0	27	13	6	35	0	0	0	0	9	0	3	93
Approach %	0.00	67.50	32.50	14.63	85.37	0.00	####	####	####	75.00	0.00	25.00	

PEAK HR.

FACTOR:	0.833	0.788	0.000	0.750	0.930

CONTROL: 1-Way Stop (WB)

COMMENT 1: 0

GPS: 33.216229, -117.346181

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Wednesday, March 7, 2018

City: Oceanside

Project #: 18-1126-008

Location: SR-76 btwn. Benet Rd. & Airport Rd.

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB
00:00			19	20	12:00			359	373
00:15			22	16	12:15			375	356
00:30			20	15	12:30			367	350
00:45			28	89	12:45			374	1475
01:00			24	10	13:00			343	302
01:15			28	11	13:15			408	361
01:30			21	19	13:30			399	325
01:45			37	110	13:45			383	1533
02:00			51	20	14:00			470	294
02:15			43	20	14:15			475	330
02:30			25	24	14:30			494	283
02:45			17	136	14:45			490	1929
03:00			16	37	15:00			486	298
03:15			25	44	15:15			501	338
03:30			31	49	15:30			508	337
03:45			22	94	15:45			432	1927
04:00			28	93	16:00			358	322
04:15			37	120	16:15			378	328
04:30			49	184	16:30			385	341
04:45			51	165	16:45			422	1543
05:00			61	307	17:00			528	352
05:15			79	387	17:15			541	363
05:30			92	369	17:30			599	385
05:45			127	359	17:45			528	2196
06:00			153	443	18:00			501	331
06:15			162	347	18:15			517	288
06:30			229	344	18:30			510	305
06:45			243	787	18:45			422	1950
07:00			241	387	19:00			370	270
07:15			239	377	19:15			437	202
07:30			299	352	19:30			334	217
07:45			298	1077	19:45			403	1544
08:00			328	549	20:00			309	159
08:15			344	553	20:15			319	170
08:30			385	543	20:30			293	151
08:45			301	1358	20:45			297	1218
09:00			277	487	21:00			284	129
09:15			264	435	21:15			334	146
09:30			234	408	21:30			278	116
09:45			274	1049	21:45			224	1120
10:00			285	363	22:00			231	97
10:15			281	373	22:15			196	109
10:30			310	412	22:30			190	75
10:45			320	1196	22:45			158	775
11:00			320	358	23:00			156	59
11:15			373	349	23:15			130	59
11:30			358	289	23:30			120	39
11:45			389	1440	23:45			104	510

Total Vol.	7860	12399	20259	17720	11736	29456

GPS Coordinates:

				Daily Totals			
				NB	SB	EB	WB Combined
						25580	24135 49715
AM				PM			
Split %	38.8%	61.2%	40.8%			60.2%	39.8% 59.2%
Peak Hour	11:45	07:45	07:45			17:00	17:00 17:00
Volume	1490	2197	3552			2196	1492 3688
P.H.F.	0.96	0.99	0.96			0.92	0.95 0.94

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Wednesday, March 7, 2018

City: Oceanside

Project #: 18-1126-009

Location: SR-76 btwn. Airport Rd. & Foussat Rd.

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB
00:00			29	17	12:00			333	347
00:15			24	21	12:15			372	340
00:30			25	20	12:30			369	339
00:45			32	110	12:45			350	1424
01:00			30	18	13:00			337	295
01:15			33	19	13:15			377	348
01:30			39	17	13:30			389	316
01:45			37	139	13:45			377	1480
02:00			51	17	14:00			403	293
02:15			41	17	14:15			474	318
02:30			31	21	14:30			386	275
02:45			17	140	14:45			442	1705
03:00			17	35	15:00			465	300
03:15			25	34	15:15			492	314
03:30			32	43	15:30			489	315
03:45			21	95	15:45			448	1894
04:00			28	78	16:00			369	321
04:15			34	95	16:15			366	301
04:30			48	168	16:30			385	369
04:45			51	161	16:45			475	1595
05:00			58	278	17:00			584	365
05:15			72	340	17:15			566	349
05:30			92	395	17:30			601	363
05:45			122	344	17:45			528	2279
06:00			146	407	18:00			483	276
06:15			151	384	18:15			431	279
06:30			211	370	18:30			446	289
06:45			236	744	18:45			432	1792
07:00			375	378	19:00			378	252
07:15			369	396	19:15			404	182
07:30			299	366	19:30			320	209
07:45			319	1362	19:45			399	1501
08:00			348	574	20:00			288	137
08:15			396	499	20:15			322	150
08:30			388	528	20:30			285	142
08:45			321	1453	20:45			294	1189
09:00			258	422	21:00			287	115
09:15			245	407	21:15			319	125
09:30			223	401	21:30			271	101
09:45			271	997	21:45			224	1101
10:00			266	360	22:00			234	82
10:15			283	352	22:15			194	89
10:30			308	396	22:30			173	65
10:45			297	1154	22:45			178	779
11:00			305	342	23:00			157	53
11:15			347	351	23:15			126	50
11:30			362	275	23:30			123	36
11:45			384	1398	23:45			98	504

Total Vol. 8097 12042 **20139** 17243 11127 **28370**

GPS Coordinates: 33.217508, -117.347393

Daily Totals

NB	SB	EB	WB	Combined
		25340	23169	48509

AM

PM

Split %	40.2%	59.8%	41.5%	60.8%	39.2%	58.5%
Peak Hour	11:45	07:45	08:00	17:00	16:30	17:00
Volume	1458	2150	3603	2279	1438	3688
P.H.F.	0.95	0.94	0.98	0.95	0.97	0.96

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, March 8, 2018

City: Oceanside

Project #: 18-1126-010

Location: SR-76 btwn. Foussat Rd. & Douglas Dr.

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB
00:00			21	20	12:00			306	353
00:15			20	13	12:15			361	334
00:30			26	16	12:30			339	336
00:45			24	91	12:45			370	1376
01:00			25	21	13:00			373	282
01:15			24	20	13:15			358	373
01:30			33	20	13:30			379	317
01:45			41	123	13:45			423	1533
02:00			49	17	14:00			430	305
02:15			38	19	14:15			448	299
02:30			33	28	14:30			423	302
02:45			19	139	14:45			487	1788
03:00			14	40	15:00			498	312
03:15			23	50	15:15			520	347
03:30			27	50	15:30			528	316
03:45			26	90	15:45			495	2041
04:00			27	100	16:00			369	321
04:15			27	128	16:15			348	333
04:30			45	203	16:30			374	369
04:45			51	150	16:45			422	1513
05:00			53	297	17:00			578	396
05:15			67	398	17:15			549	354
05:30			106	469	17:30			582	403
05:45			130	356	17:45			501	2210
06:00			134	471	18:00			480	364
06:15			163	474	18:15			440	304
06:30			211	406	18:30			473	322
06:45			247	755	18:45			487	1880
07:00			282	422	19:00			372	283
07:15			269	405	19:15			383	209
07:30			322	420	19:30			384	222
07:45			369	1242	19:45			364	1503
08:00			355	562	20:00			309	158
08:15			411	492	20:15			321	184
08:30			401	519	20:30			295	155
08:45			328	1495	20:45			290	1215
09:00			253	433	21:00			279	141
09:15			232	399	21:15			329	147
09:30			241	443	21:30			262	125
09:45			274	1000	21:45			232	1102
10:00			228	395	22:00			230	91
10:15			320	333	22:15			177	107
10:30			308	392	22:30			197	72
10:45			276	1132	22:45			170	774
11:00			332	305	23:00			138	60
11:15			318	364	23:15			136	60
11:30			379	306	23:30			127	37
11:45			381	1410	23:45			96	497

Total Vol. 7983 12851 **20834** 17432 11998 **29430**

GPS Coordinates: 33.219658, -117.340176

Daily Totals

NB	SB	EB	WB	Combined
		25415	24849	50264

AM

PM

Split %	38.3%	61.7%	41.4%	59.2%	40.8%	58.6%
Peak Hour	07:45	08:00	07:45	17:00	17:00	17:00
Volume	1536	2122	3651	2210	1542	3752
P.H.F.	0.93	0.94	0.99	0.95	0.96	0.95

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, March 8, 2018

City: Oceanside

Project #: 18-1126-003

Location: Mission Ave. btwn. Airport Rd. & Roymar Rd.

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB
00:00			22	17	12:00			142	126
00:15			25	7	12:15			159	145
00:30			18	6	12:30			172	142
00:45			16	81	12:45			157	630
01:00			11	10	13:00			142	125
01:15			7	7	13:15			157	156
01:30			8	2	13:30			144	130
01:45			10	36	13:45			162	605
02:00			8	3	14:00			145	160
02:15			11	11	14:15			163	177
02:30			11	9	14:30			245	154
02:45			6	36	14:45			195	748
03:00			4	5	15:00			235	182
03:15			3	12	15:15			223	159
03:30			2	14	15:30			223	143
03:45			7	16	15:45			255	936
04:00			10	17	16:00			263	210
04:15			7	25	16:15			278	233
04:30			13	34	16:30			285	228
04:45			19	49	16:45			311	1137
05:00			28	50	17:00			363	208
05:15			24	80	17:15			301	222
05:30			47	137	17:30			298	196
05:45			37	136	17:45			311	1273
06:00			42	170	18:00			250	143
06:15			67	216	18:15			216	134
06:30			56	198	18:30			210	123
06:45			65	230	18:45			167	843
07:00			79	236	19:00			178	97
07:15			80	228	19:15			138	105
07:30			87	220	19:30			146	99
07:45			99	345	19:45			131	593
08:00			128	296	20:00			84	59
08:15			166	266	20:15			97	68
08:30			154	258	20:30			101	57
08:45			141	589	20:45			80	362
09:00			143	196	21:00			106	59
09:15			103	205	21:15			86	63
09:30			108	175	21:30			64	61
09:45			114	468	21:45			70	326
10:00			126	123	22:00			67	64
10:15			125	124	22:15			65	37
10:30			114	132	22:30			45	42
10:45			106	471	22:45			26	203
11:00			127	140	23:00			41	21
11:15			122	123	23:15			39	24
11:30			149	123	23:30			35	15
11:45			149	547	23:45			23	138

Total Vol. 3004 5182 **8186** 7794 5771 **13565**

GPS Coordinates: 33.214446, -117.346766

Daily Totals

NB	SB	EB	WB	Combined
		10798	10953	21751

AM

PM

Split %	36.7%	63.3%	37.6%	57.5%	42.5%	62.4%
Peak Hour	11:45	07:45	08:00	16:45	16:00	16:30
Volume	622	1061	1650	1273	912	2159
P.H.F.	0.90	0.90	0.95	0.88	0.95	0.95

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, March 8, 2018

City: Oceanside

Project #: 18-1126-004

Location: Mission Ave. btwn. Roymar Rd. & Foussat Rd.

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB
00:00			25	19	12:00			163	155
00:15			21	7	12:15			169	146
00:30			10	5	12:30			152	154
00:45			11	67	12:45			155	639
01:00			7	13	13:00			141	173
01:15			5	10	13:15			147	157
01:30			8	5	13:30			154	149
01:45			5	25	13:45			161	603
02:00			8	4	14:00			166	160
02:15			6	15	14:15			185	180
02:30			9	9	14:30			214	149
02:45			7	30	14:45			222	787
03:00			5	7	15:00			236	133
03:15			8	15	15:15			222	163
03:30			6	18	15:30			252	173
03:45			9	28	15:45			254	964
04:00			13	14	16:00			265	204
04:15			16	24	16:15			258	241
04:30			14	47	16:30			241	236
04:45			21	64	16:45			322	1086
05:00			42	56	17:00			328	219
05:15			41	90	17:15			319	205
05:30			24	142	17:30			322	200
05:45			28	135	17:45			328	1297
06:00			32	223	18:00			263	185
06:15			59	248	18:15			258	143
06:30			50	228	18:30			241	143
06:45			75	216	18:45			216	978
07:00			78	241	19:00			185	97
07:15			80	243	19:15			166	111
07:30			87	220	19:30			141	116
07:45			99	344	19:45			122	614
08:00			128	319	20:00			130	71
08:15			154	276	20:15			104	78
08:30			163	263	20:30			85	68
08:45			149	594	20:45			88	407
09:00			155	196	21:00			80	57
09:15			154	222	21:15			87	66
09:30			141	204	21:30			74	68
09:45			128	578	21:45			75	316
10:00			133	142	22:00			50	51
10:15			131	129	22:15			54	53
10:30			128	148	22:30			41	39
10:45			124	516	22:45			42	187
11:00			141	131	23:00			28	38
11:15			143	141	23:15			24	16
11:30			139	124	23:30			26	19
11:45			133	556	23:45			30	108

Total Vol. 3153 5687 **8840** 7986 6022 **14008**

GPS Coordinates: 33.216131, -117.344319

				Daily Totals			
				NB	SB	EB	WB
							Combined
						11139	11709
							22848
				PM			
Split %	AM	35.7%	64.3%	38.7%	57.0%	43.0%	61.3%
Peak Hour	08:15	08:00	08:00	17:00	16:15	16:45	
Volume	621	1132	1726	1297	907	2126	
P.H.F.	0.95	0.89	0.97	0.99	0.94	0.97	

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, March 8, 2018

City: Oceanside

Project #: 18-1126-005

Location: Mission Ave. btwn. Foussat Rd. & Frontier Dr.

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB
00:00			25	21	12:00			178	169
00:15			22	8	12:15			187	175
00:30			23	6	12:30			198	158
00:45			16	86	8	43	129	195	758
01:00			16		13			172	167
01:15			6		8			180	172
01:30			11		0			197	167
01:45			12	45	5	26	71	183	732
02:00			11		7			171	170
02:15			13		11			219	172
02:30			11		12			232	141
02:45			10	45	10	40	85	267	889
03:00			7		6			236	153
03:15			6		14			279	162
03:30			7		10			249	163
03:45			12	32	12	42	74	287	1051
04:00			12		16			269	192
04:15			9		25			266	199
04:30			15		41			258	187
04:45			19	55	39	121	176	322	1115
05:00			28		57			324	188
05:15			27		73			328	187
05:30			33		119			333	174
05:45			34	122	123	372	494	305	1290
06:00			54		176			277	162
06:15			63		200			237	119
06:30			65		182			215	135
06:45			66	248	196	754	1002	194	923
07:00			55		199			194	100
07:15			54		222			174	102
07:30			78		208			141	128
07:45			80	267	241	870	1137	130	639
08:00			89		330			139	75
08:15			136		258			127	80
08:30			133		285			119	71
08:45			128	486	263	1136	1622	105	490
09:00			118		218			121	51
09:15			131		196			90	66
09:30			143		152			68	60
09:45			135	527	137	703	1230	78	357
10:00			148		134			63	45
10:15			151		131			74	52
10:30			146		147			66	38
10:45			141	586	153	565	1151	46	249
11:00			149		143			48	34
11:15			152		124			47	20
11:30			178		139			28	20
11:45			192	671	137	543	1214	27	150

Total Vol. 3170 5215 **8385** 8643 5813 **14456**

GPS Coordinates: 33.217809, -117.341921

GPS Coordinates:		33.217809,-117.341921		Daily Totals				
				NB	SB	EB	WB	Combined
						11813	11028	22841

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, March 8, 2018

City: Oceanside

Project #: 18-1126-006

Location: Mission Ave. btwn. Frontier Dr. & Fireside St.

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB
00:00			28	22	12:00			182	199
00:15			23	9	12:15			185	196
00:30			21	8	12:30			187	185
00:45			14	86	12:45			169	723
01:00			19	11				187	200
01:15			8	50	13:00			179	193
01:30			13	33	13:15			195	185
01:45			12	85	13:30			195	756
02:00			8	8	13:45			167	191
02:15			8	15	14:00			236	179
02:30			14	5	14:15			222	167
02:45			12	42	14:30			241	866
03:00			6	10	14:45			259	155
03:15			6	6	15:00			278	188
03:30			6	15	15:15			245	182
03:45			8	13	15:30			288	1070
04:00			11	12	15:45			294	189
04:15			9	46	16:00			269	199
04:30			12	72	16:15			263	204
04:45			15	47	16:30			333	1159
05:00			29	45	16:45			305	187
05:15			30	131	17:00			325	185
05:30			39	178	17:15			322	199
05:45			36	413	17:30			296	1248
06:00			48	547	17:45			282	165
06:15			62	172	18:00			233	151
06:30			54	227	18:15			219	137
06:45			57	194	18:30			191	925
07:00			63	815	18:45			209	112
07:15			66	1036	19:00			177	125
07:30			60	200	19:15			149	142
07:45			87	216	19:30			139	674
08:00			85	222	19:45			145	79
08:15			133	846	20:00			141	84
08:30			136	1122	20:15			127	81
08:45			128	208	20:30			105	518
09:00			110	846	20:45			111	69
09:15			117	1193	21:00			102	70
09:30			142	1675	21:15			66	63
09:45			125	274	21:30			87	366
10:00			141	783	21:45			63	49
10:15			141	1277	22:00			72	57
10:30			133	150	22:15			65	37
10:45			136	137	22:30			45	245
11:00			135	160	22:45			53	31
11:15			161	603	23:00			57	26
11:30			179	1154	23:15			21	23
11:45			193	1260	23:30			25	156
					23:45			16	96

Total Vol. 3079 5540 **8619** 8706 6369 **15075**

GPS Coordinates: 33.221883, -117.336155

Daily Totals

	NB	SB	EB	WB	Combined
			11785	11909	23694
AM					
Split %			35.7%	64.3%	36.4%
Peak Hour			11:45	08:00	08:00
Volume			747	1193	1675
P.H.F.			0.97	0.90	0.96
PM					
Split %			57.8%	42.2%	63.6%
Peak Hour			16:45	16:00	16:45
Volume			1285	806	2070
P.H.F.			0.96	0.94	0.95

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, March 8, 2018

City: Oceanside

Project #: 18-1126-007

Location: Mission Ave. btwn. Fireside St. & El Camino Real

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB
00:00			20	19	12:00			187	199
00:15			19	5	12:15			199	189
00:30			15	2	12:30			196	175
00:45			14	68	12:45			185	767
01:00			18	6	13:00			187	192
01:15			6	9	13:15			183	188
01:30			10	5	13:30			187	154
01:45			13	47	13:45			202	759
02:00			8	14	14:00			155	185
02:15			7	10	14:15			204	174
02:30			11	11	14:30			214	154
02:45			10	36	14:45			227	800
03:00			6	16	15:00			242	166
03:15			7	14	15:15			247	196
03:30			10	21	15:30			227	185
03:45			11	34	15:45			257	973
04:00			12	54	16:00			265	163
04:15			10	50	16:15			258	200
04:30			13	75	16:30			244	196
04:45			19	54	16:45			245	1012
05:00			28	104	17:00			322	181
05:15			29	133	17:15			258	187
05:30			48	139	17:30			277	174
05:45			35	140	17:45			271	1128
06:00			51	174	18:00			257	166
06:15			68	214	18:15			222	161
06:30			65	199	18:30			186	154
06:45			74	258	18:45			182	847
07:00			76	193	19:00			181	122
07:15			80	198	19:15			183	104
07:30			89	214	19:30			135	122
07:45			103	348	19:45			132	631
08:00			111	258	20:00			127	78
08:15			128	243	20:15			117	85
08:30			155	269	20:30			116	86
08:45			128	522	20:45			93	453
09:00			102	245	21:00			97	65
09:15			120	252	21:15			79	58
09:30			139	196	21:30			70	54
09:45			116	477	21:45			73	319
10:00			136	161	22:00			59	42
10:15			148	154	22:15			67	28
10:30			135	174	22:30			50	24
10:45			135	554	22:45			43	219
11:00			132	163	23:00			45	25
11:15			151	136	23:15			50	21
11:30			150	155	23:30			19	16
11:45			171	604	23:45			22	136

Total Vol. 3142 5725 **8867** 8044 6135 **14179**

GPS Coordinates: 33.224011, -117.333131

Daily Totals

	NB	SB	EB	WB	Combined
			11186	11860	23046
AM					
Split %			35.4%	64.6%	38.5%
Peak Hour			11:45	08:00	08:00
Volume			753	1033	1555
P.H.F.			0.95	0.96	0.92
PM					
			56.7%	43.3%	61.5%
			17:00	16:15	16:15
			1128	791	1860
			0.88	0.92	0.92

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, March 8, 2018

City: Oceanside

Project #: 18-1126-002

Location: Mission Ave. btwn. El Camino Real & Douglas Dr.

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB
00:00			6	13	12:00			157	153
00:15			13	13	12:15			148	167
00:30			11	12	12:30			159	179
00:45			10	40	12:45			136	600
01:00			7	14	13:00			146	165
01:15			8	6	13:15			159	167
01:30			10	11	13:30			122	146
01:45			2	27	13:45			145	572
02:00			4	3	14:00			133	166
02:15			10	6	14:15			130	162
02:30			6	6	14:30			176	173
02:45			5	25	14:45			149	588
03:00			8	11	15:00			150	136
03:15			6	3	15:15			164	133
03:30			9	6	15:30			196	128
03:45			13	36	15:45			205	715
04:00			6	6	16:00			241	129
04:15			15	8	16:15			187	133
04:30			28	11	16:30			185	151
04:45			25	74	16:45			241	854
05:00			37	22	17:00			233	141
05:15			39	16	17:15			243	133
05:30			60	26	17:30			249	120
05:45			52	188	17:45			236	961
06:00			66	46	18:00			205	141
06:15			88	53	18:15			185	143
06:30			104	44	18:30			156	139
06:45			96	354	18:45			103	649
07:00			82	120	19:00			95	148
07:15			98	105	19:15			116	120
07:30			87	125	19:30			88	114
07:45			85	352	19:45			97	396
08:00			103	174	20:00			85	89
08:15			128	169	20:15			72	73
08:30			149	181	20:30			79	86
08:45			136	516	20:45			74	310
09:00			130	128	21:00			76	80
09:15			129	104	21:15			54	57
09:30			126	101	21:30			53	53
09:45			106	491	21:45			41	224
10:00			115	112	22:00			44	53
10:15			115	123	22:15			37	55
10:30			137	99	22:30			40	33
10:45			122	489	22:45			12	133
11:00			118	132	23:00			20	33
11:15			123	147	23:15			21	17
11:30			142	158	23:30			16	16
11:45			119	502	23:45			13	70

Total Vol. 3094 3124 **6218** 6072 5530 **11602**

GPS Coordinates: 33.227305, -117.327625

Daily Totals

NB	SB	EB	WB	Combined
		9166	8654	17820

AM

PM

Split %	49.8%	50.2%	34.9%	52.3%	47.7%	65.1%
Peak Hour	11:45	08:00	11:45	16:45	14:00	16:45
Volume	583	700	1240	966	693	1514
P.H.F.	0.92	0.97	0.92	0.97	0.90	0.96

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Wednesday, March 7, 2018

City: Oceanside

Project #: 18-1126-001

Location: Foussat Rd. btwn. SR-76 & Mission Ave.

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB
00:00	8	2			12:00	66	26		
00:15	5	0			12:15	79	25		
00:30	5	1			12:30	79	38		
00:45	1	19	0	3	12:45	69	293	49	138
01:00	5	2			13:00	70	38		
01:15	4	3			13:15	81	33		
01:30	1	3			13:30	60	49		
01:45	3	13	1	9	13:45	65	276	43	163
02:00	7	1			14:00	71	35		
02:15	6	3			14:15	65	47		
02:30	8	0			14:30	65	47		
02:45	3	24	3	7	14:45	57	258	54	183
03:00	2	3			15:00	50	24		
03:15	4	1			15:15	49	39		
03:30	0	2			15:30	41	62		
03:45	3	9	4	10	15:45	54	194	53	178
04:00	9	1			16:00	55	36		
04:15	10	3			16:15	50	41		
04:30	16	5			16:30	45	55		
04:45	14	49	6	15	16:45	60	210	71	203
05:00	25	5			17:00	54	76		
05:15	14	10			17:15	49	60		
05:30	28	16			17:30	50	65		
05:45	27	94	19	50	17:45	54	207	54	255
06:00	33	28			18:00	55	39		
06:15	37	25			18:15	59	27		
06:30	29	25			18:30	63	29		
06:45	56	155	37	115	18:45	53	230	24	119
07:00	46	43			19:00	51	19		
07:15	36	36			19:15	41	34		
07:30	38	29			19:30	70	36		
07:45	22	142	33	141	19:45	42	204	12	101
08:00	30	30			20:00	34	20		
08:15	28	32			20:15	29	21		
08:30	24	28			20:30	44	17		
08:45	22	104	34	124	20:45	46	153	23	81
09:00	38	31			21:00	24	11		
09:15	57	18			21:15	29	27		
09:30	41	28			21:30	22	16		
09:45	55	191	20	97	21:45	15	90	14	68
10:00	53	18			22:00	14	15		
10:15	41	17			22:15	24	9		
10:30	52	36			22:30	16	5		
10:45	50	196	25	96	22:45	11	65	7	36
11:00	58	33			23:00	12	8		
11:15	54	49			23:15	17	4		
11:30	65	31			23:30	14	4		
11:45	45	222	44	157	23:45	12	55	3	19

Total Vol. 1218 824 **2042** 2235 1544 **3779**

GPS Coordinates: 33.217501, -117.343749

				Daily Totals			
				NB	SB	EB	WB
				3453	2368		
				5821			
AM				PM			
Split %	59.6%	40.4%	35.1%	59.1%	40.9%		64.9%
Peak Hour	11:45	11:00	11:45	12:30	16:45		16:45
Volume	269	157	402	299	272		485
P.H.F.	0.85	0.80	0.86	0.92	0.89		0.93

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, March 8, 2018

City: Oceanside

Project #: 18-1126-011

Location: Roymar Rd. btwn. Via de la Valle & Mission Ave.

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB
00:00	0	3			12:00	17	16		
00:15	0	0			12:15	15	11		
00:30	1	1			12:30	16	13		
00:45	0	1	0	4	12:45	13	61	12	52
01:00	0	0			13:00	12	12		
01:15	0	0			13:15	12	16		
01:30	0	0			13:30	3	11		
01:45	1	1	0	0	13:45	6	33	13	52
02:00	0	0			14:00	13	15		
02:15	0	1			14:15	10	8		
02:30	1	0			14:30	7	19		
02:45	0	1	0	1	14:45	19	49	13	55
03:00	0	2			15:00	6	15		
03:15	0	4			15:15	16	14		
03:30	0	0			15:30	8	20		
03:45	0	0	0	6	15:45	8	38	14	63
04:00	0	0			16:00	7	11		
04:15	0	1			16:15	4	10		
04:30	1	4			16:30	8	14		
04:45	4	5	6	11	16:45	5	24	15	50
05:00	2	0			17:00	9	12		
05:15	3	0			17:15	11	8		
05:30	3	2			17:30	7	11		
05:45	7	15	10	12	17:45	6	33	10	41
06:00	7	10			18:00	7	19		
06:15	3	3			18:15	3	9		
06:30	2	9			18:30	5	9		
06:45	4	16	14	36	18:45	2	17	12	49
07:00	5	5			19:00	4	6		
07:15	2	6			19:15	1	9		
07:30	6	8			19:30	4	5		
07:45	8	21	5	24	19:45	0	9	4	24
08:00	7	9			20:00	1	6		
08:15	11	6			20:15	3	2		
08:30	10	6			20:30	1	0		
08:45	12	40	8	29	20:45	2	7	3	11
09:00	23	11			21:00	1	2		
09:15	8	7			21:15	0	0		
09:30	10	16			21:30	1	5		
09:45	8	49	20	54	21:45	4	6	7	14
10:00	10	13			22:00	3	2		
10:15	13	12			22:15	1	5		
10:30	9	11			22:30	3	4		
10:45	11	43	13	49	22:45	0	7	0	11
11:00	14	17			23:00	2	0		
11:15	19	15			23:15	1	2		
11:30	16	14			23:30	0	0		
11:45	19	68	9	55	23:45	4	7	2	4

Total Vol. 260 281 **541** 291 426 **717**

GPS Coordinates: 33.215980, -117.345922

Daily Totals

NB	SB	EB	WB	Combined
551	707			1258

AM

PM

Split %	48.1%	51.9%	43.0%	40.6%	59.4%	57.0%
Peak Hour	11:15	09:30	11:15	12:00	15:00	12:00
Volume	71	61	125	61	63	113
P.H.F.	0.93	0.76	0.92	0.90	0.79	0.86

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, March 8, 2018

City: Oceanside

Project #: 18-1126-012

Location: Via de la Valle east of Roymar Rd.

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB
00:00			0	0	12:00			2	1
00:15			0	0	12:15			4	4
00:30			0	0	12:30			2	2
00:45			0	0	12:45			3	11
01:00			0	0	13:00			3	3
01:15			0	0	13:15			2	4
01:30			0	0	13:30			2	3
01:45			0	0	13:45			1	8
02:00			0	0	14:00			8	2
02:15			1	0	14:15			3	4
02:30			0	0	14:30			1	2
02:45			0	1	14:45			5	17
03:00			0	0	15:00			1	3
03:15			0	0	15:15			5	2
03:30			0	0	15:30			2	3
03:45			0	0	15:45			2	10
04:00			0	0	16:00			3	3
04:15			1	0	16:15			4	6
04:30			0	0	16:30			1	3
04:45			0	1	16:45			2	10
05:00			0	0	17:00			5	5
05:15			1	0	17:15			2	2
05:30			1	0	17:30			3	4
05:45			0	2	17:45			2	12
06:00			1	0	18:00			1	5
06:15			0	0	18:15			1	2
06:30			1	0	18:30			0	3
06:45			2	4	18:45			0	2
07:00			1	1	19:00			4	1
07:15			2	0	19:15			2	1
07:30			1	2	19:30			0	2
07:45			3	7	19:45			0	6
08:00			2	4	20:00			0	0
08:15			5	2	20:15			0	3
08:30			2	5	20:30			3	2
08:45			4	13	20:45			0	3
09:00			5	1	21:00			0	0
09:15			4	1	21:15			0	1
09:30			1	2	21:30			0	0
09:45			3	13	21:45			0	0
10:00			3	2	22:00			0	1
10:15			4	1	22:15			0	1
10:30			4	3	22:30			0	1
10:45			6	17	22:45			0	0
11:00			3	2	23:00			2	1
11:15			3	5	23:15			0	2
11:30			0	2	23:30			0	0
11:45			7	13	23:45			0	2

Total Vol. 71 49 **120** 81 95 **176**

GPS Coordinates: 33.216601, -117.345644

				Daily Totals			
				NB	SB	EB	WB
							Combined
						152	144
							296
				PM			
Split %	AM	AM	AM	PM	PM	PM	PM
	59.2%	40.8%	40.5%	46.0%	54.0%	59.5%	
Peak Hour	10:00	11:00	10:30	14:00	16:15	16:15	
Volume	17	15	30	17	16	28	
P.H.F.	0.71	0.63	0.75	0.53	0.67	0.70	

APPENDIX E

EXISTING CONDITIONS SYNCHRO PEAK-HOUR INTERSECTION ANALYSIS SHEETS

OnPoint - Oceanside
1: Airport Rd & SR 76

Existing Baseline
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	24	1296	37	30	2049	25	60	27	86	38	31	11
Future Volume (veh/h)	24	1296	37	30	2049	25	60	27	86	38	31	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	1350	39	31	2134	26	62	28	90	40	32	11
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	194	2348	1040	66	2052	907	103	50	160	79	218	180
Arrive On Green	0.11	0.66	0.66	0.04	0.58	0.58	0.06	0.13	0.13	0.04	0.12	0.12
Sat Flow, veh/h	1781	3554	1573	1781	3554	1571	1781	383	1231	1781	1870	1544
Grp Volume(v), veh/h	25	1350	39	31	2134	26	62	0	118	40	32	11
Grp Sat Flow(s),veh/h/ln	1781	1777	1573	1781	1777	1571	1781	0	1614	1781	1870	1544
Q Serve(g_s), s	2.5	41.6	1.7	3.4	115.5	1.0	6.8	0.0	13.7	4.4	3.1	1.0
Cycle Q Clear(g_c), s	2.5	41.6	1.7	3.4	115.5	1.0	6.8	0.0	13.7	4.4	3.1	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.76	1.00		1.00
Lane Grp Cap(c), veh/h	194	2348	1040	66	2052	907	103	0	210	79	218	180
V/C Ratio(X)	0.13	0.57	0.04	0.47	1.04	0.03	0.60	0.00	0.56	0.50	0.15	0.06
Avail Cap(c_a), veh/h	194	2348	1040	80	2052	907	131	0	315	89	321	265
HCM Platoon Ratio	1.00	1.00	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	0.97	0.00	0.97	1.00	1.00	1.00
Uniform Delay (d), s/veh	80.6	18.6	11.8	94.4	42.3	9.7	91.9	0.0	81.6	93.4	79.4	49.9
Incr Delay (d2), s/veh	0.1	1.0	0.1	1.9	31.1	0.1	2.0	0.0	0.9	1.8	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	17.7	0.7	1.6	58.8	0.6	3.2	0.0	5.8	2.1	1.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.7	19.6	11.9	96.3	73.4	9.8	93.9	0.0	82.5	95.2	79.5	50.0
LnGrp LOS	F	B	B	F	F	A	F	A	F	F	E	D
Approach Vol, veh/h	1414			2191			180			83		
Approach Delay, s/veh	20.5			72.9			86.4			83.2		
Approach LOS	C			E			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.1	140.2	17.3	29.4	29.8	123.5	14.6	32.1				
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.1	8.0	* 8	* 5.7	6.1				
Max Green Setting (Gmax), s	* 9	116.5	* 15	34.3	10.0	* 12E2	* 10	39.0				
Max Q Clear Time (g_c+I1), s	5.4	43.6	8.8	5.1	4.5	117.5	6.4	15.7				
Green Ext Time (p_c), s	0.0	47.6	0.0	0.1	0.0	0.0	0.0	0.4				

Intersection Summary

HCM 6th Ctrl Delay	54.6
HCM 6th LOS	D

Notes

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

OnPoint - Oceanside
2: Foussat Rd & SR 76

Existing Baseline
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	29	1371	44	52	2038	34	37	26	51	52	20	38
Future Volume (veh/h)	29	1371	44	52	2038	34	37	26	51	52	20	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	1385	44	53	2059	34	37	26	52	53	20	38
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	530	2205	979	196	1821	808	196	682	207	213	492	372
Arrive On Green	0.15	0.62	0.62	0.06	0.51	0.51	0.06	0.13	0.13	0.06	0.14	0.14
Sat Flow, veh/h	3456	3554	1577	3456	3554	1576	3456	5106	1549	3456	3554	2689
Grp Volume(v), veh/h	29	1385	44	53	2059	34	37	26	52	53	20	38
Grp Sat Flow(s),veh/h/ln	1728	1777	1577	1728	1777	1576	1728	1702	1549	1728	1777	1344
Q Serve(g_s), s	1.4	48.5	2.2	2.9	102.5	1.6	2.0	0.9	6.0	2.9	1.0	1.8
Cycle Q Clear(g_c), s	1.4	48.5	2.2	2.9	102.5	1.6	2.0	0.9	6.0	2.9	1.0	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	530	2205	979	196	1821	808	196	682	207	213	492	372
V/C Ratio(X)	0.05	0.63	0.04	0.27	1.13	0.04	0.19	0.04	0.25	0.25	0.04	0.10
Avail Cap(c_a), veh/h	530	2205	979	207	1821	808	225	1174	356	225	817	618
HCM Platoon Ratio	1.00	1.00	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	72.3	23.6	14.8	90.3	48.8	13.1	89.9	75.5	77.7	89.4	74.6	41.2
Incr Delay (d2), s/veh	0.0	1.4	0.1	0.3	66.3	0.1	0.2	0.0	0.2	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	21.1	0.8	1.3	62.0	0.9	0.9	0.4	2.4	1.3	0.5	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.3	25.0	14.9	90.6	115.1	13.2	90.1	75.5	77.9	89.7	74.7	41.3
LnGrp LOS	E	C	B	F	F	F	F	E	E	F	E	D
Approach Vol, veh/h	1458			2146			115			111		
Approach Delay, s/veh	25.6			112.9			81.3			70.4		
Approach LOS	C			F			F			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.1	132.1	17.0	33.8	38.7	110.5	18.0	32.8				
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.1	8.0	* 8	* 5.7	6.1				
Max Green Setting (Gmax), s	* 13	103.5	* 13	46.0	13.0	* 1E2	* 13	46.0				
Max Q Clear Time (g_c+I1), s	50.5	4.0	3.8	3.4	104.5	4.9	8.0					
Green Ext Time (p_c), s	0.0	39.2	0.0	0.1	0.0	0.0	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay	77.5
HCM 6th LOS	E

Notes

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

OnPoint - Oceanside
3: Airport Rd & Mission Ave

Existing Baseline
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱			↰	↱	↰	↱	↰
Traffic Volume (veh/h)	25	549	6	7	1022	69	13	20	19	32	17	16
Future Volume (veh/h)	25	549	6	7	1022	69	13	20	19	32	17	16
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	0.99	1.00	0.99	1.00	1.00	0.96	1.00	0.97		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	566	6	7	1054	71	13	21	20	26	28	16
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	46	2222	24	16	2026	136	33	53	51	153	161	131
Arrive On Green	0.03	0.62	0.62	0.01	0.40	0.40	0.08	0.08	0.08	0.09	0.09	0.09
Sat Flow, veh/h	1781	3602	38	1781	3377	227	411	664	632	1781	1870	1530
Grp Volume(v), veh/h	26	279	293	7	554	571	54	0	0	26	28	16
Grp Sat Flow(s),veh/h/ln	1781	1777	1863	1781	1777	1827	1707	0	0	1781	1870	1530
Q Serve(g_s), s	1.4	7.1	7.1	0.4	23.6	23.6	3.0	0.0	0.0	1.4	1.4	1.0
Cycle Q Clear(g_c), s	1.4	7.1	7.1	0.4	23.6	23.6	3.0	0.0	0.0	1.4	1.4	1.0
Prop In Lane	1.00		0.02	1.00	0.12	0.24		0.37	1.00		1.00	
Lane Grp Cap(c), veh/h	46	1096	1149	16	1066	1096	137	0	0	153	161	131
V/C Ratio(X)	0.57	0.25	0.25	0.44	0.52	0.52	0.39	0.00	0.00	0.17	0.17	0.12
Avail Cap(c_a), veh/h	93	1096	1149	89	1066	1096	348	0	0	363	382	312
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	0.91	0.91	0.91	1.00	0.00	0.00	0.99	0.99	0.99
Uniform Delay (d), s/veh	48.2	8.7	8.7	49.5	19.0	19.0	43.7	0.0	0.0	42.4	42.4	42.2
Incr Delay (d2), s/veh	10.6	0.6	0.5	16.9	1.7	1.6	2.6	0.0	0.0	0.7	0.7	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	2.7	2.9	0.2	10.8	11.1	1.4	0.0	0.0	0.0	0.6	0.7	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.7	9.3	9.2	66.3	20.7	20.6	46.3	0.0	0.0	43.1	43.1	42.8
LnGrp LOS	E	A	A	E	C	C	D	A	A	D	D	D
Approach Vol, veh/h	598			1132			54			70		
Approach Delay, s/veh	11.4			20.9			46.3			43.1		
Approach LOS	B			C			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	67.9			13.2	8.0	66.2		12.6				
Change Period (Y+Rc), s	5.4	6.2		4.6	5.4	6.2		4.6				
Max Green Setting (Gmax), s	33.4			20.4	5.2	33.2		20.4				
Max Q Clear Time (g_c+I), s	9.1			3.4	3.4	25.6		5.0				
Green Ext Time (p_c), s	0.0	9.6		0.3	0.0	6.6		0.2				

Intersection Summary

HCM 6th Ctrl Delay	19.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

OnPoint - Oceanside
4: Roymar Rd & Mission Ave

Existing Baseline
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱			↰	↱	↰	↱	↰
Traffic Volume (veh/h)	17	554	22	46	1070	19	22	0	46	19	0	10
Future Volume (veh/h)	17	554	22	46	1070	19	22	0	46	19	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	0.99	1.00	0.99	0.99	1.00	0.99	0.99	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	18	571	23	47	1103	20	23	0	47	20	0	10
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	35	2021	851	65	1988	36	77	0	419	77	0	419
Arrive On Green	0.02	0.54	0.54	0.07	1.00	1.00	0.27	0.00	0.27	0.27	0.00	0.27
Sat Flow, veh/h	1781	3741	1576	1781	3570	65	20	0	1567	19	0	1567
Grp Volume(v), veh/h	18	571	23	47	549	574	23	0	47	20	0	10
Grp Sat Flow(s),veh/h/ln	1781	1870	1576	1781	1777	1858	20	0	1567	19	0	1567
Q Serve(g_s), s	1.0	8.3	0.7	2.6	0.0	0.0	0.4	0.0	2.3	0.4	0.0	0.5
Cycle Q Clear(g_c), s	1.0	8.3	0.7	2.6	0.0	0.0	26.7	0.0	2.3	26.7	0.0	0.5
Prop In Lane	1.00		1.00	1.00	0.03	1.00		1.00	1.00		1.00	
Lane Grp Cap(c), veh/h	35	2021	851	65	990	1035	77	0	419	77	0	419
V/C Ratio(X)	0.51	0.28	0.03	0.72	0.55	0.55	0.30	0.00	0.11	0.26	0.00	0.02
Avail Cap(c_a), veh/h	105	2021	851	141	990	1035	99	0	444	98	0	444
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.5	12.5	10.7	45.9	0.0	0.0	50.0	0.0	27.7	50.0	0.0	27.0
Incr Delay (d2), s/veh	10.9	0.3	0.1	14.1	2.2	2.1	2.1	0.0	0.1	1.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.2	1.4	0.6	0.6	0.6	0.0	0.9	0.5	0.0	0.2	
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.5	12.8	10.8	60.0	2.2	2.1	52.1	0.0	27.8	51.7	0.0	27.0
LnGrp LOS	E	B	B	E	A	A	D	A	C	D	A	C
Approach Vol, veh/h	612			1170			70			30		
Approach Delay, s/veh	14.1			4.5			35.8			43.5		
Approach LOS	B			A			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	59.5			31.8	7.1	61.2		31.8				
Change Period (Y+Rc), s	5.1	5.8		* 4.7	5.1	5.8		* 4.7				
Max Green Setting (Gmax), s	48.2			* 28	5.9	50.2		* 28				
Max Q Clear Time (g_c+I), s	10.3			28.7	3.0	2.0		28.7				
Green Ext Time (p_c), s	0.0	13.5		0.0	0.0	31.5		0.0				

Intersection Summary

HCM 6th Ctrl Delay	9.4
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

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

OnPoint - Oceanside
5: Foussat Rd & Mission Ave

Existing Baseline
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱		↰	↱	
Traffic Volume (veh/h)	44	521	38	22	1036	30	37	79	35	32	70	65
Future Volume (veh/h)	44	521	38	22	1036	30	37	79	35	32	70	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		0.99	1.00		0.97	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	46	543	40	23	1079	31	39	82	36	33	73	68
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	440	2011	148	42	1312	628	114	246	101	104	348	948
Arrive On Green	0.49	1.00	1.00	0.05	0.74	0.74	0.03	0.10	0.10	0.01	0.03	0.03
Sat Flow, veh/h	1781	3355	247	1781	3554	1572	3456	2433	999	3456	3554	2647
Grp Volume(v), veh/h	46	287	296	23	1079	31	39	58	60	33	73	68
Grp Sat Flow(s),veh/h/ln	1781	1777	1825	1781	1777	1572	1728	1777	1655	1728	1777	1324
Q Serve(g_s), s	1.4	0.0	0.0	1.3	20.2	0.1	1.1	3.1	3.4	0.9	2.0	0.2
Cycle Q Clear(g_c), s	1.4	0.0	0.0	1.3	20.2	0.1	1.1	3.1	3.4	0.9	2.0	0.2
Prop In Lane	1.00		0.14	1.00		1.00	1.00		0.60	1.00		1.00
Lane Grp Cap(c), veh/h	440	1065	1094	42	1312	628	114	179	167	104	348	948
V/C Ratio(X)	0.10	0.27	0.27	0.55	0.82	0.05	0.34	0.33	0.36	0.32	0.21	0.07
Avail Cap(c_a), veh/h	440	1065	1094	100	1439	684	173	409	381	173	817	1297
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.93	0.93	0.93	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.4	0.0	0.0	47.1	10.9	2.6	47.3	41.8	41.9	48.5	44.6	11.0
Incr Delay (d2), s/veh	0.1	0.6	0.6	9.9	5.5	0.1	1.8	1.0	1.3	1.7	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.2	0.2	0.7	4.7	0.1	0.5	1.4	1.4	0.4	0.9	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.5	0.6	0.6	57.0	16.4	2.8	49.0	42.8	43.2	50.2	44.9	11.0
LnGrp LOS	B	A	A	E	B	A	D	D	D	D	D	B
Approach Vol, veh/h	629			1133			157			174		
Approach Delay, s/veh	2.0			16.9			44.5			32.7		
Approach LOS	A			B			D			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	66.7	8.9	15.9	31.5	43.7	8.6	16.2					
Change Period (Y+Rc), s	6.1	6.8	5.6	6.1	6.8	* 6.8	5.6	6.1				
Max Green Setting (Gmax), s	41.8	5.0	23.0	6.9	* 41	5.0	23.0					
Max Q Clear Time (g_c+I),s	2.0	3.1	4.0	3.4	22.2	2.9	5.4					
Green Ext Time (p_c), s	0.0	13.1	0.0	0.6	0.0	14.7	0.0	0.5				

Intersection Summary

HCM 6th Ctrl Delay	15.8
HCM 6th LOS	B

Notes

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

OnPoint - Oceanside
6: Copperwood Wy & Mission Ave

Existing Baseline
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱		↰	↱	
Traffic Volume (veh/h)	7	468	90	91	1016	8	47	6	41	4	0	7
Future Volume (veh/h)	7	468	90	91	1016	8	47	6	41	4	0	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	482	93	94	1047	8	48	6	42	4	0	7
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	9	1914	367	118	2550	19	120	15	114	8	0	13
Arrive On Green	0.01	1.00	1.00	0.13	1.00	1.00	0.08	0.08	0.08	0.01	0.00	0.01
Sat Flow, veh/h	1781	2970	570	1781	3614	28	1592	199	1522	576	0	1008
Grp Volume(v), veh/h	7	287	288	94	515	540	54	0	42	11	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1763	1781	1777	1865	1791	0	1522	1584	0	0
Q Serve(g_s), s	0.4	0.0	0.0	5.1	0.0	0.0	2.9	0.0	2.6	0.7	0.0	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.0	5.1	0.0	0.0	2.9	0.0	2.6	0.7	0.0	0.0
Prop In Lane	1.00		0.32	1.00		0.01	0.89		1.00	0.36		0.64
Lane Grp Cap(c), veh/h	9	1145	1136	118	1253	1316	135	0	114	21	0	0
V/C Ratio(X)	0.74	0.25	0.25	0.80	0.41	0.41	0.40	0.00	0.37	0.53	0.00	0.00
Avail Cap(c_a), veh/h	69	1145	1136	230	1253	1316	455	0	387	86	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	0.93	0.93	0.93	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	49.4	0.0	0.0	42.7	0.0	0.0	44.1	0.0	44.0	49.0	0.0	0.0
Incr Delay (d2), s/veh	71.6	0.5	0.5	4.2	0.9	0.9	1.9	0.0	2.0	19.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.2	0.2	2.3	0.3	0.3	1.3	0.0	1.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	121.0	0.5	0.5	46.9	0.9	0.9	46.0	0.0	45.9	68.1	0.0	0.0
LnGrp LOS	F	A	A	D	A	A	D	A	D	E	A	A
Approach Vol, veh/h	582			1149			96			11		
Approach Delay, s/veh	2.0			4.7			46.0			68.1		
Approach LOS	A			A			D			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	70.2			5.9	5.6	76.3		12.1				
Change Period (Y+Rc), s	5.1			4.6	5.1	5.8		4.6				
Max Green Setting (Gmax), s	36.2			5.4	3.9	45.2		25.4				
Max Q Clear Time (g_c+I),s	2.0			2.7	2.4	2.0		4.9				
Green Ext Time (p_c), s	0.0	12.1		0.0	0.0	27.3		0.3				

Intersection Summary

HCM 6th Ctrl Delay	6.4
HCM 6th LOS	A

OnPoint - Oceanside
7: Frontier Dr & Mission Ave

Existing Baseline
Timing Plan: AM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	460	45	63	1079	39	43
Future Volume (veh/h)	460	45	63	1079	39	43
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99	1.00		1.00	0.97	
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	1900	1900
Adj Flow Rate, veh/h	479	47	66	1124	41	45
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	2309	226	85	2862	70	77
Arrive On Green	0.23	0.23	0.05	0.81	0.09	0.09
Sat Flow, veh/h	3361	319	1781	3647	775	850
Grp Volume(v), veh/h	260	266	66	1124	87	0
Grp Sat Flow(s),veh/h/ln	1810	1781	1777	1644	0	
Q Serve(g_s), s	11.8	11.9	3.7	9.0	5.1	0.0
Cycle Q Clear(g_c), s	11.8	11.9	3.7	9.0	5.1	0.0
Prop In Lane	0.18	1.00		0.47	0.52	
Lane Grp Cap(c), veh/h	1255	1279	85	2862	149	0
V/C Ratio(X)	0.21	0.21	0.77	0.39	0.58	0.00
Avail Cap(c_a), veh/h	1255	1279	265	2862	451	0
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.92	0.92	1.00	0.00
Uniform Delay (d), s/veh	15.8	15.8	47.1	2.8	43.7	0.0
Incr Delay (d2), s/veh	0.4	0.4	5.1	0.4	3.6	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	6.7	5.8	1.7	2.2	2.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.1	16.2	52.1	3.1	47.3	0.0
LnGrp LOS	B	B	D	A	D	A
Approach Vol, veh/h	526		1190	87		
Approach Delay, s/veh	16.1		5.9	47.3		
Approach LOS	B		A	D		
Timer - Assigned Phs	1	2		6	8	
Phs Duration (G+Y+Rc), s	9.9	76.5		86.3	13.7	
Change Period (Y+Rc), s	5.1	5.8		5.8	4.6	
Max Green Setting (Gmax), s	42.2			62.2	27.4	
Max Q Clear Time (g_c+ID),s	13.9			11.0	7.1	
Green Ext Time (p_c), s	0.0	10.0		33.4	0.2	

Intersection Summary

HCM 6th Ctrl Delay	10.9
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

OnPoint - Oceanside
8: Mission Ave & Fireside St

Existing Baseline
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	17	510	0	0	1081	9	0	0	0	31	0	54
Future Volume (veh/h)	17	510	0	0	1081	9	0	0	0	31	0	54
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00	0.99					1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach	No		No	No						No		
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870				1870	0	1870
Adj Flow Rate, veh/h	18	537	0	0	1138	9				33	0	57
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	2	2	2				2	0	2
Cap, veh/h	21	2997	0	2	2820	22				94	0	83
Arrive On Green	0.02	1.00	0.00	0.00	0.78	0.78				0.05	0.00	0.05
Sat Flow, veh/h	1781	3647	0	1781	3613	29				1781	0	1585
Grp Volume(v), veh/h	18	537	0	0	560	587				33	0	57
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1865				1781	0	1585
Q Serve(g_s), s	1.0	0.0	0.0	0.0	10.1	10.1				1.8	0.0	3.5
Cycle Q Clear(g_c), s	1.0	0.0	0.0	0.0	10.1	10.1				1.8	0.0	3.5
Prop In Lane	1.00	0.00	1.00	0.02						1.00		1.00
Lane Grp Cap(c), veh/h	21	2997	0	2	1387	1456				94	0	83
V/C Ratio(X)	0.85	0.18	0.00	0.00	0.40	0.40				0.35	0.00	0.68
Avail Cap(c_a), veh/h	123	2997	0	89	1387	1456				452	0	403
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	48.7	0.0	0.0	0.0	3.5	3.5				45.7	0.0	46.5
Incr Delay (d2), s/veh	27.8	0.1	0.0	0.0	0.9	0.8				2.2	0.0	9.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.6	0.1	0.0	0.0	3.0	3.1				0.8	0.0	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.5	0.1	0.0	0.0	4.4	4.4				48.0	0.0	56.0
LnGrp LOS	E	A	A	A	A	A				D	A	E
Approach Vol, veh/h	555		1147							90		
Approach Delay, s/veh	2.6		4.4							53.0		
Approach LOS	A		A							D		
Timer - Assigned Phs	1	2		4	5	6						
Phs Duration (G+Y+Rc), s	0.0	90.1		9.9	6.3	83.8						
Change Period (Y+Rc), s	5.1	5.8		4.6	5.1	5.8						
Max Green Setting (Gmax), s	54.1			25.4	6.9	52.2						
Max Q Clear Time (g_c+ID),s	2.0			5.5	3.0	12.1						
Green Ext Time (p_c), s	0.0	13.6		0.2	0.0	28.2						

Intersection Summary

HCM 6th Ctrl Delay	6.3
HCM 6th LOS	A

OnPoint - Oceanside

9: El Camino Real & Mission Ave

Existing Baseline

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	142	264	111	148	473	22	142	212	89	86	730	406
Future Volume (veh/h)	142	264	111	148	473	22	142	212	89	86	730	406
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	0.99	1.00	1.00	0.97	1.00	0.99	1.00	0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	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	148	275	0	154	493	23	123	256	93	90	760	423
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	288	941		289	915	43	170	358	147	583	1164	647
Arrive On Green	0.08	0.26	0.00	0.08	0.26	0.26	0.10	0.10	0.10	0.33	0.33	0.33
Sat Flow, veh/h	3456	3554	1585	3456	3455	161	1781	3741	1535	1781	3554	1571
Grp Volume(v), veh/h	148	275	0	154	253	263	123	256	93	90	760	423
Grp Sat Flow(s), veh/h/ln	1728	1777	1585	1728	1777	1839	1781	1870	1535	1781	1777	1571
Q Serve(g_s), s	4.9	7.3	0.0	5.1	14.5	14.6	8.0	7.9	6.9	4.3	21.8	25.8
Cycle Q Clear(g_c), s	4.9	7.3	0.0	5.1	14.5	14.6	8.0	7.9	6.9	4.3	21.8	25.8
Prop In Lane	1.00	1.00	1.00	1.00	0.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	288	941		289	471	487	170	358	147	583	1164	647
V/C Ratio(X)	0.51	0.29		0.53	0.54	0.54	0.72	0.72	0.63	0.15	0.65	0.65
Avail Cap(c_a), veh/h	427	1389		404	682	706	260	547	225	823	1643	858
HCM Platoon Ratio	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.2	34.9	0.0	52.3	37.5	37.5	52.3	52.2	51.8	28.3	34.2	28.3
Incr Delay (d2), s/veh	1.4	0.8	0.0	1.5	4.4	4.2	5.7	2.7	4.5	0.1	0.6	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh	0.2	3.3	0.0	2.3	6.9	7.1	3.8	3.8	2.9	1.9	9.5	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.6	35.7	0.0	53.8	41.9	41.8	58.0	54.9	56.3	28.5	34.8	29.4
LnGrp LOS	D	D		D	D	D	E	D	E	C	C	C
Approach Vol, veh/h	423	A		670			472			1273		
Approach Delay, s/veh	41.9			44.6			56.0			32.6		
Approach LOS	D			D			E			C		
Timer - Assigned Phs	1	2		4	5	6	8					
Phs Duration (G+Y+Rc), s	37.2	38.3		45.3	17.2	38.3	18.2					
Change Period (Y+Rc), s	7.3	6.8		6.3	7.3	6.8	6.8					
Max Green Setting (Gmax), s	33.5	46.5		55.0	14.7	45.7	17.4					
Max Q Clear Time (g_c+I), s	9.3			27.8	6.9	16.6	10.0					
Green Ext Time (p_c), s	0.2	5.7		8.2	0.3	9.9	1.4					

Intersection Summary

HCM 6th Ctrl Delay	40.7
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

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

OnPoint - Oceanside

10: Douglas Dr & Mission Ave

Existing Baseline

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	52	369	55	27	595	33	50	102	21	19	97	64
Future Volume (veh/h)	52	369	55	27	595	33	50	102	21	19	97	64
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	0.99	1.00	1.00	0.99	1.00	0.99	1.00	0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	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	55	388	58	28	626	35	53	107	22	20	102	67
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	174	1244	550	56	1131	63	88	682	136	42	436	264
Arrive On Green	0.05	0.35	0.35	0.03	0.33	0.33	0.05	0.23	0.23	0.02	0.21	0.21
Sat Flow, veh/h	3456	3554	1571	1781	3420	191	1781	2944	588	1781	2114	1281
Grp Volume(v), veh/h	55	388	58	28	325	336	53	63	66	20	84	85
Grp Sat Flow(s), veh/h/ln	1728	1777	1571	1781	1777	1834	1781	1777	1755	1781	1777	1618
Q Serve(g_s), s	0.9	4.7	1.5	0.9	8.8	8.8	1.7	1.7	1.8	0.7	2.3	2.6
Cycle Q Clear(g_c), s	0.9	4.7	1.5	0.9	8.8	8.8	1.7	1.7	1.8	0.7	2.3	2.6
Prop In Lane	1.00	1.00	1.00	1.00	0.10	1.00	1.00	0.34	1.00		0.79	
Lane Grp Cap(c), veh/h	174	1244	550	56	588	607	88	412	407	42	367	334
V/C Ratio(X)	0.32	0.31	0.11	0.50	0.55	0.55	0.60	0.15	0.16	0.47	0.23	0.25
Avail Cap(c_a), veh/h	299	1713	758	178	881	909	281	1170	1156	166	1056	961
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.0	14.0	12.9	28.1	16.1	16.1	27.4	18.0	18.1	28.4	19.5	19.6
Incr Delay (d2), s/veh	1.0	0.3	0.2	6.9	1.7	1.7	6.5	0.2	0.3	8.0	0.5	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	0.4	1.7	0.5	0.5	3.5	3.6	0.9	0.7	0.7	0.4	0.9	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.0	14.3	13.1	35.0	17.9	17.8	34.0	18.3	18.3	36.4	19.9	20.1
LnGrp LOS	C	B	B	C	B	B	C	B	B	D	B	C
Approach Vol, veh/h	501			689			182			189		
Approach Delay, s/veh	15.6			18.6			22.9			21.8		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	26.4	8.0	17.6	8.1	25.3	6.5	19.1					
Change Period (Y+Rc), s	5.1	5.8	5.1	5.4	5.1	5.8	5.1	5.4				
Max Green Setting (Gmax), s	28.4	9.3	35.0	5.1	29.2	5.5	38.8					
Max Q Clear Time (g_c+I), s	6.7	3.7	4.6	2.9	10.8	2.7	3.8					
Green Ext Time (p_c), s	0.0	4.9	0.0	1.4	0.0	6.9	0.0	1.0				

Intersection Summary

HCM 6th Ctrl Delay	18.5
HCM 6th LOS	B

OnPoint - Oceanside
11: Roymar Rd & Via de la Valle

Existing Baseline
Timing Plan: AM Peak

Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	0	0	0	15	0	5	0	26	9	4	16	0
Future Vol, veh/h	0	0	0	15	0	5	0	26	9	4	16	0
Conflicting Peds, #/hr	0	0	0	10	0	10	0	0	10	10	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	17	0	6	0	29	10	4	18	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	73	75	28	80	70	54	18	0	0	49	0	0
Stage 1	26	26	-	44	44	-	-	-	-	-	-	-
Stage 2	47	49	-	36	26	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	918	815	1047	908	821	1013	1599	-	-	1558	-	-
Stage 1	992	874	-	970	858	-	-	-	-	-	-	-
Stage 2	967	854	-	980	874	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	902	804	1037	889	810	994	1599	-	-	1543	-	-
Mov Cap-2 Maneuver	902	804	-	889	810	-	-	-	-	-	-	-
Stage 1	992	871	-	960	849	-	-	-	-	-	-	-
Stage 2	952	845	-	968	871	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9	0	1.5
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1599	-	-	-	913	1543	-	-
HCM Lane V/C Ratio	-	-	-	-	0.025	0.003	-	-
HCM Control Delay (s)	0	-	-	0	9	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0	-	-

OnPoint - Oceanside
12: Mission Ave & Project Dwy 1

Existing Baseline
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕			↕
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	-
Pot Cap-1 Maneuver	0	-	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

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

OnPoint - Oceanside
13: Foussat Rd & Project Dwy 2

Existing Baseline
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗↗↗	↖↖	
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	1	-	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	1083	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	1083	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)	-	-	-	-		
HCM Lane V/C Ratio	-	-	-	-		
HCM Control Delay (s)	-	0	-	-		
HCM Lane LOS	-	A	-	-		
HCM 95th %tile Q(veh)	-	-	-	-		

OnPoint - Oceanside
1: Airport Rd & SR 76

Existing Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱↱	↰		↱↱		↰	↱		↰	↱	↰
Traffic Volume (veh/h)	23	2068	46	74	1306	25	68	93	84	39	69	40
Future Volume (veh/h)	23	2068	46	74	1306	25	68	93	84	39	69	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No			No				No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	2200	49	79	1389	27	72	99	89	41	73	43
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	285	2349	1040	92	1923	850	88	117	105	53	207	171
Arrive On Green	0.16	0.66	0.66	0.05	0.54	0.54	0.05	0.13	0.13	0.03	0.11	0.11
Sat Flow, veh/h	1781	3554	1573	1781	3554	1570	1781	897	806	1781	1870	1542
Grp Volume(v), veh/h	24	2200	49	79	1389	27	72	0	188	41	73	43
Grp Sat Flow(s),veh/h/ln	1781	1777	1573	1781	1777	1570	1781	0	1703	1781	1870	1542
Q Serve(g_s), s	2.3	110.2	2.2	8.8	58.9	1.3	8.0	0.0	21.6	4.6	7.2	3.8
Cycle Q Clear(g_c), s	2.3	110.2	2.2	8.8	58.9	1.3	8.0	0.0	21.6	4.6	7.2	3.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.47	1.00		1.00
Lane Grp Cap(c), veh/h	285	2349	1040	92	1923	850	88	0	222	53	207	171
V/C Ratio(X)	0.08	0.94	0.05	0.86	0.72	0.03	0.82	0.00	0.85	0.78	0.35	0.25
Avail Cap(c_a), veh/h	285	2349	1040	92	2313	1022	140	0	247	56	207	171
HCM Platoon Ratio	1.00	1.00	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	0.97	0.00	0.97	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.5	30.2	11.9	94.1	34.6	13.3	94.2	0.0	85.0	96.4	82.3	44.7
Incr Delay (d2), s/veh	0.0	8.7	0.1	50.2	2.4	0.1	8.8	0.0	19.0	42.8	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	48.8	0.8	5.4	26.4	0.6	4.0	0.0	10.8	2.8	3.6	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.6	38.8	11.9	144.4	37.0	13.3	103.0	0.0	104.0	139.3	82.7	44.9
LnGrp LOS	E	D	B	F	D	B	F	A	F	F	F	D
Approach Vol, veh/h	2273				1495				260		157	
Approach Delay, s/veh	38.6				42.2				103.7		87.1	
Approach LOS	D				D				F		F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.0	140.2	15.6	28.2	40.0	116.2	11.6	32.2				
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.1	8.0	* 8	* 5.7	6.1				
Max Green Setting (Gmax), s	* 10	128.9	* 16	19.6	9.0	* 1.3E2	* 6.3	29.0				
Max Q Clear Time (g_c+I), s	10.8	112.2	10.0	9.2	4.3	60.9	6.6	23.6				
Green Ext Time (p_c), s	0.0	16.5	0.0	0.2	0.0	47.3	0.0	0.3				

Intersection Summary	
HCM 6th Ctrl Delay	45.8
HCM 6th LOS	D
Notes	

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

OnPoint - Oceanside
2: Foussat Rd & SR 76

Existing Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↲	↰	↱	↲	↰	↱	↲	↰	↱	↲
Traffic Volume (veh/h)	104	2013	84	109	1298	86	62	47	92	58	84	64
Future Volume (veh/h)	104	2013	84	109	1298	86	62	47	92	58	84	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	0.99	1.00	0.98	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	No	No	No	No	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	108	2097	88	114	1352	90	65	49	96	60	88	67
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	662	2377	1055	155	1814	804	168	631	191	122	392	293
Arrive On Green	0.19	0.67	0.67	0.04	0.51	0.51	0.05	0.12	0.12	0.04	0.11	0.11
Sat Flow, veh/h	3456	3554	1578	3456	3554	1576	3456	5106	1547	3456	3554	2663
Grp Volume(v), veh/h	108	2097	88	114	1352	90	65	49	96	60	88	67
Grp Sat Flow(s),veh/h/ln	1728	1777	1578	1728	1777	1576	1728	1702	1547	1728	1777	1332
Q Serve(g_s), s	5.2	95.4	3.9	6.5	60.1	4.7	3.6	1.7	11.6	3.4	4.5	3.2
Cycle Q Clear(g_c), s	5.2	95.4	3.9	6.5	60.1	4.7	3.6	1.7	11.6	3.4	4.5	3.2
Prop In Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	662	2377	1055	155	1814	804	168	631	191	122	392	293
V/C Ratio(X)	0.16	0.88	0.08	0.73	0.75	0.11	0.39	0.08	0.50	0.49	0.22	0.23
Avail Cap(c_a), veh/h	662	2377	1055	156	2077	921	173	996	302	126	645	483
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.5	26.8	11.6	94.3	38.7	15.8	92.2	77.5	81.9	94.7	81.2	40.4
Incr Delay (d2), s/veh	0.0	5.2	0.2	14.5	2.8	0.3	0.5	0.0	0.8	1.1	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	41.4	1.5	3.3	27.2	2.3	1.7	0.8	4.7	1.6	2.1	1.6	
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.5	31.9	11.8	108.9	41.5	16.1	92.8	77.6	82.6	95.9	81.3	40.6
LnGrp LOS	E	C	B	F	D	B	F	E	F	F	F	D
Approach Vol, veh/h	2293			1556			210			215		
Approach Delay, s/veh	32.8			45.0			84.6			72.7		
Approach LOS	C			D			F			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.7	141.8	15.4	28.1	46.3	110.1	12.7	30.8				
Change Period (Y+Rc), s	5.7	8.0	* 5.7	6.1	8.0	* 8	* 5.7	6.1				
Max Green Setting (Gmax), s	119.2	* 10	36.3	11.3*	1.2E2	* 7.3	39.0					
Max Q Clear Time (g_c+I),s	97.4	5.6	6.5	7.2	62.1	5.4	13.6					
Green Ext Time (p_c), s	0.0	21.4	0.0	0.4	0.0	40.0	0.0	0.2				
Intersection Summary												
HCM 6th Ctrl Delay				41.8								
HCM 6th LOS				D								
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

OnPoint - Oceanside
3: Airport Rd & Mission Ave

Existing Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↲	↰	↱	↲	↰	↱	↲	↰	↱	↲
Traffic Volume (veh/h)	28	1229	11	15	832	38	15	10	17	33	11	35
Future Volume (veh/h)	28	1229	11	15	832	38	15	10	17	33	11	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	0.99	1.00	0.99	1.00	0.96	1.00	0.96	1.00	0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	No	No	No	No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	30	1322	12	16	895	41	16	11	18	24	28	38
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	47	2382	22	31	2252	103	42	29	47	142	149	121
Arrive On Green	0.03	0.66	0.66	0.03	1.00	1.00	0.07	0.07	0.07	0.08	0.08	0.08
Sat Flow, veh/h	1781	3608	33	1781	3459	158	599	412	673	1781	1870	1525
Grp Volume(v), veh/h	30	651	683	16	460	476	45	0	0	24	28	38
Grp Sat Flow(s),veh/h/ln	1781	1777	1864	1781	1777	1840	1684	0	0	1781	1870	1525
Q Serve(g_s), s	2.0	23.6	23.6	1.1	0.0	0.0	3.1	0.0	0.0	1.5	1.7	2.8
Cycle Q Clear(g_c), s	2.0	23.6	23.6	1.1	0.0	0.0	3.1	0.0	0.0	1.5	1.7	2.8
Prop In Lane	1.00	0.02	1.00	0.09	0.36		0.40	1.00	1.00			
Lane Grp Cap(c), veh/h	47	1173	1231	31	1157	1198	117	0	0	142	149	121
V/C Ratio(X)	0.64	0.55	0.56	0.52	0.40	0.40	0.38	0.00	0.00	0.17	0.19	0.31
Avail Cap(c_a), veh/h	98	1173	1231	77	1157	1198	286	0	0	303	318	259
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.00	0.00	0.87	0.87	0.87
Uniform Delay (d), s/veh	57.9	10.9	10.9	57.4	0.0	0.0	53.3	0.0	0.0	51.5	51.6	52.1
Incr Delay (d2), s/veh	13.6	1.9	1.8	12.4	1.0	0.9	2.9	0.0	0.0	0.7	0.8	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	14.1	9.3	9.7	0.6	0.3	0.3	1.4	0.0	0.0	0.7	0.8	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.4	12.8	12.7	69.9	1.0	0.9	56.3	0.0	0.0	52.2	52.4	53.9
LnGrp LOS	E	B	B	E	A	A	E	A	A	D	D	D
Approach Vol, veh/h	1364			952			45			90		
Approach Delay, s/veh	14.1			2.1			56.3			53.0		
Approach LOS	B			A			E			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	85.4			14.1	8.6	84.3		13.0				
Change Period (Y+Rc), s	6.2			4.6	5.4	6.2		4.6				
Max Green Setting (Gmax), s	53.2			20.4	6.6	51.8		20.4				
Max Q Clear Time (g_c+I),s	25.6			4.8	4.0	2.0		5.1				
Green Ext Time (p_c), s	0.0	22.9		0.3	0.0	24.4		0.2				
Intersection Summary												
HCM 6th Ctrl Delay				11.6								
HCM 6th LOS				B								
Notes												
User approved volume balancing among the lanes for turning movement.												

OnPoint - Oceanside
4: Roymar Rd & Mission Ave

Existing Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↲	↰	↱	↲		↰	↱	↲	↰	↱
Traffic Volume (veh/h)	21	1235	33	43	810	17	37	0	104	22	0	22
Future Volume (veh/h)	21	1235	33	43	810	17	37	0	104	22	0	22
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	0.99	1.00	1.00	0.99	1.00	0.99	1.00	0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	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	23	1328	35	46	871	18	40	0	112	24	0	24
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	40	2279	961	59	2208	46	60	0	356	60	0	356
Arrive On Green	0.02	0.61	0.61	0.07	1.00	1.00	0.23	0.00	0.23	0.23	0.00	0.23
Sat Flow, veh/h	1781	3741	1577	1781	3560	74	0	0	1564	0	0	1564
Grp Volume(v), veh/h	23	1328	35	46	435	454	40	0	112	24	0	24
Grp Sat Flow(s),veh/h/ln	1781	1870	1577	1781	1777	1856	0	0	1564	0	0	1564
Q Serve(g_s), s	1.5	25.8	1.1	3.1	0.0	0.0	0.0	0.0	7.1	0.0	0.0	1.4
Cycle Q Clear(g_c), s	1.5	25.8	1.1	3.1	0.0	0.0	27.3	0.0	7.1	27.3	0.0	1.4
Prop In Lane	1.00	1.00	1.00	1.00	0.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	40	2279	961	59	1102	1151	60	0	356	60	0	356
V/C Ratio(X)	0.58	0.58	0.04	0.78	0.39	0.39	0.67	0.00	0.31	0.40	0.00	0.07
Avail Cap(c_a), veh/h	88	2279	961	147	1102	1151	60	0	356	60	0	356
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.83	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.1	14.2	9.4	55.6	0.0	0.0	60.0	0.0	38.6	60.0	0.0	36.4
Incr Delay (d2), s/veh	10.6	0.9	0.1	19.4	1.1	1.0	24.6	0.0	0.5	4.3	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	10.7	0.4	1.7	0.3	0.3	1.6	0.0	2.8	0.8	0.0	0.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.7	15.1	9.4	75.0	1.1	1.0	84.6	0.0	39.1	64.3	0.0	36.4
LnGrp LOS	E	B	A	E	A	A	F	A	D	E	A	D
Approach Vol, veh/h	1386			935			152			48		
Approach Delay, s/veh	15.9			4.7			51.1			50.3		
Approach LOS	B			A			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	78.9			32.0	7.8	80.2		32.0				
Change Period (Y+Rc), s	5.1	5.8		* 4.7	5.1	5.8		* 4.7				
Max Green Setting (Gmax), s	67.2			* 27	5.9	71.2		* 27				
Max Q Clear Time (g_c+I),s	27.8			29.3	3.5	2.0		29.3				
Green Ext Time (p_c), s	0.0	32.1		0.0	0.0	27.9		0.0				

Intersection Summary

HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

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

OnPoint - Oceanside
5: Foussat Rd & Mission Ave

Existing Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↲	↰	↱	↲	↰	↱	↲	↰	↱	↲
Traffic Volume (veh/h)	51	1267	57	30	731	39	40	94	29	61	121	80
Future Volume (veh/h)	51	1267	57	30	731	39	40	94	29	61	121	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	0.99	1.00	1.00	0.97	1.00	0.95	1.00	0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	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	54	1348	61	32	778	41	43	100	31	65	129	85
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	563	2195	99	49	1206	592	110	259	77	127	362	1152
Arrive On Green	0.63	1.00	1.00	0.04	0.45	0.45	0.03	0.10	0.10	0.04	0.10	0.10
Sat Flow, veh/h	1781	3462	156	1781	3554	1571	3456	2681	793	3456	3554	2653
Grp Volume(v), veh/h	54	691	718	32	778	41	43	65	66	65	129	85
Grp Sat Flow(s),veh/h/ln	1781	1777	1841	1781	1777	1571	1728	1777	1698	1728	1777	1326
Q Serve(g_s), s	1.4	0.0	0.0	2.1	20.3	0.4	1.5	4.1	4.4	2.2	4.1	0.3
Cycle Q Clear(g_c), s	1.4	0.0	0.0	2.1	20.3	0.4	1.5	4.1	4.4	2.2	4.1	0.3
Prop In Lane	1.00	1.00	0.08	1.00	1.00	1.00	1.00	0.47	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	563	1127	1168	49	1206	592	110	172	164	127	362	1152
V/C Ratio(X)	0.10	0.61	0.61	0.66	0.64	0.07	0.39	0.38	0.40	0.51	0.36	0.07
Avail Cap(c_a), veh/h	563	1127	1168	88	1697	809	150	342	327	158	693	1399
HCM Platoon Ratio	2.00	2.00	2.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.3	0.0	0.0	57.3	27.3	8.2	57.0	50.8	51.0	56.7	50.2	10.1
Incr Delay (d2), s/veh	0.1	2.5	2.4	13.7	2.6	0.2	2.3	1.4	1.6	3.1	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.8	0.8	1.1	8.4	0.4	0.7	1.9	2.0	1.0	1.8	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.4	2.5	2.4	70.9	29.9	8.4	59.2	52.2	52.6	59.8	50.8	10.1
LnGrp LOS	B	A	A	E	C	A	E	D	D	E	D	B
Approach Vol, veh/h	1463			851			174			279		
Approach Delay, s/veh	2.9			30.4			54.1			40.5		
Approach LOS	A			C			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	82.9	9.4	18.3	44.7	47.5	10.0	17.7					
Change Period (Y+Rc), s	6.1	6.8	5.6	6.1	6.8	* 6.8	5.6	6.1				
Max Green Setting (Gmax), s	60.9	5.2	23.4	9.5	* 57	5.5	23.1					
Max Q Clear Time (g_c+I),s	2.0	3.5	6.1	3.4	22.3	4.2	6.4					
Green Ext Time (p_c), s	0.0	46.2	0.0	1.0	0.0	18.4	0.0	0.6				

Intersection Summary

HCM 6th Ctrl Delay	18.4
HCM 6th LOS	B

Notes

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

OnPoint - Oceanside
6: Copperwood Wy & Mission Ave

Existing Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	4	1250	91	55	678	7	96	2	108	5	1	7
Future Volume (veh/h)	4	1250	91	55	678	7	96	2	108	5	1	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.97	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	1359	99	60	737	8	104	2	117	5	1	8
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	6	2217	161	77	2522	27	199	4	175	9	2	14
Arrive On Green	0.01	1.00	1.00	0.09	1.00	1.00	0.11	0.11	0.11	0.02	0.02	0.02
Sat Flow, veh/h	1781	3357	244	1781	3601	39	1749	34	1543	569	114	911
Grp Volume(v), veh/h	4	717	741	60	364	381	106	0	117	14	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1824	1781	1777	1863	1783	0	1543	1594	0	0
Q Serve(g_s), s	0.3	0.0	0.0	4.0	0.0	0.0	6.7	0.0	8.7	1.0	0.0	0.0
Cycle Q Clear(g_c), s	0.3	0.0	0.0	4.0	0.0	0.0	6.7	0.0	8.7	1.0	0.0	0.0
Prop In Lane	1.00		0.13	1.00		0.02	0.98		1.00	0.36		0.57
Lane Grp Cap(c), veh/h	6	1173	1205	77	1244	1305	202	0	175	25	0	0
V/C Ratio(X)	0.72	0.61	0.61	0.78	0.29	0.29	0.52	0.00	0.67	0.57	0.00	0.00
Avail Cap(c_a), veh/h	46	1173	1205	132	1244	1305	376	0	325	69	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.76	0.76	0.98	0.98	0.98	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	59.6	0.0	0.0	54.3	0.0	0.0	50.1	0.0	51.0	58.7	0.0	0.0
Incr Delay (d2), s/veh	82.5	1.8	1.8	6.2	0.6	0.6	2.1	0.0	4.3	18.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.6	0.6	1.9	0.2	0.2	3.1	0.0	3.6	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	142.1	1.8	1.8	60.5	0.6	0.6	52.2	0.0	55.4	77.3	0.0	0.0
LnGrp LOS	F	A	A	E	A	A	D	A	E	E	A	A
Approach Vol, veh/h	1462			805			223			14		
Approach Delay, s/veh	2.2			5.0			53.9			77.3		
Approach LOS	A			A			D			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	30.3	85.0		6.5	5.5	89.8		18.2				
Change Period (Y+Rc), s	5.1	5.8		4.6	5.1	5.8		4.6				
Max Green Setting (Gmax), s	60.5			5.2	3.1	66.3		25.3				
Max Q Clear Time (g_c+I), s	2.0			3.0	2.3	2.0		10.7				
Green Ext Time (p_c), s	0.0	47.4		0.0	0.0	21.0		0.8				
Intersection Summary												
HCM 6th Ctrl Delay				8.1								
HCM 6th LOS				A								

OnPoint - Oceanside
7: Frontier Dr & Mission Ave

Existing Baseline
Timing Plan: PM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↱	↰	↱	↰	↱
Traffic Volume (veh/h)	1215	45	45	725	28	41
Future Volume (veh/h)	1215	45	45	725	28	41
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	1.00		1.00	0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	1253	46	46	747	29	42
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	2651	97	59	2965	52	75
Arrive On Green	1.00	1.00	0.03	0.83	0.08	0.08
Sat Flow, veh/h	3588	128	1781	3647	654	947
Grp Volume(v), veh/h	637	662	46	747	72	0
Grp Sat Flow(s),veh/h/ln	1777	1846	1781	1777	1623	0
Q Serve(g_s), s	0.0	0.0	3.1	5.3	5.1	0.0
Cycle Q Clear(g_c), s	0.0	0.0	3.1	5.3	5.1	0.0
Prop In Lane		0.07	1.00		0.40	0.58
Lane Grp Cap(c), veh/h	1348	1400	59	2965	128	0
V/C Ratio(X)	0.47	0.47	0.78	0.25	0.56	0.00
Avail Cap(c_a), veh/h	1348	1400	162	2965	357	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.77	0.77	0.93	0.93	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	57.6	2.1	53.2	0.0
Incr Delay (d2), s/veh	0.9	0.9	7.3	0.2	3.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.3	1.5	1.3	2.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.9	0.9	64.9	2.3	57.0	0.0
LnGrp LOS	A	A	E	A	E	A
Approach Vol, veh/h	1299			793	72	
Approach Delay, s/veh	0.9			5.9	57.0	
Approach LOS	A			A	E	
Timer - Assigned Phs	1	2		6		8
Phs Duration (G+Y+Rc), s	9.1	96.8		105.9		14.1
Change Period (Y+Rc), s	5.1	5.8		5.8		4.6
Max Green Setting (Gmax), s	9.1	67.2		83.2		26.4
Max Q Clear Time (g_c+I), s	2.0			7.3		7.1
Green Ext Time (p_c), s	0.0	45.7		23.3		0.2
Intersection Summary						
HCM 6th Ctrl Delay				4.6		
HCM 6th LOS				A		
Notes						
User approved volume balancing among the lanes for turning movement.						

OnPoint - Oceanside
8: Mission Ave & Fireside St

Existing Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱					↰	↱	↰
Traffic Volume (veh/h)	234	1010	0	0	642	97	0	0	0	50	0	113
Future Volume (veh/h)	234	1010	0	0	642	97	0	0	0	50	0	113
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	0.99					1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00					1.00	1.00	1.00
Work Zone On Approach	No			No						No		
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870				1870	0	1870
Adj Flow Rate, veh/h	241	1041	0	0	662	100				52	0	116
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97				0.97	0.97	0.97
Percent Heavy Veh, %	2	2	0	2	2	2				2	0	2
Cap, veh/h	270	2920	0	1	1940	293				163	0	145
Arrive On Green	0.15	0.82	0.00	0.00	0.63	0.63				0.09	0.00	0.09
Sat Flow, veh/h	1781	3647	0	1781	3092	467				1781	0	1585
Grp Volume(v), veh/h	241	1041	0	0	380	382				52	0	116
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1782				1781	0	1585
Q Serve(g_s), s	15.9	8.9	0.0	0.0	12.2	12.2				3.3	0.0	8.6
Cycle Q Clear(g_c), s	15.9	8.9	0.0	0.0	12.2	12.2				3.3	0.0	8.6
Prop In Lane	1.00	0.00	1.00	0.26						1.00	1.00	
Lane Grp Cap(c), veh/h	270	2920	0	1	1115	1118				163	0	145
V/C Ratio(X)	0.89	0.36	0.00	0.00	0.34	0.34				0.32	0.00	0.80
Avail Cap(c_a), veh/h	474	2920	0	74	1115	1118				407	0	362
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	49.9	2.7	0.0	0.0	10.6	10.6				51.0	0.0	53.4
Incr Delay (d2), s/veh	4.2	0.3	0.0	0.0	0.8	0.8				1.1	0.0	9.6
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	4	2.4	0.0	0.0	4.9	4.9				1.5	0.0	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.2	3.0	0.0	0.0	11.4	11.4				52.1	0.0	63.0
LnGrp LOS	D	A	A	A	B	B				D	A	E
Approach Vol, veh/h	1282			762						168		
Approach Delay, s/veh	12.6			11.4						59.7		
Approach LOS	B			B						E		
Timer - Assigned Phs	1	2		4	5	6						
Phs Duration (G+Y+Rc), s	104.4			15.6	23.3	81.1						
Change Period (Y+Rc), s	5.1	5.8		4.6	5.1	5.8						
Max Green Setting (Gmax), s	72.1			27.4	31.9	45.2						
Max Q Clear Time (g_c+I), s	10.9			10.6	17.9	14.2						
Green Ext Time (p_c), s	0.0	34.0		0.4	0.3	15.7						
Intersection Summary												
HCM 6th Ctrl Delay			15.8									
HCM 6th LOS			B									

OnPoint - Oceanside
9: El Camino Real & Mission Ave

Existing Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱					↰	↱	↰
Traffic Volume (veh/h)	367	579	141	118	264	101	215	693	243	165	414	288
Future Volume (veh/h)	367	579	141	118	264	101	215	693	243	165	414	288
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	0.99	1.00				0.99	1.00	0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No						No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	399	629	0	128	287	110	234	753	264	179	450	313
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	403	974		240	572	214	400	840	351	431	860	564
Arrive On Green	0.12	0.27	0.00	0.07	0.23	0.23	0.22	0.22	0.22	0.24	0.24	0.24
Sat Flow, veh/h	3456	3554	1585	3456	2520	942	1781	3741	1564	1781	3554	1565
Grp Volume(v), veh/h	399	629	0	128	200	197	234	753	264	179	450	313
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1686	1781	1870	1564	1781	1777	1565
Q Serve(g_s), s	16.5	22.4	0.0	5.1	14.1	14.6	16.8	28.0	22.6	12.1	15.7	23.0
Cycle Q Clear(g_c), s	16.5	22.4	0.0	5.1	14.1	14.6	16.8	28.0	22.6	12.1	15.7	23.0
Prop In Lane	1.00	1.00	1.00	0.56	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	403	974		240	403	382	400	840	351	431	860	564
V/C Ratio(X)	0.99	0.65		0.53	0.50	0.51	0.59	0.90	0.75	0.42	0.52	0.56
Avail Cap(c_a), veh/h	403	1295		282	586	556	417	875	366	689	1375	791
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.2	45.8	0.0	64.4	48.2	48.5	49.6	53.9	51.8	45.7	47.1	36.8
Incr Delay (d2), s/veh	42.1	3.3	0.0	1.8	4.3	4.9	2.0	11.6	8.2	0.6	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6	10.4	0.0	2.3	6.8	6.7	7.8	14.5	9.7	5.5	7.1	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	105.2	49.1	0.0	66.2	52.6	53.3	51.5	65.5	60.0	46.4	47.6	37.7
LnGrp LOS	F	D		E	D	D	D	E	E	D	D	D
Approach Vol, veh/h	1028		A	525			1251			942		
Approach Delay, s/veh	70.9			56.2			61.7			44.1		
Approach LOS	E			E			E			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	46.0		41.0	24.0	39.3		39.0				
Change Period (Y+Rc), s	7.3	6.8		6.3	7.3	6.8		6.8				
Max Green Setting (Gmax), s	4.7	52.2		55.4	16.7	47.2		33.5				
Max Q Clear Time (g_c+I), s	24.4			25.0	18.5	16.6		30.0				
Green Ext Time (p_c), s	0.1	12.5		5.1	0.0	7.7		2.2				
Intersection Summary												
HCM 6th Ctrl Delay			59.0									
HCM 6th LOS			E									
Notes												
User approved volume balancing among the lanes for turning movement.												
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.												

OnPoint - Oceanside
10: Douglas Dr & Mission Ave

Existing Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	65	955	50	31	415	32	58	89	23	22	101	79
Future Volume (veh/h)	65	955	50	31	415	32	58	89	23	22	101	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	0.99	1.00	0.99	1.00	0.99	1.00	0.98	1.00	0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	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	66	974	51	32	423	33	59	91	23	22	103	81
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	183	1436	636	60	1285	100	89	607	148	45	373	267
Arrive On Green	0.05	0.40	0.40	0.03	0.38	0.38	0.05	0.21	0.21	0.03	0.19	0.19
Sat Flow, veh/h	3456	3554	1573	1781	3339	259	1781	2824	688	1781	1962	1406
Grp Volume(v), veh/h	66	974	51	32	224	232	59	56	58	22	92	92
Grp Sat Flow(s),veh/h/ln	1728	1777	1573	1781	1777	1821	1781	1777	1735	1781	1777	1591
Q Serve(g_s), s	1.2	14.9	1.3	1.2	5.9	6.0	2.2	1.7	1.8	0.8	2.9	3.3
Cycle Q Clear(g_c), s	1.2	14.9	1.3	1.2	5.9	6.0	2.2	1.7	1.8	0.8	2.9	3.3
Prop In Lane	1.00	1.00	1.00	1.00	0.14	1.00	0.40	1.00	0.88	1.00	0.88	1.00
Lane Grp Cap(c), veh/h	183	1436	636	60	684	701	89	382	373	45	338	303
V/C Ratio(X)	0.36	0.68	0.08	0.54	0.33	0.33	0.66	0.15	0.16	0.49	0.27	0.30
Avail Cap(c_a), veh/h	276	1749	774	134	867	888	158	942	919	153	936	838
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.4	16.2	12.2	31.6	14.4	14.4	31.0	21.1	21.2	32.0	23.0	23.1
Incr Delay (d2), s/veh	1.2	1.4	0.1	7.2	0.6	0.6	8.2	0.2	0.3	8.1	0.6	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	0.4	0.6	2.3	2.4	1.1	0.7	0.7	0.4	1.2	1.2	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.6	17.6	12.3	38.8	15.0	15.0	39.2	21.4	21.4	40.1	23.6	23.9
LnGrp LOS	C	B	B	D	B	B	D	C	C	D	C	C
Approach Vol, veh/h	1091			488			173			206		
Approach Delay, s/veh	18.2			16.5			27.5			25.5		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s/3	32.6	8.4	18.0	8.6	31.4	6.8	19.7					
Change Period (Y+Rc), s 5.1	5.8	5.1	5.4	5.1	5.8	5.1	5.4					
Max Green Setting (Gmax),s	32.7	5.9	35.0	5.3	32.4	5.7	35.2					
Max Q Clear Time (g_c+I),s	16.9	4.2	5.3	3.2	8.0	2.8	3.8					
Green Ext Time (p_c), s	0.0	9.9	0.0	1.6	0.0	5.2	0.0	0.9				

Intersection Summary

HCM 6th Ctrl Delay	19.4
HCM 6th LOS	B

OnPoint - Oceanside
11: Roymar Rd & Via de la Valle

Existing Baseline
Timing Plan: PM Peak

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Vol, veh/h	0	0	0	9	0	3	0	27	13	6	35	0
Future Vol, veh/h	0	0	0	9	0	3	0	27	13	6	35	0
Conflicting Peds, #/hr	0	0	0	10	0	10	0	0	10	10	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	10	0	3	0	29	14	6	38	0

Major/Minor	Minor2	Minor1	Major1	Major2								
Conflicting Flow All	98	103	48	106	96	56	38	0	0	53	0	0
Stage 1	50	50	-	46	46	-	-	-	-	-	-	-
Stage 2	48	53	-	60	50	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	884	787	1021	873	794	1011	1572	-	-	1553	-	-
Stage 1	963	853	-	968	857	-	-	-	-	-	-	-
Stage 2	965	851	-	951	853	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	870	776	1011	854	783	992	1572	-	-	1538	-	-
Mov Cap-2 Maneuver	870	776	-	854	783	-	-	-	-	-	-	-
Stage 1	963	850	-	958	848	-	-	-	-	-	-	-
Stage 2	953	842	-	938	850	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.1	0	1.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1572	-	-	-	885	1538	-	-
HCM Lane V/C Ratio	-	-	-	-	0.015	0.004	-	-
HCM Control Delay (s)	0	-	-	0	9.1	7.4	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-	-

OnPoint - Oceanside
12: Mission Ave & Project Dwy 1

Existing Baseline
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕			↕
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	- 0 - 1
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	-	- - 0 1083
Stage 1	0	-	- - 0 -
Stage 2	0	-	- - 0 -
Platoon blocked, %	-	-	- - -
Mov Cap-1 Maneuver	-	-	- - - 1083
Mov Cap-2 Maneuver	-	-	- - -
Stage 1	-	-	- - -
Stage 2	-	-	- - -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

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

OnPoint - Oceanside
13: Foussat Rd & Project Dwy 2

Existing Baseline
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↕		↕↕↕	↕↕	
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	1	- 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 1083	0	- - -
Stage 1	0	- 0	- - -
Stage 2	0	- 0	- - -
Platoon blocked, %	-	-	- - -
Mov Cap-1 Maneuver	-	1083	- - -
Mov Cap-2 Maneuver	-	-	- - -
Stage 1	-	-	- - -
Stage 2	-	-	- - -

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

OnPoint - Oceanside
1: Airport Rd & SR 76

Existing with Project
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	24	1323	37	30	2026	25	109	27	86	38	31	11
Future Volume (veh/h)	24	1323	37	30	2026	25	109	27	86	38	31	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	1378	39	31	2110	26	114	28	90	40	32	11
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	194	2348	1040	66	2052	907	130	50	160	79	190	156
Arrive On Green	0.11	0.66	0.66	0.04	0.58	0.58	0.07	0.13	0.13	0.04	0.10	0.10
Sat Flow, veh/h	1781	3554	1573	1781	3554	1571	1781	383	1231	1781	1870	1538
Grp Volume(v), veh/h	25	1378	39	31	2110	26	114	0	118	40	32	11
Grp Sat Flow(s),veh/h/ln	1781	1777	1573	1781	1777	1571	1781	0	1614	1781	1870	1538
Q Serve(g_s), s	2.5	43.0	1.7	3.4	115.5	1.0	12.7	0.0	13.7	4.4	3.1	1.0
Cycle Q Clear(g_c), s	2.5	43.0	1.7	3.4	115.5	1.0	12.7	0.0	13.7	4.4	3.1	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.76	1.00		1.00
Lane Grp Cap(c), veh/h	194	2348	1040	66	2052	907	130	0	210	79	190	156
V/C Ratio(X)	0.13	0.59	0.04	0.47	1.03	0.03	0.87	0.00	0.56	0.50	0.17	0.07
Avail Cap(c_a), veh/h	194	2348	1040	80	2052	907	131	0	315	89	321	264
HCM Platoon Ratio	1.00	1.00	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	0.97	0.00	0.97	1.00	1.00	1.00
Uniform Delay (d), s/veh	80.6	18.8	11.8	94.4	42.3	9.7	91.8	0.0	81.6	93.4	82.1	52.1
Incr Delay (d2), s/veh	0.1	1.1	0.1	1.9	27.4	0.1	41.0	0.0	0.9	1.8	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	18.3	0.7	1.6	57.8	0.6	7.4	0.0	5.8	2.1	1.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.7	19.9	11.9	96.3	69.7	9.8	132.8	0.0	82.5	95.2	82.3	52.2
LnGrp LOS	F	B	B	F	F	A	F	A	F	F	F	D
Approach Vol, veh/h		1442			2167			232			83	
Approach Delay, s/veh		20.7			69.4			107.2			84.5	
Approach LOS		C			E			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.1	140.2	20.3	26.4	29.8	123.5	14.6	32.1				
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.1	8.0	* 8	* 5.7	6.1				
Max Green Setting (Gmax), s	* 9	116.5	* 15	34.3	10.0	* 12E2	* 10	39.0				
Max Q Clear Time (g_c+I1), s	5.4	45.0	14.7	5.1	4.5	117.5	6.4	15.7				
Green Ext Time (p_c), s	0.0	48.2	0.0	0.1	0.0	0.0	0.0	0.4				

Intersection Summary

HCM 6th Ctrl Delay	54.0
HCM 6th LOS	D

Notes

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

OnPoint - Oceanside
2: Foussat Rd & SR 76

Existing with Project
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	29	1355	87	102	2015	34	37	31	93	52	25	38
Future Volume (veh/h)	29	1355	87	102	2015	34	37	31	93	52	25	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	1369	88	103	2035	34	37	31	94	53	25	38
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	517	2181	968	207	1821	808	196	701	213	213	505	383
Arrive On Green	0.15	0.61	0.61	0.06	0.51	0.51	0.06	0.14	0.14	0.06	0.14	0.14
Sat Flow, veh/h	3456	3554	1577	3456	3554	1576	3456	5106	1550	3456	3554	2692
Grp Volume(v), veh/h	29	1369	88	103	2035	34	37	31	94	53	25	38
Grp Sat Flow(s),veh/h/ln	1728	1777	1577	1728	1777	1576	1728	1702	1550	1728	1777	1346
Q Serve(g_s), s	1.4	48.4	4.6	5.8	102.5	1.6	2.0	1.1	11.1	2.9	1.2	1.8
Cycle Q Clear(g_c), s	1.4	48.4	4.6	5.8	102.5	1.6	2.0	1.1	11.1	2.9	1.2	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	517	2181	968	207	1821	808	196	701	213	213	505	383
V/C Ratio(X)	0.06	0.63	0.09	0.50	1.12	0.04	0.19	0.04	0.44	0.25	0.05	0.10
Avail Cap(c_a), veh/h	517	2181	968	207	1821	808	225	1174	357	225	817	619
HCM Platoon Ratio	1.00	1.00	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	72.9	24.3	15.8	91.1	48.8	13.1	89.9	74.9	79.2	89.4	74.1	41.2
Incr Delay (d2), s/veh	0.0	1.4	0.2	0.7	61.0	0.1	0.2	0.0	0.5	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	21.1	1.8	2.6	60.6	0.9	0.9	0.5	4.5	1.3	0.6	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.9	25.6	16.0	91.8	109.7	13.2	90.1	74.9	79.8	89.7	74.1	41.3
LnGrp LOS	E	C	B	F	F	F	F	E	E	F	E	D
Approach Vol, veh/h		1486			2172			162			116	
Approach Delay, s/veh		26.0			107.4			81.2			70.5	
Approach LOS		C			F			F			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.1	130.8	17.0	34.5	37.9	110.5	18.0	33.6				
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.1	8.0	* 8	* 5.7	6.1				
Max Green Setting (Gmax), s	* 12	103.5	* 13	46.0	13.0	* 1E2	* 13	46.0				
Max Q Clear Time (g_c+I1), s	50.4	4.0	3.8	3.4	104.5	4.9	13.1					
Green Ext Time (p_c), s	0.0	39.5	0.0	0.1	0.0	0.0	0.0	0.2				

Intersection Summary

HCM 6th Ctrl Delay	74.5
HCM 6th LOS	E

Notes

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

OnPoint - Oceanside
3: Airport Rd & Mission Ave

Existing with Project
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↲	↰	↱	↲	↰	↱	↲	↰	↱	↲
Traffic Volume (veh/h)	25	571	6	7	1043	85	13	20	19	32	17	16
Future Volume (veh/h)	25	571	6	7	1043	85	13	20	19	32	17	16
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	0.99	1.00	0.99	1.00	1.00	0.96	1.00	0.97	1.00	0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	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	26	589	6	7	1075	88	13	21	20	26	28	16
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	46	2223	23	16	1994	163	33	53	51	153	161	131
Arrive On Green	0.03	0.62	0.62	0.01	0.60	0.60	0.08	0.08	0.08	0.09	0.09	0.09
Sat Flow, veh/h	1781	3604	37	1781	3324	272	411	664	632	1781	1870	1530
Grp Volume(v), veh/h	26	290	305	7	574	589	54	0	0	26	28	16
Grp Sat Flow(s),veh/h/ln	1781	1777	1863	1781	1777	1819	1707	0	0	1781	1870	1530
Q Serve(g_s), s	1.4	7.5	7.5	0.4	19.1	19.1	3.0	0.0	0.0	1.4	1.4	1.0
Cycle Q Clear(g_c), s	1.4	7.5	7.5	0.4	19.1	19.1	3.0	0.0	0.0	1.4	1.4	1.0
Prop In Lane	1.00	1.00	0.02	1.00	0.15	0.24	0.37	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	46	1096	1150	16	1066	1091	137	0	0	153	161	131
V/C Ratio(X)	0.57	0.26	0.27	0.44	0.54	0.54	0.39	0.00	0.00	0.17	0.17	0.12
Avail Cap(c_a), veh/h	93	1096	1150	89	1066	1091	348	0	0	363	382	312
HCM Platoon Ratio	1.00	1.00	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	0.89	0.89	0.89	1.00	0.00	0.00	0.99	0.99	0.99
Uniform Delay (d), s/veh	48.2	8.8	8.8	49.3	11.8	11.8	43.7	0.0	0.0	42.4	42.4	42.2
Incr Delay (d2), s/veh	10.6	0.6	0.6	16.5	1.7	1.7	2.6	0.0	0.0	0.7	0.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	2.9	3.0	0.2	7.5	7.7	1.4	0.0	0.0	0.6	0.7	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.7	9.4	9.3	65.8	13.6	13.5	46.3	0.0	0.0	43.1	43.1	42.8
LnGrp LOS	E	A	A	E	B	B	D	A	A	D	D	D
Approach Vol, veh/h	621			1170			54			70		
Approach Delay, s/veh	11.4			13.9			46.3			43.1		
Approach LOS	B			B			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	67.9			13.2	8.0	66.2		12.6				
Change Period (Y+Rc), s	5.4	6.2		4.6	5.4	6.2		4.6				
Max Green Setting (Gmax), s	33.4			20.4	5.2	33.2		20.4				
Max Q Clear Time (g_c+I), s	9.5			3.4	3.4	21.1		5.0				
Green Ext Time (p_c), s	0.0	9.9		0.3	0.0	10.2		0.2				

Intersection Summary

HCM 6th Ctrl Delay	15.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

OnPoint - Oceanside
4: Roymar Rd & Mission Ave

Existing with Project
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↲	↰	↱	↲	↰	↱	↲	↰	↱	↲
Traffic Volume (veh/h)	45	548	22	56	1107	19	22	0	46	88	0	10
Future Volume (veh/h)	45	548	22	56	1107	19	22	0	46	88	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	0.99	1.00	0.99	1.00	0.99	1.00	0.99	1.00	0.99	1.00	0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	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	565	23	58	1141	20	23	0	47	91	0	10
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	64	1942	818	74	1875	33	72	0	444	72	0	444
Arrive On Green	0.04	0.52	0.52	0.08	1.00	1.00	0.28	0.00	0.28	0.28	0.00	0.28
Sat Flow, veh/h	1781	3741	1576	1781	3573	63	0	0	1568	0	0	1568
Grp Volume(v), veh/h	46	565	23	58	567	594	23	0	47	91	0	10
Grp Sat Flow(s),veh/h/ln	1781	1870	1576	1781	1777	1858	0	0	1568	0	0	1568
Q Serve(g_s), s	2.6	8.6	0.7	3.2	0.0	0.0	0.0	0.0	2.2	0.0	0.0	0.5
Cycle Q Clear(g_c), s	2.6	8.6	0.7	3.2	0.0	0.0	28.3	0.0	2.2	28.3	0.0	0.5
Prop In Lane	1.00	1.00	1.00	1.00	0.03	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	64	1942	818	74	933	976	72	0	444	72	0	444
V/C Ratio(X)	0.72	0.29	0.03	0.78	0.61	0.61	0.32	0.00	0.11	1.26	0.00	0.02
Avail Cap(c_a), veh/h	105	1942	818	141	933	976	72	0	444	72	0	444
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	47.7	13.6	11.7	45.4	0.0	0.0	50.0	0.0	26.5	50.0	0.0	25.9
Incr Delay (d2), s/veh	13.5	0.4	0.1	16.0	2.9	2.8	2.5	0.0	0.1	192.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	3.6	0.3	1.7	0.8	0.8	0.6	0.0	0.8	5.6	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.2	14.0	11.8	61.4	2.9	2.8	52.5	0.0	26.6	242.6	0.0	25.9
LnGrp LOS	E	B	B	E	A	A	D	A	C	F	A	C
Approach Vol, veh/h	634			1219			70			101		
Approach Delay, s/veh	17.3			5.7			35.1			221.1		
Approach LOS	B			A			D			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	57.7			33.0	8.7	58.3		33.0				
Change Period (Y+Rc), s	5.1	5.8		* 4.7	5.1	5.8		* 4.7				
Max Green Setting (Gmax), s	48.2			* 28	5.9	50.2		* 28				
Max Q Clear Time (g_c+I), s	10.6			30.3	4.6	2.0		30.3				
Green Ext Time (p_c), s	0.0	13.3		0.0	0.0	32.6		0.0				

Intersection Summary

HCM 6th Ctrl Delay	21.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

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

OnPoint - Oceanside
5: Foussat Rd & Mission Ave

Existing with Project
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱		↰	↱	
Traffic Volume (veh/h)	91	542	43	22	1058	30	42	79	35	32	70	65
Future Volume (veh/h)	91	542	43	22	1058	30	42	79	35	32	70	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		0.99	1.00		0.97	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	95	565	45	23	1102	31	44	82	36	33	73	68
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	433	1998	159	42	1324	634	122	246	101	104	340	932
Arrive On Green	0.49	1.00	1.00	0.05	0.75	0.75	0.04	0.10	0.10	0.01	0.03	0.03
Sat Flow, veh/h	1781	3333	265	1781	3554	1572	3456	2433	999	3456	3554	2644
Grp Volume(v), veh/h	95	301	309	23	1102	31	44	58	60	33	73	68
Grp Sat Flow(s),veh/h/ln	1781	1777	1821	1781	1777	1572	1728	1777	1655	1728	1777	1322
Q Serve(g_s), s	3.1	0.0	0.0	1.3	20.8	0.1	1.2	3.1	3.4	0.9	2.0	0.3
Cycle Q Clear(g_c), s	3.1	0.0	0.0	1.3	20.8	0.1	1.2	3.1	3.4	0.9	2.0	0.3
Prop In Lane	1.00		0.15	1.00		1.00	1.00		0.60	1.00		1.00
Lane Grp Cap(c), veh/h	433	1065	1092	42	1324	634	122	179	167	104	340	932
V/C Ratio(X)	0.22	0.28	0.28	0.55	0.83	0.05	0.36	0.33	0.36	0.32	0.21	0.07
Avail Cap(c_a), veh/h	433	1065	1092	100	1439	684	173	409	381	173	817	1287
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.93	0.93	0.93	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.2	0.0	0.0	47.1	10.6	2.5	47.1	41.8	41.9	48.5	44.8	11.1
Incr Delay (d2), s/veh	0.3	0.7	0.7	9.9	5.8	0.1	1.8	1.0	1.3	1.7	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	0.7	4.8	0.1	0.6	1.4	1.4	0.4	0.9	0.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.5	0.7	0.7	57.0	16.4	2.7	48.9	42.8	43.2	50.2	45.1	11.2
LnGrp LOS	C	A	A	E	B	A	D	D	D	D	D	B
Approach Vol, veh/h	705			1156			162			174		
Approach Delay, s/veh	3.3			16.9			44.6			32.8		
Approach LOS	A			B			D			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	66.7	9.1	15.7	31.1	44.1	8.6	16.2					
Change Period (Y+Rc), s	6.1	6.8	5.6	6.1	6.8	* 6.8	5.6	6.1				
Max Green Setting (Gmax), s	41.8	5.0	23.0	6.9	* 41	5.0	23.0					
Max Q Clear Time (g_c+I),s	2.0	3.2	4.0	5.1	22.8	2.9	5.4					
Green Ext Time (p_c), s	0.0	13.8	0.0	0.6	0.0	14.5	0.0	0.5				

Intersection Summary

HCM 6th Ctrl Delay	15.8
HCM 6th LOS	B

Notes

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

OnPoint - Oceanside
6: Copperwood Wy & Mission Ave

Existing with Project
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱		↰	↱	
Traffic Volume (veh/h)	7	489	90	91	1038	8	47	6	41	4	0	7
Future Volume (veh/h)	7	489	90	91	1038	8	47	6	41	4	0	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	504	93	94	1070	8	48	6	42	4	0	7
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	9	1929	354	118	2550	19	120	15	114	8	0	13
Arrive On Green	0.01	1.00	1.00	0.13	1.00	1.00	0.08	0.08	0.08	0.01	0.00	0.01
Sat Flow, veh/h	1781	2994	550	1781	3615	27	1592	199	1522	576	0	1008
Grp Volume(v), veh/h	7	298	299	94	526	552	54	0	42	11	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1766	1781	1777	1865	1791	0	1522	1584	0	0
Q Serve(g_s), s	0.4	0.0	0.0	5.1	0.0	0.0	2.9	0.0	2.6	0.7	0.0	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.0	5.1	0.0	0.0	2.9	0.0	2.6	0.7	0.0	0.0
Prop In Lane	1.00		0.31	1.00		0.01	0.89		1.00	0.36		0.64
Lane Grp Cap(c), veh/h	9	1145	1138	118	1253	1316	135	0	114	21	0	0
V/C Ratio(X)	0.74	0.26	0.26	0.80	0.42	0.42	0.40	0.00	0.37	0.53	0.00	0.00
Avail Cap(c_a), veh/h	69	1145	1138	230	1253	1316	455	0	387	86	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	0.92	0.92	0.92	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	49.4	0.0	0.0	42.7	0.0	0.0	44.1	0.0	44.0	49.0	0.0	0.0
Incr Delay (d2), s/veh	71.1	0.5	0.5	4.2	1.0	0.9	1.9	0.0	2.0	19.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.2	0.2	2.3	0.3	0.3	1.3	0.0	1.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	120.5	0.5	0.5	46.9	1.0	0.9	46.0	0.0	45.9	68.1	0.0	0.0
LnGrp LOS	F	A	A	D	A	A	D	A	D	E	A	A
Approach Vol, veh/h	604			1172			96			11		
Approach Delay, s/veh	1.9			4.6			46.0			68.1		
Approach LOS	A			A			D			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	70.2			5.9	5.6	76.3		12.1				
Change Period (Y+Rc), s	5.1			4.6	5.1	5.8		4.6				
Max Green Setting (Gmax), s	36.2			5.4	3.9	45.2		25.4				
Max Q Clear Time (g_c+I),s	2.0			2.7	2.4	2.0		4.9				
Green Ext Time (p_c), s	0.0	12.7		0.0	0.0	27.9		0.3				

Intersection Summary

HCM 6th Ctrl Delay	6.2
HCM 6th LOS	A

OnPoint - Oceanside
7: Frontier Dr & Mission Ave

Existing with Project
Timing Plan: AM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	481	45	63	1101	39	43
Future Volume (veh/h)	481	45	63	1101	39	43
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99	1.00		1.00	0.97	
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	1900	1900
Adj Flow Rate, veh/h	501	47	66	1147	41	45
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	2319	217	85	2862	70	77
Arrive On Green	0.23	0.23	0.05	0.81	0.09	0.09
Sat Flow, veh/h	3376	307	1781	3647	775	850
Grp Volume(v), veh/h	270	278	66	1147	87	0
Grp Sat Flow(s),veh/h/ln	1813	1781	1777	1644	0	
Q Serve(g_s), s	12.3	12.4	3.7	9.3	5.1	0.0
Cycle Q Clear(g_c), s	12.3	12.4	3.7	9.3	5.1	0.0
Prop In Lane	0.17	1.00		0.47	0.52	
Lane Grp Cap(c), veh/h	1255	1281	85	2862	149	0
V/C Ratio(X)	0.22	0.22	0.77	0.40	0.58	0.00
Avail Cap(c_a), veh/h	1255	1281	265	2862	451	0
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.91	0.91	1.00	0.00
Uniform Delay (d), s/veh	16.0	16.0	47.1	2.8	43.7	0.0
Incr Delay (d2), s/veh	0.4	0.4	5.0	0.4	3.6	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	6.9	6.1	1.7	2.3	2.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.4	16.4	52.1	3.2	47.3	0.0
LnGrp LOS	B	B	D	A	D	A
Approach Vol, veh/h	548		1213	87		
Approach Delay, s/veh	16.4		5.8	47.3		
Approach LOS	B		A	D		
Timer - Assigned Phs	1	2		6	8	
Phs Duration (G+Y+Rc), s	9.9	76.5		86.3	13.7	
Change Period (Y+Rc), s	5.1	5.8		5.8	4.6	
Max Green Setting (Gmax), s	42.2			62.2	27.4	
Max Q Clear Time (g_c+ID), s	14.4			11.3	7.1	
Green Ext Time (p_c), s	0.0	10.4		34.0	0.2	

Intersection Summary

HCM 6th Ctrl Delay	10.9
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

OnPoint - Oceanside
8: Mission Ave & Fireside St

Existing with Project
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	17	531	0	0	1103	9	0	0	0	31	0	54
Future Volume (veh/h)	17	531	0	0	1103	9	0	0	0	31	0	54
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	0.99					1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach	No		No	No						No		
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870				1870	0	1870
Adj Flow Rate, veh/h	18	559	0	0	1161	9				33	0	57
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	2	2	2				2	0	2
Cap, veh/h	21	2997	0	2	2821	22				94	0	83
Arrive On Green	0.02	1.00	0.00	0.00	0.78	0.78				0.05	0.00	0.05
Sat Flow, veh/h	1781	3647	0	1781	3614	28				1781	0	1585
Grp Volume(v), veh/h	18	559	0	0	571	599				33	0	57
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1865				1781	0	1585
Q Serve(g_s), s	1.0	0.0	0.0	0.0	10.4	10.4				1.8	0.0	3.5
Cycle Q Clear(g_c), s	1.0	0.0	0.0	0.0	10.4	10.4				1.8	0.0	3.5
Prop In Lane	1.00	0.00	1.00	0.02						1.00		1.00
Lane Grp Cap(c), veh/h	21	2997	0	2	1387	1456				94	0	83
V/C Ratio(X)	0.85	0.19	0.00	0.00	0.41	0.41				0.35	0.00	0.68
Avail Cap(c_a), veh/h	123	2997	0	89	1387	1456				452	0	403
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	48.7	0.0	0.0	0.0	3.5	3.5				45.7	0.0	46.5
Incr Delay (d2), s/veh	27.6	0.1	0.0	0.0	0.9	0.9				2.2	0.0	9.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.6	0.1	0.0	0.0	3.0	3.2				0.8	0.0	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.3	0.1	0.0	0.0	4.5	4.4				48.0	0.0	56.0
LnGrp LOS	E	A	A	A	A	A				D	A	E
Approach Vol, veh/h	577			1170						90		
Approach Delay, s/veh	2.5			4.4						53.0		
Approach LOS	A			A						D		
Timer - Assigned Phs	1	2		4	5	6						
Phs Duration (G+Y+Rc), s	0.0	90.1		9.9	6.3	83.8						
Change Period (Y+Rc), s	5.1	5.8		4.6	5.1	5.8						
Max Green Setting (Gmax), s	54.1			25.4	6.9	52.2						
Max Q Clear Time (g_c+ID), s	2.0			5.5	3.0	12.4						
Green Ext Time (p_c), s	0.0	14.3		0.2	0.0	28.6						

Intersection Summary

HCM 6th Ctrl Delay	6.2
HCM 6th LOS	A

OnPoint - Oceanside

9: El Camino Real & Mission Ave

Existing with Project

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	152	269	116	148	478	22	147	212	89	86	730	417
Future Volume (veh/h)	152	269	116	148	478	22	147	212	89	86	730	417
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	0.99	1.00	1.00	0.97	1.00	0.99	1.00	0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	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	158	280	0	154	498	23	125	261	93	90	760	434
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	285	939		285	914	42	172	360	148	590	1177	651
Arrive On Green	0.08	0.26	0.00	0.08	0.26	0.26	0.10	0.10	0.10	0.33	0.33	0.33
Sat Flow, veh/h	3456	3554	1585	3456	3457	159	1781	3741	1536	1781	3554	1571
Grp Volume(v), veh/h	158	280	0	154	256	265	125	261	93	90	760	434
Grp Sat Flow(s), veh/h/ln	1728	1777	1585	1728	1777	1840	1781	1870	1536	1781	1777	1571
Q Serve(g_s), s	5.3	7.6	0.0	5.2	14.9	15.0	8.2	8.2	7.0	4.3	21.9	27.0
Cycle Q Clear(g_c), s	5.3	7.6	0.0	5.2	14.9	15.0	8.2	8.2	7.0	4.3	21.9	27.0
Prop In Lane	1.00	1.00	1.00	1.00	0.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	285	939		285	470	486	172	360	148	590	1177	651
V/C Ratio(X)	0.55	0.30		0.54	0.54	0.55	0.73	0.72	0.63	0.15	0.65	0.67
Avail Cap(c_a), veh/h	421	1370		398	673	697	257	540	222	813	1621	847
HCM Platoon Ratio	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.2	35.4	0.0	53.1	38.1	38.1	52.9	52.9	52.4	28.4	34.3	28.6
Incr Delay (d2), s/veh	1.7	0.8	0.0	1.6	4.5	4.4	5.8	2.8	4.3	0.1	0.6	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	0.4	3.4	0.0	2.3	7.1	7.3	4.0	4.0	2.9	1.9	9.5	10.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.9	36.2	0.0	54.7	42.6	42.5	58.8	55.7	56.7	28.5	34.9	29.9
LnGrp LOS	D	D		D	D	D	E	E	E	C	C	C
Approach Vol, veh/h	438	A		675			479			1284		
Approach Delay, s/veh	42.9			45.3			56.7			32.8		
Approach LOS	D			D			E			C		
Timer - Assigned Phs	1	2		4	5	6	8					
Phs Duration (G+Y+Rc), s	37.2	38.7		46.2	17.2	38.7	18.4					
Change Period (Y+Rc), s	7.3	6.8		6.3	7.3	6.8	6.8					
Max Green Setting (Gmax), s	46.5	46.5		55.0	14.7	45.7	17.4					
Max Q Clear Time (g_c+I), s	9.6	29.0		7.3	17.0		10.2					
Green Ext Time (p_c), s	0.2	5.8		8.2	0.3	10.0	1.4					

Intersection Summary

HCM 6th Ctrl Delay	41.2
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

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

OnPoint - Oceanside

10: Douglas Dr & Mission Ave

Existing with Project

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	52	374	55	27	600	33	50	107	21	19	102	64
Future Volume (veh/h)	52	374	55	27	600	33	50	107	21	19	102	64
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	0.99	1.00	1.00	0.99	1.00	0.99	1.00	0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	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	55	394	58	28	632	35	53	113	22	20	107	67
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	174	1248	552	56	1137	63	88	688	130	42	443	257
Arrive On Green	0.05	0.35	0.35	0.03	0.33	0.33	0.05	0.23	0.23	0.02	0.21	0.21
Sat Flow, veh/h	3456	3554	1572	1781	3422	189	1781	2973	564	1781	2152	1249
Grp Volume(v), veh/h	55	394	58	28	328	339	53	66	69	20	87	87
Grp Sat Flow(s), veh/h/ln	1728	1777	1572	1781	1777	1834	1781	1777	1760	1781	1777	1624
Q Serve(g_s), s	0.9	4.8	1.5	0.9	8.9	8.9	1.7	1.8	1.8	0.7	2.4	2.7
Cycle Q Clear(g_c), s	0.9	4.8	1.5	0.9	8.9	8.9	1.7	1.8	1.8	0.7	2.4	2.7
Prop In Lane	1.00	1.00	1.00	1.00	0.10	1.00	1.00	0.32	1.00		0.77	
Lane Grp Cap(c), veh/h	174	1248	552	56	590	609	88	411	407	42	366	334
V/C Ratio(X)	0.32	0.32	0.11	0.50	0.56	0.56	0.61	0.16	0.17	0.47	0.24	0.26
Avail Cap(c_a), veh/h	298	1709	756	178	879	907	281	1168	1157	166	1053	962
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.1	14.0	12.9	28.2	16.1	16.2	27.5	18.1	18.1	28.5	19.6	19.7
Incr Delay (d2), s/veh	1.0	0.3	0.2	6.9	1.7	1.7	6.6	0.3	0.3	8.0	0.5	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	0.4	1.8	0.5	0.5	3.5	3.7	0.9	0.7	0.7	0.4	1.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.1	14.3	13.1	35.1	17.9	17.9	34.1	18.4	18.4	36.5	20.0	20.3
LnGrp LOS	C	B	B	D	B	B	C	B	B	D	C	C
Approach Vol, veh/h	507			695			188			194		
Approach Delay, s/veh	15.6			18.6			22.8			21.8		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	26.5	8.0	17.6	8.1	25.4	6.5	19.1					
Change Period (Y+Rc), s	5.1	5.8	5.1	5.4	5.1	5.8	5.1	5.4				
Max Green Setting (Gmax), s	28.4	9.3	35.0	5.1	29.2	5.5	38.8					
Max Q Clear Time (g_c+I), s	6.8	3.7	4.7	2.9	10.9	2.7	3.8					
Green Ext Time (p_c), s	0.0	5.0	0.0	1.5	0.0	7.0	0.0	1.1				

Intersection Summary

HCM 6th Ctrl Delay	18.5
HCM 6th LOS	B

OnPoint - Oceanside
11: Roymar Rd & Via de la Valle

Existing with Project
Timing Plan: AM Peak

Intersection												
Int Delay, s/veh	5.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	84	0	38	0	26	37	4	16	0
Future Vol, veh/h	0	0	0	84	0	38	0	26	37	4	16	0
Conflicting Peds, #/hr	0	0	0	10	0	10	0	0	10	10	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	94	0	43	0	29	42	4	18	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	108	107	28	96	86	70	18	0	0	81	0	0
Stage 1	26	26	-	60	60	-	-	-	-	-	-	-
Stage 2	82	81	-	36	26	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	871	783	1047	887	804	993	1599	-	-	1517	-	-
Stage 1	992	874	-	951	845	-	-	-	-	-	-	-
Stage 2	926	828	-	980	874	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	823	773	1037	868	794	974	1599	-	-	1503	-	-
Mov Cap-2 Maneuver	823	773	-	868	794	-	-	-	-	-	-	-
Stage 1	992	871	-	941	837	-	-	-	-	-	-	-
Stage 2	877	820	-	968	871	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.7	0	1.5
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1599	-	-	-	898	1503	-	-
HCM Lane V/C Ratio	-	-	-	-	0.153	0.003	-	-
HCM Control Delay (s)	0	-	-	0	9.7	7.4	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.5	0	-	-

OnPoint - Oceanside
12: Mission Ave & Project Dwy 1

Existing with Project
Timing Plan: AM Peak

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	WBT	WBR	SBL	SBR						
Lane Configurations		↕	↕			↕						
Traffic Vol, veh/h	0	677	1123	39	0	59						
Future Vol, veh/h	0	677	1123	39	0	59						
Conflicting Peds, #/hr	0	0	0	0	0	0						
Sign Control	Free	Free	Free	Free	Stop	Stop						
RT Channelized	-	None	-	None	-	None						
Storage Length	-	-	-	-	-	0						
Veh in Median Storage, #	-	0	0	-	0	-						
Grade, %	-	0	0	-	0	-						
Peak Hour Factor	92	92	92	92	92	92						
Heavy Vehicles, %	2	2	2	2	2	2						
Mvmt Flow	0	736	1221	42	0	64						

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	632
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	-	-	0	423
Stage 1	0	-	-	0	-
Stage 2	0	-	-	0	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	423
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	15
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	423
HCM Lane V/C Ratio	-	-	-	0.152
HCM Control Delay (s)	-	-	-	15
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.5

OnPoint - Oceanside
13: Foussat Rd & Project Dwy 2

Existing with Project
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗↗↗	↗↗	
Traffic Vol, veh/h	0	0	0	161	167	98
Future Vol, veh/h	0	0	0	161	167	98
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	175	182	107

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	- 145	- 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	0 876	0 -	- -
Stage 1	0 -	0 -	- -
Stage 2	0 -	0 -	- -
Platoon blocked, %	- -	- -	- -
Mov Cap-1 Maneuver	- 876	- -	- -
Mov Cap-2 Maneuver	- -	- -	- -
Stage 1	- -	- -	- -
Stage 2	- -	- -	- -

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	- 0	-	-
HCM Lane LOS	- A	-	-
HCM 95th %tile Q(veh)	-	-	-

OnPoint - Oceanside
1: Airport Rd & SR 76

Existing with Project
Timing Plan: PM Peak

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	↖	↖↖	↖	↖	↖↖	↖	↖	↖	↖	↖	↖	↖
Lane Configurations		↖↖	↖	↖	↖↖	↖	↖	↖	↖	↖	↖	↖
Traffic Volume (veh/h)	23	2103	46	74	1280	25	128	93	84	39	69	40
Future Volume (veh/h)	23	2103	46	74	1280	25	128	93	84	39	69	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No		No		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	2237	49	79	1362	27	136	99	89	41	73	43
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	299	2349	1040	92	1895	837	140	117	105	53	152	124
Arrive On Green	0.17	0.66	0.66	0.05	0.53	0.53	0.08	0.13	0.13	0.03	0.08	0.08
Sat Flow, veh/h	1781	3554	1573	1781	3554	1570	1781	897	806	1781	1870	1527
Grp Volume(v), veh/h	24	2237	49	79	1362	27	136	0	188	41	73	43
Grp Sat Flow(s),veh/h/ln	1781	1777	1573	1781	1777	1570	1781	0	1703	1781	1870	1527
Q Serve(g_s), s	2.3	115.2	2.2	8.8	58.0	1.3	15.2	0.0	21.6	4.6	7.5	3.9
Cycle Q Clear(g_c), s	2.3	115.2	2.2	8.8	58.0	1.3	15.2	0.0	21.6	4.6	7.5	3.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.47	1.00		1.00
Lane Grp Cap(c), veh/h	299	2349	1040	92	1895	837	140	0	222	53	152	124
V/C Ratio(X)	0.08	0.95	0.05	0.86	0.72	0.03	0.97	0.00	0.85	0.78	0.48	0.35
Avail Cap(c_a), veh/h	299	2349	1040	92	2313	1022	140	0	247	56	183	150
HCM Platoon Ratio	1.00	1.00	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	0.97	0.00	0.97	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.2	31.0	11.9	94.1	35.3	13.8	91.9	0.0	85.0	96.4	87.8	47.6
Incr Delay (d2), s/veh	0.0	10.3	0.1	50.2	2.4	0.1	66.1	0.0	19.0	42.8	0.9	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	51.5	0.8	5.4	26.1	0.6	9.7	0.0	10.8	2.8	3.7	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.2	41.3	11.9	144.4	37.7	13.9	158.1	0.0	104.0	139.3	88.7	48.2
LnGrp LOS	E	D	B	F	D	B	F	A	F	F	F	D
Approach Vol, veh/h	2310			1468			324			157		
Approach Delay, s/veh	41.0			43.0			126.7			90.8		
Approach LOS	D			D			F			F		

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	140.2	21.4	22.4	41.6	114.6	11.6	32.2
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.1	8.0	* 8	* 5.7	6.1
Max Green Setting (Gmax), s	* 10	128.9	* 16	19.6	9.0	* 1.3E2	* 6.3	29.0
Max Q Clear Time (g_c+I), s	10.8	117.2	17.2	9.5	4.3	60.0	6.6	23.6
Green Ext Time (p_c), s	0.0	11.6	0.0	0.2	0.0	46.6	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	50.1
HCM 6th LOS	D

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

OnPoint - Oceanside
2: Foussat Rd & SR 76

Existing with Project
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	1994	138	170	1272	86	62	54	144	58	91	64
Future Volume (veh/h)	104	1994	138	170	1272	86	62	54	144	58	91	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No		No		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	108	2077	144	177	1325	90	65	56	150	60	95	67
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	618	2308	1025	156	1791	794	168	730	222	122	460	347
Arrive On Green	0.18	0.65	0.65	0.05	0.50	0.50	0.05	0.14	0.14	0.04	0.13	0.13
Sat Flow, veh/h	3456	3554	1578	3456	3554	1576	3456	5106	1552	3456	3554	2682
Grp Volume(v), veh/h	108	2077	144	177	1325	90	65	56	150	60	95	67
Grp Sat Flow(s),veh/h/ln	1728	1777	1578	1728	1777	1576	1728	1702	1552	1728	1777	1341
Q Serve(g_s), s	5.3	98.6	7.0	9.0	59.0	4.8	3.6	1.9	18.3	3.4	4.8	3.2
Cycle Q Clear(g_c), s	5.3	98.6	7.0	9.0	59.0	4.8	3.6	1.9	18.3	3.4	4.8	3.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	618	2308	1025	156	1791	794	168	730	222	122	460	347
V/C Ratio(X)	0.17	0.90	0.14	1.14	0.74	0.11	0.39	0.08	0.68	0.49	0.21	0.19
Avail Cap(c_a), veh/h	618	2308	1025	156	2077	921	173	996	303	126	645	487
HCM Platoon Ratio	1.00	1.00	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	69.6	29.6	13.5	95.5	39.2	16.3	92.2	74.3	81.3	94.7	77.9	39.6
Incr Delay (d2), s/veh	0.0	6.2	0.3	114.1	2.8	0.3	0.5	0.0	1.3	1.1	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	43.5	2.7	6.5	26.8	2.4	1.7	0.8	7.5	1.6	2.2	1.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.6	35.8	13.8	209.6	42.0	16.6	92.8	74.3	82.7	95.9	77.9	39.7
LnGrp LOS	E	D	B	F	D	B	F	E	F	F	E	D
Approach Vol, veh/h	2329			1592			271			222		
Approach Delay, s/veh	36.0			59.2			83.4			71.2		
Approach LOS	D			E			F			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.7	137.9	15.4	32.0	43.8	108.8	12.7	34.7				
Change Period (Y+Rc), s	5.7	8.0	5.7	6.1	8.0	8.0	5.7	6.1				
Max Green Setting (Gmax), s	119.2	10	36.3	11.3	1.2E2	7.3	39.0					
Max Q Clear Time (g_c+I),s	100.6	5.6	6.8	7.3	61.0	5.4	20.3					
Green Ext Time (p_c), s	0.0	18.3	0.0	0.4	0.0	39.8	0.0	0.3				
Intersection Summary												
HCM 6th Ctrl Delay	49.0											
HCM 6th LOS	D											
Notes												

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

OnPoint - Oceanside
3: Airport Rd & Mission Ave

Existing with Project
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	1257	11	15	859	58	15	10	17	33	11	35
Future Volume (veh/h)	28	1257	11	15	859	58	15	10	17	33	11	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	0.99	1.00	0.99	1.00	0.96	1.00	0.96	1.00	0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	No	No	No	No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	30	1352	12	16	924	62	16	11	18	24	28	38
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	47	2383	21	31	2199	148	42	29	47	142	149	121
Arrive On Green	0.03	0.66	0.66	0.03	1.00	1.00	0.07	0.07	0.07	0.08	0.08	0.08
Sat Flow, veh/h	1781	3609	32	1781	3378	227	599	412	673	1781	1870	1525
Grp Volume(v), veh/h	30	665	699	16	486	500	45	0	0	24	28	38
Grp Sat Flow(s),veh/h/ln	1781	1777	1864	1781	1777	1827	1684	0	0	1781	1870	1525
Q Serve(g_s), s	2.0	24.4	24.4	1.1	0.0	0.0	3.1	0.0	0.0	1.5	1.7	2.8
Cycle Q Clear(g_c), s	2.0	24.4	24.4	1.1	0.0	0.0	3.1	0.0	0.0	1.5	1.7	2.8
Prop In Lane	1.00		0.02	1.00		0.12	0.36		0.40	1.00		1.00
Lane Grp Cap(c), veh/h	47	1173	1231	31	1157	1190	117	0	0	142	149	121
V/C Ratio(X)	0.64	0.57	0.57	0.52	0.42	0.42	0.38	0.00	0.00	0.17	0.19	0.31
Avail Cap(c_a), veh/h	98	1173	1231	77	1157	1190	286	0	0	303	318	259
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.93	0.93	0.93	1.00	0.00	0.00	0.85	0.85	0.85
Uniform Delay (d), s/veh	57.9	11.1	11.1	57.4	0.0	0.0	53.3	0.0	0.0	51.5	51.6	52.1
Incr Delay (d2), s/veh	13.6	2.0	1.9	12.2	1.0	1.0	2.9	0.0	0.0	0.7	0.7	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	14.1	9.6	10.1	0.6	0.3	0.3	1.4	0.0	0.0	0.7	0.8	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.4	13.1	13.0	69.6	1.0	1.0	56.3	0.0	0.0	52.2	52.3	53.9
LnGrp LOS	E	B	B	E	A	A	E	A	A	D	D	D
Approach Vol, veh/h	1394			1002			45			90		
Approach Delay, s/veh	14.3			2.1			56.3			53.0		
Approach LOS	B			A			E			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	85.4			14.1			8.6			84.3		
Change Period (Y+Rc), s	6.2			4.6			5.4			6.2		
Max Green Setting (Gmax), s	53.2			20.4			6.6			51.8		
Max Q Clear Time (g_c+I),s	26.4			4.8			4.0			2.0		
Green Ext Time (p_c), s	0.0			22.6			0.3			0.0		
Intersection Summary												
HCM 6th Ctrl Delay			11.6									
HCM 6th LOS			B									
Notes												

User approved volume balancing among the lanes for turning movement.

OnPoint - Oceanside
4: Roymar Rd & Mission Ave

Existing with Project
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	1228	33	56	857	17	37	0	104	107	0	22
Future Volume (veh/h)	56	1228	33	56	857	17	37	0	104	107	0	22
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	1.00	1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	1320	35	60	922	18	40	0	112	115	0	24
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	77	2242	945	77	2136	42	60	0	356	60	0	356
Arrive On Green	0.04	0.60	0.60	0.09	1.00	1.00	0.23	0.00	0.23	0.23	0.00	0.23
Sat Flow, veh/h	1781	3741	1577	1781	3564	70	0	0	1564	0	0	1564
Grp Volume(v), veh/h	60	1320	35	60	460	480	40	0	112	115	0	24
Grp Sat Flow(s),veh/h/ln	1781	1870	1577	1781	1777	1857	0	0	1564	0	0	1564
Q Serve(g_s), s	4.0	26.2	1.1	4.0	0.0	0.0	0.0	0.0	7.1	0.0	0.0	1.4
Cycle Q Clear(g_c), s	4.0	26.2	1.1	4.0	2.0	0.0	27.3	0.0	7.1	27.3	0.0	1.4
Prop In Lane	1.00	1.00	1.00	1.00	0.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	77	2242	945	77	1065	1113	60	0	356	60	0	356
V/C Ratio(X)	0.78	0.59	0.04	0.78	0.43	0.43	0.67	0.00	0.31	1.92	0.00	0.07
Avail Cap(c_a), veh/h	88	2242	945	147	1065	1113	60	0	356	60	0	356
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.82	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.8	14.9	9.9	54.3	0.0	0.0	60.0	0.0	38.6	60.0	0.0	36.4
Incr Delay (d2), s/veh	26.9	0.9	0.1	15.5	1.3	1.2	24.6	0.0	0.5	467.8	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	11.0	0.4	2.0	0.4	0.4	1.6	0.0	2.8	9.6	0.0	0.6	
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.7	15.8	9.9	69.8	1.3	1.2	84.6	0.0	39.1	527.8	0.0	36.4
LnGrp LOS	F	B	A	E	A	A	F	A	D	F	A	D
Approach Vol, veh/h	1415			1000			152			139		
Approach Delay, s/veh	18.6			5.4			51.1			443.0		
Approach LOS	B			A			D			F		

Intersection Summary												
HCM 6th Ctrl Delay	37.3											
HCM 6th LOS	D											
Notes												
User approved volume balancing among the lanes for turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

OnPoint - Oceanside
5: Foussat Rd & Mission Ave

Existing with Project
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	1294	64	30	759	39	47	94	29	61	121	80
Future Volume (veh/h)	109	1294	64	30	759	39	47	94	29	61	121	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	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	116	1377	68	32	807	41	50	100	31	65	129	85
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	585	2185	108	49	1164	573	117	259	77	127	354	1180
Arrive On Green	0.66	1.00	1.00	0.05	0.66	0.66	0.03	0.10	0.10	0.04	0.10	0.10
Sat Flow, veh/h	1781	3446	170	1781	3554	1571	3456	2681	793	3456	3554	2650
Grp Volume(v), veh/h	116	709	736	32	807	41	50	65	66	65	129	85
Grp Sat Flow(s),veh/h/ln	1781	1777	1839	1781	1777	1571	1728	1777	1698	1728	1777	1325
Q Serve(g_s), s	3.1	0.0	0.0	2.1	17.2	0.2	1.7	4.1	4.4	2.2	4.1	0.3
Cycle Q Clear(g_c), s	3.1	0.0	0.0	2.1	17.2	0.2	1.7	4.1	4.4	2.2	4.1	0.3
Prop In Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	585	1127	1166	49	1164	573	117	172	164	127	354	1180
V/C Ratio(X)	0.20	0.63	0.63	0.66	0.69	0.07	0.43	0.38	0.40	0.51	0.36	0.07
Avail Cap(c_a), veh/h	585	1127	1166	88	1697	808	150	342	327	158	693	1432
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.4	0.0	0.0	56.2	16.9	5.3	56.8	50.8	51.0	56.7	50.5	9.5
Incr Delay (d2), s/veh	0.2	2.7	2.6	13.7	3.3	0.2	2.5	1.4	1.6	3.1	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.8	0.8	1.1	5.1	0.2	0.8	1.9	2.0	1.0	1.8	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.6	2.7	2.6	69.8	20.2	5.5	59.3	52.2	52.6	59.8	51.1	9.6
LnGrp LOS	B	A	A	E	C	A	E	D	D	E	D	A
Approach Vol, veh/h	1561			880			181			279		
Approach Delay, s/veh	3.5			21.3			54.3			40.5		
Approach LOS	A			C			D			D		

Intersection Summary												
HCM 6th Ctrl Delay	15.6											
HCM 6th LOS	B											
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

OnPoint - Oceanside
6: Copperwood Wy & Mission Ave

Existing with Project
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	4	1277	91	55	706	7	96	2	108	5	1	7
Future Volume (veh/h)	4	1277	91	55	706	7	96	2	108	5	1	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.97	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	1388	99	60	767	8	104	2	117	5	1	8
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	6	2221	158	77	2523	26	199	4	175	9	2	14
Arrive On Green	0.01	1.00	1.00	0.09	1.00	1.00	0.11	0.11	0.11	0.02	0.02	0.02
Sat Flow, veh/h	1781	3363	239	1781	3603	38	1749	34	1543	569	114	911
Grp Volume(v), veh/h	4	731	756	60	378	397	106	0	117	14	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1825	1781	1777	1863	1783	0	1543	1594	0	0
Q Serve(g_s), s	0.3	0.0	0.0	4.0	0.0	0.0	6.7	0.0	8.7	1.0	0.0	0.0
Cycle Q Clear(g_c), s	0.3	0.0	0.0	4.0	0.0	0.0	6.7	0.0	8.7	1.0	0.0	0.0
Prop In Lane	1.00		0.13	1.00		0.02	0.98		1.00	0.36		0.57
Lane Grp Cap(c), veh/h	6	1173	1205	77	1244	1305	202	0	175	25	0	0
V/C Ratio(X)	0.72	0.62	0.63	0.78	0.30	0.30	0.52	0.00	0.67	0.57	0.00	0.00
Avail Cap(c_a), veh/h	46	1173	1205	132	1244	1305	376	0	325	69	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.74	0.74	0.74	0.97	0.97	0.97	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	59.6	0.0	0.0	54.3	0.0	0.0	50.1	0.0	51.0	58.7	0.0	0.0
Incr Delay (d2), s/veh	80.9	1.9	1.8	6.2	0.0	0.6	2.1	0.0	4.3	18.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.6	0.6	1.8	0.2	0.2	3.1	0.0	3.6	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	140.5	1.9	1.8	60.5	0.6	0.6	52.2	0.0	55.4	77.3	0.0	0.0
LnGrp LOS	F	A	A	E	A	A	D	A	E	E	A	A
Approach Vol, veh/h	1491			835			223				14	
Approach Delay, s/veh	2.2			4.9			53.9				77.3	
Approach LOS	A			A			D				E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	30.3	85.0		6.5	5.5	89.8		18.2				
Change Period (Y+Rc), s	5.1	5.8		4.6	5.1	5.8		4.6				
Max Green Setting (Gmax), s	60.5			5.2	3.1	66.3		25.3				
Max Q Clear Time (g_c+I),s	2.0			3.0	2.3	2.0		10.7				
Green Ext Time (p_c), s	0.0	48.2		0.0	0.0	22.2		0.8				

Intersection Summary

HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

OnPoint - Oceanside
7: Frontier Dr & Mission Ave

Existing with Project
Timing Plan: PM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↱	↱	↰	↱	↰	↱
Traffic Volume (veh/h)	1242	45	45	753	28	41
Future Volume (veh/h)	1242	45	45	753	28	41
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	1.00		1.00	0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	1280	46	46	776	29	42
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	2653	95	59	2965	52	75
Arrive On Green	1.00	1.00	0.03	0.83	0.08	0.08
Sat Flow, veh/h	3592	126	1781	3647	654	947
Grp Volume(v), veh/h	650	676	46	776	72	0
Grp Sat Flow(s),veh/h/ln	1777	1847	1781	1777	1623	0
Q Serve(g_s), s	0.0	0.0	3.1	5.6	5.1	0.0
Cycle Q Clear(g_c), s	0.0	0.0	3.1	5.6	5.1	0.0
Prop In Lane		0.07	1.00		0.40	0.58
Lane Grp Cap(c), veh/h	1348	1401	59	2965	128	0
V/C Ratio(X)	0.48	0.48	0.78	0.26	0.56	0.00
Avail Cap(c_a), veh/h	1348	1401	162	2965	357	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.75	0.75	0.93	0.93	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	57.6	2.1	53.2	0.0
Incr Delay (d2), s/veh	0.9	0.9	7.3	0.2	3.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.3	1.5	1.4	2.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.9	0.9	64.9	2.3	57.0	0.0
LnGrp LOS	A	A	E	A	E	A
Approach Vol, veh/h	1326			822	72	
Approach Delay, s/veh	0.9			5.8	57.0	
Approach LOS	A			A	E	
Timer - Assigned Phs	1	2		6		8
Phs Duration (G+Y+Rc), s	9.1	96.8		105.9		14.1
Change Period (Y+Rc), s	5.1	5.8		5.8		4.6
Max Green Setting (Gmax), s	9.1	67.2		83.2		26.4
Max Q Clear Time (g_c+I),s	2.0			7.6		7.1
Green Ext Time (p_c), s	0.0	46.8		24.6		0.2

Intersection Summary

HCM 6th Ctrl Delay	4.5
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

OnPoint - Oceanside
8: Mission Ave & Fireside St

Existing with Project
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱					↰	↱	↰
Traffic Volume (veh/h)	234	1037	0	0	670	97	0	0	0	50	0	113
Future Volume (veh/h)	234	1037	0	0	670	97	0	0	0	50	0	113
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach	No			No						No		
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870				1870	0	1870
Adj Flow Rate, veh/h	241	1069	0	0	691	100				52	0	116
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97				0.97	0.97	0.97
Percent Heavy Veh, %	2	2	0	2	2	2				2	0	2
Cap, veh/h	270	2920	0	1	1953	282				163	0	145
Arrive On Green	0.15	0.82	0.00	0.00	0.63	0.63				0.09	0.00	0.09
Sat Flow, veh/h	1781	3647	0	1781	3112	450				1781	0	1585
Grp Volume(v), veh/h	241	1069	0	0	394	397				52	0	116
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1785				1781	0	1585
Q Serve(g_s), s	15.9	9.2	0.0	0.0	12.7	12.8				3.3	0.0	8.6
Cycle Q Clear(g_c), s	15.9	9.2	0.0	0.0	12.7	12.8				3.3	0.0	8.6
Prop In Lane	1.00		0.00	1.00		0.25				1.00		1.00
Lane Grp Cap(c), veh/h	270	2920	0	1	1115	1120				163	0	145
V/C Ratio(X)	0.89	0.37	0.00	0.00	0.35	0.35				0.32	0.00	0.80
Avail Cap(c_a), veh/h	474	2920	0	74	1115	1120				407	0	362
HCM Platoon Ratio	1.00	1.00	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	49.9	2.7	0.0	0.0	10.7	10.7				51.0	0.0	53.4
Incr Delay (d2), s/veh	4.2	0.3	0.0	0.0	0.9	0.9				1.1	0.0	9.6
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	4	2.5	0.0	0.0	5.1	5.1				1.5	0.0	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.1	3.0	0.0	0.0	11.6	11.6				52.1	0.0	63.0
LnGrp LOS	D	A	A	A	B	B				D	A	E
Approach Vol, veh/h	1310				791					168		
Approach Delay, s/veh	12.4				11.6					59.7		
Approach LOS	B				B					E		
Timer - Assigned Phs	1	2		4	5	6						
Phs Duration (G+Y+Rc), s	104.4			15.6	23.3	81.1						
Change Period (Y+Rc), s	5.1	5.8		4.6	5.1	5.8						
Max Green Setting (Gmax), s	72.1			27.4	31.9	45.2						
Max Q Clear Time (g_c+I), s	11.2			10.6	17.9	14.8						
Green Ext Time (p_c), s	0.0	35.1		0.4	0.3	16.2						
Intersection Summary												
HCM 6th Ctrl Delay			15.6									
HCM 6th LOS			B									

OnPoint - Oceanside
9: El Camino Real & Mission Ave

Existing with Project
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱					↰	↱	↰
Traffic Volume (veh/h)	380	586	148	118	271	101	222	693	243	165	414	302
Future Volume (veh/h)	380	586	148	118	271	101	222	693	243	165	414	302
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00			0.99	1.00	0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No						No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	413	637	0	128	295	110	241	753	264	179	450	328
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	422	973		237	560	204	397	835	349	440	877	580
Arrive On Green	0.12	0.27	0.00	0.07	0.22	0.22	0.22	0.22	0.22	0.25	0.25	0.25
Sat Flow, veh/h	3456	3554	1585	3456	2540	925	1781	3741	1564	1781	3554	1566
Grp Volume(v), veh/h	413	637	0	128	204	201	241	753	264	179	450	328
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1689	1781	1870	1564	1781	1777	1566
Q Serve(g_s), s	17.3	23.0	0.0	5.2	14.7	15.2	17.6	28.4	22.9	12.2	15.8	24.2
Cycle Q Clear(g_c), s	17.3	23.0	0.0	5.2	14.7	15.2	17.6	28.4	22.9	12.2	15.8	24.2
Prop In Lane	1.00		1.00	1.00	0.55	1.00		1.00	1.00	1.00		1.00
Lane Grp Cap(c), veh/h	422	973		237	391	372	397	835	349	440	877	580
V/C Ratio(X)	0.98	0.65		0.54	0.52	0.54	0.61	0.90	0.76	0.41	0.51	0.57
Avail Cap(c_a), veh/h	422	1280		279	566	538	412	864	361	681	1358	792
HCM Platoon Ratio	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.4	46.6	0.0	65.3	49.8	50.0	50.6	54.8	52.6	45.7	47.1	36.5
Incr Delay (d2), s/veh	38.1	3.4	0.0	1.9	4.9	5.5	2.4	12.4	8.6	0.6	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8	10.7	0.0	2.4	7.1	7.1	8.2	14.8	9.8	5.5	7.1	9.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	101.6	50.0	0.0	67.2	54.7	55.5	53.0	67.2	61.2	46.3	47.5	37.4
LnGrp LOS	F	D		E	D	E	D	E	E	D	D	D
Approach Vol, veh/h	1050		A		533			1258			957	
Approach Delay, s/veh	70.3				58.0			63.2			43.8	
Approach LOS	E				E			E			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	72	46.5		42.1	25.0	38.7		39.1				
Change Period (Y+Rc), s	6.8	6.8		6.3	7.3	6.8		6.8				
Max Green Setting (Gmax), s	52.2			55.4	17.7	46.2		33.5				
Max Q Clear Time (g_c+I), s	25.0			26.2	19.3	17.2		30.4				
Green Ext Time (p_c), s	0.1	12.5		5.2	0.0	7.7		2.0				
Intersection Summary												
HCM 6th Ctrl Delay			59.6									
HCM 6th LOS			E									
Notes												
User approved volume balancing among the lanes for turning movement.												
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.												

OnPoint - Oceanside
10: Douglas Dr & Mission Ave

Existing with Project
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	65	962	50	31	422	32	58	96	23	22	108	79
Future Volume (veh/h)	65	962	50	31	422	32	58	96	23	22	108	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	0.99	1.00	0.99	1.00	0.99	1.00	0.98	1.00	0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	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	66	982	51	32	431	33	59	98	23	22	110	81
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	183	1440	638	60	1290	98	89	616	140	45	383	258
Arrive On Green	0.05	0.41	0.41	0.03	0.39	0.39	0.05	0.21	0.21	0.03	0.19	0.19
Sat Flow, veh/h	3456	3554	1573	1781	3344	255	1781	2868	651	1781	2015	1361
Grp Volume(v), veh/h	66	982	51	32	228	236	59	59	62	22	96	95
Grp Sat Flow(s),veh/h/ln	1728	1777	1573	1781	1777	1822	1781	1777	1742	1781	1777	1600
Q Serve(g_s), s	1.2	15.1	1.3	1.2	6.0	6.1	2.2	1.8	1.9	0.8	3.1	3.4
Cycle Q Clear(g_c), s	1.2	15.1	1.3	1.2	6.0	6.1	2.2	1.8	1.9	0.8	3.1	3.4
Prop In Lane	1.00	1.00	1.00	1.00	0.14	1.00	0.37	1.00	0.85	1.00	0.85	1.00
Lane Grp Cap(c), veh/h	183	1440	638	60	686	703	89	381	374	45	337	304
V/C Ratio(X)	0.36	0.68	0.08	0.54	0.33	0.34	0.66	0.16	0.16	0.49	0.28	0.31
Avail Cap(c_a), veh/h	275	1745	773	134	865	887	158	939	921	153	934	841
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.4	16.3	12.2	31.7	14.4	14.4	31.1	21.2	21.3	32.0	23.1	23.2
Incr Delay (d2), s/veh	1.2	1.4	0.1	7.3	0.6	0.6	8.2	0.3	0.3	8.1	0.7	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	5.8	0.4	0.6	2.3	2.4	1.1	0.7	0.8	0.4	1.3	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.6	17.7	12.3	38.9	15.0	15.0	39.3	21.5	21.6	40.2	23.7	24.1
LnGrp LOS	C	B	B	D	B	B	D	C	C	D	C	C
Approach Vol, veh/h	1099			496			180			213		
Approach Delay, s/veh	18.3			16.6			27.4			25.6		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s/3	32.8	8.4	18.0	8.6	31.5	6.8	19.7					
Change Period (Y+Rc), s 5.1	5.8	5.1	5.4	5.1	5.8	5.1	5.4					
Max Green Setting (Gmax),s	32.7	5.9	35.0	5.3	32.4	5.7	35.2					
Max Q Clear Time (g_c+I),s	17.1	4.2	5.4	3.2	8.1	2.8	3.9					
Green Ext Time (p_c), s	0.0	9.9	0.0	1.6	0.0	5.3	0.0	0.9				
Intersection Summary												
HCM 6th Ctrl Delay				19.4								
HCM 6th LOS				B								

OnPoint - Oceanside
11: Roymar Rd & Via de la Valle

Existing with Project
Timing Plan: PM Peak

Intersection												
Int Delay, s/veh	5.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Vol, veh/h	0	0	0	94	0	42	0	27	48	6	35	0
Future Vol, veh/h	0	0	0	94	0	42	0	27	48	6	35	0
Conflicting Peds, #/hr	0	0	0	10	0	10	0	0	10	10	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	101	0	45	0	29	52	6	38	0
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	138	141	48	125	115	75	38	0	0	91	0	0
Stage 1	50	50	-	65	65	-	-	-	-	-	-	-
Stage 2	88	91	-	60	50	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	833	750	1021	849	775	986	1572	-	-	1504	-	-
Stage 1	963	853	-	946	841	-	-	-	-	-	-	-
Stage 2	920	820	-	951	853	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	784	740	1011	830	764	967	1572	-	-	1490	-	-
Mov Cap-2 Maneuver	784	740	-	830	764	-	-	-	-	-	-	-
Stage 1	963	850	-	937	833	-	-	-	-	-	-	-
Stage 2	869	812	-	938	850	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			10			0			1.1		
HCM LOS	A			B								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1572	-	-	-	868	1490	-	-				
HCM Lane V/C Ratio	-	-	-	-	0.168	0.004	-	-				
HCM Control Delay (s)	0	-	-	0	10	7.4	0	-				
HCM Lane LOS	A	-	-	A	B	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	-	0.6	0	-	-				

OnPoint - Oceanside
12: Mission Ave & Project Dwy 1

Existing with Project
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕			↕
Traffic Vol, veh/h	0	1467	856	49	0	74
Future Vol, veh/h	0	1467	856	49	0	74
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1595	930	53	0	80

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	-	0	-	0	-	492
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	-	-	-	0	522
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	522
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	13.1
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	522
HCM Lane V/C Ratio	-	-	-	0.154
HCM Control Delay (s)	-	-	-	13.1
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.5

OnPoint - Oceanside
13: Foussat Rd & Project Dwy 2

Existing with Project
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↰		↰↰↰	↰↰	
Traffic Vol, veh/h	0	0	0	259	262	121
Future Vol, veh/h	0	0	0	259	262	121
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	282	285	132

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	-	209	-	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	797	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	797	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

APPENDIX F

OPENING YEAR CONDITIONS SYNCHRO PEAK-HOUR INTERSECTION ANALYSIS SHEETS

OnPoint - Oceanside
1: Airport Rd & SR 76

Opening Day Baseline
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	24	1312	81	59	2108	25	81	27	89	38	31	11
Future Volume (veh/h)	24	1312	81	59	2108	25	81	27	89	38	31	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	1367	84	61	2196	26	84	28	93	40	32	11
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	192	2321	1027	77	2052	907	106	49	163	79	218	180
Arrive On Green	0.11	0.65	0.65	0.04	0.58	0.58	0.06	0.13	0.13	0.04	0.12	0.12
Sat Flow, veh/h	1781	3554	1573	1781	3554	1571	1781	373	1240	1781	1870	1544
Grp Volume(v), veh/h	25	1367	84	61	2196	26	84	0	121	40	32	11
Grp Sat Flow(s),veh/h/ln	1781	1777	1573	1781	1777	1571	1781	0	1613	1781	1870	1544
Q Serve(g_s), s	2.5	43.4	3.9	6.8	115.5	1.0	9.3	0.0	14.1	4.4	3.1	1.0
Cycle Q Clear(g_c), s	2.5	43.4	3.9	6.8	115.5	1.0	9.3	0.0	14.1	4.4	3.1	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.77	1.00		1.00
Lane Grp Cap(c), veh/h	192	2321	1027	77	2052	907	106	0	212	79	218	180
V/C Ratio(X)	0.13	0.59	0.08	0.79	1.07	0.03	0.79	0.00	0.57	0.50	0.15	0.06
Avail Cap(c_a), veh/h	192	2321	1027	80	2052	907	131	0	315	89	321	265
HCM Platoon Ratio	1.00	1.00	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	0.96	0.00	0.96	1.00	1.00	1.00
Uniform Delay (d), s/veh	80.8	19.5	12.7	94.7	42.3	9.7	92.8	0.0	81.6	93.4	79.4	50.1
Incr Delay (d2), s/veh	0.1	1.1	0.2	35.3	41.7	0.1	17.9	0.0	0.9	1.8	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	18.5	1.5	3.9	61.8	0.6	4.9	0.0	6.0	2.1	1.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.9	20.6	12.9	130.0	83.9	9.8	110.8	0.0	82.5	95.2	79.6	50.2
LnGrp LOS	F	C	B	F	F	A	F	A	F	F	E	D
Approach Vol, veh/h		1476			2283			205			83	
Approach Delay, s/veh		21.2			84.3			94.1			83.2	
Approach LOS		C			F			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.4	138.6	17.6	29.4	29.5	123.5	14.6	32.3				
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.1	8.0	* 8	* 5.7	6.1				
Max Green Setting (Gmax), s	* 9	116.5	* 15	34.3	10.0	* 12E2	* 10	39.0				
Max Q Clear Time (g_c+I1), s	8.8	45.4	11.3	5.1	4.5	117.5	6.4	16.1				
Green Ext Time (p_c), s	0.0	48.6	0.0	0.1	0.0	0.0	0.0	0.4				
Intersection Summary												
HCM 6th Ctrl Delay			61.8									
HCM 6th LOS			E									
Notes												

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

OnPoint - Oceanside
2: Foussat Rd & SR 76

Opening Day Baseline
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	30	1389	44	71	2123	34	37	38	72	52	27	41
Future Volume (veh/h)	30	1389	44	71	2123	34	37	38	72	52	27	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	30	1403	44	72	2144	34	37	38	73	53	27	41
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	530	2198	976	204	1821	808	196	682	207	213	492	372
Arrive On Green	0.15	0.62	0.62	0.06	0.51	0.51	0.06	0.13	0.13	0.06	0.14	0.14
Sat Flow, veh/h	3456	3554	1577	3456	3554	1576	3456	5106	1549	3456	3554	2689
Grp Volume(v), veh/h	30	1403	44	72	2144	34	37	38	73	53	27	41
Grp Sat Flow(s),veh/h/ln	1728	1777	1577	1728	1777	1576	1728	1702	1549	1728	1777	1344
Q Serve(g_s), s	1.5	49.8	2.2	4.0	102.5	1.6	2.0	1.3	8.6	2.9	1.3	2.0
Cycle Q Clear(g_c), s	1.5	49.8	2.2	4.0	102.5	1.6	2.0	1.3	8.6	2.9	1.3	2.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	530	2198	976	204	1821	808	196	682	207	213	492	372
V/C Ratio(X)	0.06	0.64	0.05	0.35	1.18	0.04	0.19	0.06	0.35	0.25	0.05	0.11
Avail Cap(c_a), veh/h	530	2198	976	207	1821	808	225	1174	356	225	817	618
HCM Platoon Ratio	1.00	1.00	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	72.3	24.1	15.0	90.5	48.8	13.1	89.9	75.6	78.8	89.4	74.8	41.3
Incr Delay (d2), s/veh	0.0	1.4	0.1	0.4	85.8	0.1	0.2	0.0	0.4	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	21.7	0.9	1.8	66.9	0.9	0.9	0.6	3.5	1.3	0.6	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.3	25.5	15.1	90.8	134.6	13.2	90.1	75.7	79.2	89.7	74.8	41.3
LnGrp LOS	E	C	B	F	F	F	F	E	E	F	E	D
Approach Vol, veh/h		1477			2250			148			121	
Approach Delay, s/veh		26.1			131.4			81.0			70.0	
Approach LOS		C			F			F			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.4	131.7	17.0	33.8	38.7	110.5	18.0	32.8				
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.1	8.0	* 8	* 5.7	6.1				
Max Green Setting (Gmax), s	* 9	103.5	* 13	46.0	13.0	* 1E2	* 13	46.0				
Max Q Clear Time (g_c+I1), s	8.8	51.8	4.0	4.0	3.5	104.5	4.9	10.6				
Green Ext Time (p_c), s	0.0	39.0	0.0	0.1	0.0	0.0	0.0	0.2				
Intersection Summary												
HCM 6th Ctrl Delay				88.7								
HCM 6th LOS				F								
Notes												

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

OnPoint - Oceanside
3: Airport Rd & Mission Ave

Opening Day Baseline
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱			↰	↱	↰	↱	↰
Traffic Volume (veh/h)	38	568	6	7	1063	101	13	20	19	44	17	17
Future Volume (veh/h)	38	568	6	7	1063	101	13	20	19	44	17	17
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	0.99	1.00	0.99	1.00	1.00	0.96	1.00	0.97		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	39	586	6	7	1096	104	13	21	20	32	37	18
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	59	2209	23	16	1930	183	33	53	51	160	168	137
Arrive On Green	0.03	0.61	0.61	0.01	0.39	0.39	0.08	0.08	0.08	0.09	0.09	0.09
Sat Flow, veh/h	1781	3603	37	1781	3277	311	411	664	632	1781	1870	1532
Grp Volume(v), veh/h	39	289	303	7	594	606	54	0	0	32	37	18
Grp Sat Flow(s),veh/h/ln	1781	1777	1863	1781	1777	1811	1707	0	0	1781	1870	1532
Q Serve(g_s), s	2.2	7.5	7.5	0.4	26.1	26.1	3.0	0.0	0.0	1.7	1.8	1.1
Cycle Q Clear(g_c), s	2.2	7.5	7.5	0.4	26.1	26.1	3.0	0.0	0.0	1.7	1.8	1.1
Prop In Lane	1.00		0.02	1.00		0.17	0.24		0.37	1.00		1.00
Lane Grp Cap(c), veh/h	59	1089	1143	16	1046	1067	137	0	0	160	168	137
V/C Ratio(X)	0.66	0.27	0.27	0.44	0.57	0.57	0.39	0.00	0.00	0.20	0.22	0.13
Avail Cap(c_a), veh/h	93	1089	1143	89	1046	1067	348	0	0	363	382	313
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	0.89	0.89	0.89	1.00	0.00	0.00	0.96	0.96	0.96
Uniform Delay (d), s/veh	47.8	8.9	8.9	49.5	20.3	20.4	43.7	0.0	0.0	42.2	42.3	41.9
Incr Delay (d2), s/veh	12.0	0.6	0.6	16.5	2.0	2.0	2.6	0.0	0.0	0.8	0.9	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	4.2	2.9	3.0	0.2	12.0	12.2	1.4	0.0	0.0	0.8	0.9	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.8	9.5	9.5	66.0	22.3	22.3	46.3	0.0	0.0	43.0	43.2	42.5
LnGrp LOS	E	A	A	E	C	C	D	A	A	D	D	D
Approach Vol, veh/h	631			1207			54			87		
Approach Delay, s/veh	12.6			22.6			46.3			43.0		
Approach LOS	B			C			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	67.5			13.6	8.7	65.1		12.6				
Change Period (Y+Rc), s	5.4	6.2		4.6	5.4	6.2		4.6				
Max Green Setting (Gmax), s	33.4			20.4	5.2	33.2		20.4				
Max Q Clear Time (g_c+I), s	9.5			3.8	4.2	28.1		5.0				
Green Ext Time (p_c), s	0.0	9.8		0.3	0.0	4.6		0.2				

Intersection Summary

HCM 6th Ctrl Delay	20.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

OnPoint - Oceanside
4: Roymar Rd & Mission Ave

Opening Day Baseline
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱			↰	↱	↰	↱	↰
Traffic Volume (veh/h)	17	560	48	78	1098	19	67	0	103	19	0	10
Future Volume (veh/h)	17	560	48	78	1098	19	67	0	103	19	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	0.99	1.00	0.99	1.00	1.00	0.99	1.00	0.99	1.00	0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	577	49	80	1132	20	69	0	106	20	0	10
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	35	1885	794	102	1934	34	72	0	444	72	0	444
Arrive On Green	0.02	0.50	0.50	0.11	1.00	1.00	0.28	0.00	0.28	0.28	0.00	0.28
Sat Flow, veh/h	1781	3741	1576	1781	3572	63	0	0	1568	0	0	1568
Grp Volume(v), veh/h	18	577	49	80	563	589	69	0	106	20	0	10
Grp Sat Flow(s),veh/h/ln	1781	1870	1576	1781	1777	1858	0	0	1568	0	0	1568
Q Serve(g_s), s	1.0	9.0	1.6	4.4	0.0	0.0	0.0	0.0	5.2	0.0	0.0	0.5
Cycle Q Clear(g_c), s	1.0	9.0	1.6	4.4	0.0	0.0	28.3	0.0	5.2	28.3	0.0	0.5
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	35	1885	794	102	962	1006	72	0	444	72	0	444
V/C Ratio(X)	0.51	0.31	0.06	0.79	0.59	0.59	0.96	0.00	0.24	0.28	0.00	0.02
Avail Cap(c_a), veh/h	105	1885	794	141	962	1006	72	0	444	72	0	444
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.5	14.5	12.7	43.7	0.0	0.0	50.0	0.0	27.6	50.0	0.0	25.9
Incr Delay (d2), s/veh	10.9	0.4	0.1	17.9	2.6	2.5	91.4	0.0	0.3	2.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	3.8	0.6	2.3	0.7	0.7	3.5	0.0	2.0	0.5	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.5	15.0	12.8	61.7	2.6	2.5	141.4	0.0	27.8	52.1	0.0	25.9
LnGrp LOS	E	B	B	E	A	A	F	A	C	D	A	C
Approach Vol, veh/h	644			1232			175			30		
Approach Delay, s/veh	16.0			6.4			72.6			43.3		
Approach LOS	B			A			E			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	56.2			33.0	7.1	59.9		33.0				
Change Period (Y+Rc), s	5.1	5.8		* 4.7	5.1	5.8		* 4.7				
Max Green Setting (Gmax), s	48.2			* 28	5.9	50.2		* 28				
Max Q Clear Time (g_c+I), s	11.0			30.3	3.0	2.0		30.3				
Green Ext Time (p_c), s	0.0	14.0		0.0	0.0	32.3		0.0				

Intersection Summary

HCM 6th Ctrl Delay	15.5
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

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

OnPoint - Oceanside
5: Foussat Rd & Mission Ave

Opening Day Baseline
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	540	48	22	1065	30	43	79	35	32	70	91
Future Volume (veh/h)	78	540	48	22	1065	30	43	79	35	32	70	91
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	0.99	1.00	0.99	1.00	1.00	0.97	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	81	562	50	23	1109	31	45	82	36	33	73	95
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	432	1978	176	42	1328	635	123	246	101	104	339	928
Arrive On Green	0.48	1.00	1.00	0.05	0.75	0.75	0.04	0.10	0.10	0.01	0.03	0.03
Sat Flow, veh/h	1781	3300	293	1781	3554	1572	3456	2433	999	3456	3554	2643
Grp Volume(v), veh/h	81	302	310	23	1109	31	45	58	60	33	73	95
Grp Sat Flow(s), veh/h/ln	1781	1777	1816	1781	1777	1572	1728	1777	1655	1728	1777	1322
Q Serve(g_s), s	2.6	0.0	0.0	1.3	21.0	0.1	1.3	3.1	3.4	0.9	2.0	0.4
Cycle Q Clear(g_c), s	2.6	0.0	0.0	1.3	21.0	0.1	1.3	3.1	3.4	0.9	2.0	0.4
Prop In Lane	1.00	0.16	1.00	1.00	1.00	1.00	0.60	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	432	1065	1088	42	1328	635	123	179	167	104	339	928
V/C Ratio(X)	0.19	0.28	0.28	0.55	0.84	0.05	0.37	0.33	0.36	0.32	0.22	0.10
Avail Cap(c_a), veh/h	432	1065	1088	100	1439	684	173	409	381	173	817	1284
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.92	0.92	0.92	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.2	0.0	0.0	47.1	10.6	2.5	47.1	41.8	41.9	48.5	44.8	11.3
Incr Delay (d2), s/veh	0.2	0.7	0.7	9.8	5.9	0.1	1.8	1.0	1.3	1.7	0.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	1.1	0.2	0.2	0.7	4.8	0.1	0.6	1.4	1.4	0.4	0.9	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.4	0.7	0.7	56.9	16.4	2.6	48.9	42.8	43.2	50.2	45.1	11.4
LnGrp LOS	C	A	A	E	B	A	D	D	D	D	D	B
Approach Vol, veh/h	693			1163			163			201		
Approach Delay, s/veh	3.0			16.8			44.6			30.0		
Approach LOS	A			B			D			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	66.7	9.2	15.6	31.0	44.2	8.6	16.2					
Change Period (Y+Rc), s	6.1	6.8	5.6	6.1	6.8	* 6.8	5.6	6.1				
Max Green Setting (Gmax), s	41.8	5.0	23.0	6.9	* 41	5.0	23.0					
Max Q Clear Time (g_c+I), s	2.0	3.3	4.0	4.6	23.0	2.9	5.4					
Green Ext Time (p_c), s	0.0	13.9	0.0	0.7	0.0	14.4	0.0	0.5				
Intersection Summary												
HCM 6th Ctrl Delay				15.7								
HCM 6th LOS				B								
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

OnPoint - Oceanside
6: Copperwood Wy & Mission Ave

Opening Day Baseline
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	487	90	91	1045	8	47	6	41	4	0	7
Future Volume (veh/h)	7	487	90	91	1045	8	47	6	41	4	0	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	0.99	1.00	0.99	1.00	1.00	0.96	1.00	0.94		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	502	93	94	1077	8	48	6	42	4	0	7
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	9	1928	355	118	2550	19	120	15	114	8	0	13
Arrive On Green	0.01	1.00	1.00	0.13	1.00	1.00	0.08	0.08	0.08	0.01	0.00	0.01
Sat Flow, veh/h	1781	2991	551	1781	3615	27	1592	199	1522	576	0	1008
Grp Volume(v), veh/h	7	297	298	94	529	556	54	0	42	11	0	0
Grp Sat Flow(s), veh/h/ln	1781	1777	1766	1781	1777	1865	1791	0	1522	1584	0	0
Q Serve(g_s), s	0.4	0.0	0.0	5.1	0.0	0.0	2.9	0.0	2.6	0.7	0.0	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.0	5.1	0.0	0.0	2.9	0.0	2.6	0.7	0.0	0.0
Prop In Lane	1.00	0.31	1.00	1.00	0.01	0.89	1.00	0.36	0.64			
Lane Grp Cap(c), veh/h	9	1145	1138	118	1253	1316	135	0	114	21	0	0
V/C Ratio(X)	0.74	0.26	0.26	0.80	0.42	0.42	0.40	0.00	0.37	0.53	0.00	0.00
Avail Cap(c_a), veh/h	69	1145	1138	230	1253	1316	455	0	387	86	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	0.92	0.92	0.92	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	49.4	0.0	0.0	42.7	0.0	0.0	44.1	0.0	44.0	49.0	0.0	0.0
Incr Delay (d2), s/veh	71.1	0.5	0.5	4.2	1.0	0.9	1.9	0.0	2.0	19.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.4	0.2	0.2	2.3	0.3	0.3	1.3	0.0	1.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	120.5	0.5	0.5	46.9	1.0	0.9	46.0	0.0	45.9	68.1	0.0	0.0
LnGrp LOS	F	A	A	D	A	A	D	A	D	E	A	A
Approach Vol, veh/h	602			1179			96			11		
Approach Delay, s/veh	1.9			4.6			46.0			68.1		
Approach LOS	A			A			D			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	70.2			5.9	5.6	76.3		12.1				
Change Period (Y+Rc), s	5.1			4.6	5.1	5.8		4.6				
Max Green Setting (Gmax), s	36.2			5.4	3.9	45.2		25.4				
Max Q Clear Time (g_c+I), s	2.0			2.7	2.4	2.0		4.9				
Green Ext Time (p_c), s	0.0	12.6		0.0	0.0	28.1		0.3				
Intersection Summary												
HCM 6th Ctrl Delay				6.2								
HCM 6th LOS				A								

OnPoint - Oceanside
7: Frontier Dr & Mission Ave

Opening Day Baseline
Timing Plan: AM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	479	45	63	1108	39	43
Future Volume (veh/h)	479	45	63	1108	39	43
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99	1.00		1.00	0.97	
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	1900	1900
Adj Flow Rate, veh/h	499	47	66	1154	41	45
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	2318	218	85	2862	70	77
Arrive On Green	0.23	0.23	0.05	0.81	0.09	0.09
Sat Flow, veh/h	3375	308	1781	3647	775	850
Grp Volume(v), veh/h	269	277	66	1154	87	0
Grp Sat Flow(s),veh/h/ln	1812	1781	1777	1644	0	
Q Serve(g_s), s	12.2	12.3	3.7	9.4	5.1	0.0
Cycle Q Clear(g_c), s	12.2	12.3	3.7	9.4	5.1	0.0
Prop In Lane	0.17	1.00		0.47	0.52	
Lane Grp Cap(c), veh/h	1255	1280	85	2862	149	0
V/C Ratio(X)	0.21	0.22	0.77	0.40	0.58	0.00
Avail Cap(c_a), veh/h	1255	1280	265	2862	451	0
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.91	0.91	1.00	0.00
Uniform Delay (d), s/veh	15.9	16.0	47.1	2.8	43.7	0.0
Incr Delay (d2), s/veh	0.4	0.4	5.0	0.4	3.6	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	6.9	6.1	1.7	2.3	2.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.3	16.4	52.1	3.2	47.3	0.0
LnGrp LOS	B	B	D	A	D	A
Approach Vol, veh/h	546		1220	87		
Approach Delay, s/veh	16.3		5.8	47.3		
Approach LOS	B		A	D		
Timer - Assigned Phs	1	2		6	8	
Phs Duration (G+Y+Rc), s	9.9	76.5		86.3	13.7	
Change Period (Y+Rc), s	5.1	5.8		5.8	4.6	
Max Green Setting (Gmax), s	42.2			62.2	27.4	
Max Q Clear Time (g_c+I),s	14.3			11.4	7.1	
Green Ext Time (p_c), s	0.0	10.4		34.2	0.2	

Intersection Summary

HCM 6th Ctrl Delay	10.9
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

OnPoint - Oceanside
8: Mission Ave & Fireside St

Opening Day Baseline
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	17	529	0	0	1112	9	0	0	0	31	0	54
Future Volume (veh/h)	17	529	0	0	1112	9	0	0	0	31	0	54
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach	No			No						No		
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870				1870	0	1870
Adj Flow Rate, veh/h	18	557	0	0	1171	9				33	0	57
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	2	2	2				2	0	2
Cap, veh/h	21	2997	0	2	2821	22				94	0	83
Arrive On Green	0.02	1.00	0.00	0.00	0.78	0.78				0.05	0.00	0.05
Sat Flow, veh/h	1781	3647	0	1781	3614	28				1781	0	1585
Grp Volume(v), veh/h	18	557	0	0	576	604				33	0	57
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1865				1781	0	1585
Q Serve(g_s), s	1.0	0.0	0.0	0.0	10.5	10.5				1.8	0.0	3.5
Cycle Q Clear(g_c), s	1.0	0.0	0.0	0.0	10.5	10.5				1.8	0.0	3.5
Prop In Lane	1.00	0.00	1.00		0.01					1.00		1.00
Lane Grp Cap(c), veh/h	21	2997	0	2	1387	1456				94	0	83
V/C Ratio(X)	0.85	0.19	0.00	0.00	0.42	0.42				0.35	0.00	0.68
Avail Cap(c_a), veh/h	123	2997	0	89	1387	1456				452	0	403
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	48.7	0.0	0.0	0.0	3.6	3.6				45.7	0.0	46.5
Incr Delay (d2), s/veh	27.6	0.1	0.0	0.0	0.9	0.9				2.2	0.0	9.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.1	0.0	0.0	3.1	3.2				0.8	0.0	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.3	0.1	0.0	0.0	4.5	4.4				48.0	0.0	56.0
LnGrp LOS	E	A	A	A	A	A				D	A	E
Approach Vol, veh/h	575			1180						90		
Approach Delay, s/veh	2.5			4.5						53.0		
Approach LOS	A			A						D		
Timer - Assigned Phs	1	2		4	5	6						
Phs Duration (G+Y+Rc), s	0.0	90.1		9.9	6.3	83.8						
Change Period (Y+Rc), s	5.1	5.8		4.6	5.1	5.8						
Max Green Setting (Gmax), s	54.1			25.4	6.9	52.2						
Max Q Clear Time (g_c+I),s	2.0			5.5	3.0	12.5						
Green Ext Time (p_c), s	0.0	14.2		0.2	0.0	28.8						

Intersection Summary

HCM 6th Ctrl Delay	6.2
HCM 6th LOS	A

OnPoint - Oceanside

9: El Camino Real & Mission Ave

Opening Day Baseline

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	143	270	115	156	496	24	145	215	91	87	734	407
Future Volume (veh/h)	143	270	115	156	496	24	145	215	91	87	734	407
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	0.99	1.00	1.00	0.97	1.00	0.99	1.00	0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	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	149	281	0	162	517	25	125	260	95	91	765	424
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	284	957		285	929	45	171	360	148	582	1162	644
Arrive On Green	0.08	0.27	0.00	0.08	0.27	0.27	0.10	0.10	0.10	0.33	0.33	0.33
Sat Flow, veh/h	3456	3554	1585	3456	3449	166	1781	3741	1536	1781	3554	1571
Grp Volume(v), veh/h	149	281	0	162	266	276	125	260	95	91	765	424
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1838	1781	1870	1536	1781	1777	1571
Q Serve(g_s), s	5.0	7.6	0.0	5.5	15.5	15.6	8.2	8.2	7.2	4.4	22.3	26.4
Cycle Q Clear(g_c), s	5.0	7.6	0.0	5.5	15.5	15.6	8.2	8.2	7.2	4.4	22.3	26.4
Prop In Lane	1.00	1.00	1.00	1.00	0.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	284	957		285	479	495	171	360	148	582	1162	644
V/C Ratio(X)	0.52	0.29		0.57	0.56	0.56	0.73	0.72	0.64	0.16	0.66	0.66
Avail Cap(c_a), veh/h	420	1368		398	672	695	257	539	221	811	1618	845
HCM Platoon Ratio	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.2	35.0	0.0	53.4	37.9	37.9	53.1	53.0	52.6	28.8	34.9	28.9
Incr Delay (d2), s/veh	1.5	0.8	0.0	1.8	4.6	4.5	5.8	2.7	4.6	0.1	0.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	3.4	0.0	2.4	7.4	7.6	4.0	4.0	3.0	1.9	9.7	10.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.7	35.8	0.0	55.2	42.5	42.4	58.9	55.8	57.2	29.0	35.5	30.1
LnGrp LOS	D	D		E	D	D	E	E	E	C	D	C
Approach Vol, veh/h	430	A		704			480			1280		
Approach Delay, s/veh	42.3			45.4			56.9			33.2		
Approach LOS	D			D			E			C		
Timer - Assigned Phs	1	2		4	5	6	8					
Phs Duration (G+Y+Rc), s	7.3	39.3		45.8	17.2	39.4	18.4					
Change Period (Y+Rc), s	7.3	6.8		6.3	7.3	6.8	6.8					
Max Green Setting (Gmax), s	46.5	46.5		55.0	14.7	45.7	17.4					
Max Q Clear Time (g_c+I),s	9.6			28.4	7.0	17.6	10.2					
Green Ext Time (p_c), s	0.2	5.9		8.2	0.3	10.3	1.4					

Intersection Summary

HCM 6th Ctrl Delay	41.5
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

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

OnPoint - Oceanside

10: Douglas Dr & Mission Ave

Opening Day Baseline

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	52	380	55	31	635	42	50	106	24	22	99	64
Future Volume (veh/h)	52	380	55	31	635	42	50	106	24	22	99	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	0.99	1.00	1.00	0.99	1.00	0.99	1.00	0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	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	55	400	58	33	668	44	53	112	25	23	104	67
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	173	1268	561	63	1157	76	87	654	142	47	433	258
Arrive On Green	0.05	0.36	0.36	0.04	0.34	0.34	0.05	0.23	0.23	0.03	0.20	0.20
Sat Flow, veh/h	3456	3554	1572	1781	3382	223	1781	2897	627	1781	2129	1267
Grp Volume(v), veh/h	55	400	58	33	351	361	53	67	70	23	85	86
Grp Sat Flow(s),veh/h/ln	1728	1777	1572	1781	1777	1828	1781	1777	1747	1781	1777	1620
Q Serve(g_s), s	0.9	4.9	1.5	1.1	9.7	9.8	1.8	1.8	1.9	0.8	2.4	2.7
Cycle Q Clear(g_c), s	0.9	4.9	1.5	1.1	9.7	9.8	1.8	1.8	1.9	0.8	2.4	2.7
Prop In Lane	1.00	1.00	1.00	1.00	0.12	1.00	1.00	0.36	1.00		0.78	
Lane Grp Cap(c), veh/h	173	1268	561	63	608	626	87	401	394	47	361	329
V/C Ratio(X)	0.32	0.32	0.10	0.53	0.58	0.58	0.61	0.17	0.18	0.49	0.24	0.26
Avail Cap(c_a), veh/h	293	1678	742	175	862	887	275	1146	1127	163	1034	942
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.6	14.0	12.9	28.5	16.2	16.2	28.1	18.7	18.8	28.9	20.1	20.2
Incr Delay (d2), s/veh	1.0	0.3	0.2	6.7	1.8	1.8	6.7	0.3	0.3	7.6	0.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.8	0.5	0.6	3.8	4.0	0.9	0.7	0.8	0.4	1.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.6	14.3	13.1	35.2	18.1	18.0	34.8	19.0	19.1	36.4	20.5	20.7
LnGrp LOS	C	B	B	D	B	B	C	B	B	D	C	C
Approach Vol, veh/h	513			745			190			194		
Approach Delay, s/veh	15.7			18.8			23.4			22.5		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.2	27.3	8.0	17.6	8.1	26.4	6.7	19.0				
Change Period (Y+Rc), s	5.1	5.8	5.1	5.4	5.1	5.8	5.1	5.4				
Max Green Setting (Gmax), s	28.4	28.4	9.3	35.0	5.1	29.2	5.5	38.8				
Max Q Clear Time (g_c+I),s	6.9	3.8	4.7	2.9	11.8	2.8	3.9					
Green Ext Time (p_c), s	0.0	5.1	0.0	1.4	0.0	7.3	0.0	1.1				

Intersection Summary

HCM 6th Ctrl Delay	18.8
HCM 6th LOS	B

OnPoint - Oceanside
11: Roymar Rd & Via de la Valle

Opening Day Baseline
Timing Plan: AM Peak

Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	0	0	0	15	0	5	0	26	9	4	16	0
Future Vol, veh/h	0	0	0	15	0	5	0	26	9	4	16	0
Conflicting Peds, #/hr	0	0	0	10	0	10	0	0	10	10	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	17	0	6	0	29	10	4	18	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	73	75	28	80	70	54	18	0	0	49	0	0
Stage 1	26	26	-	44	44	-	-	-	-	-	-	-
Stage 2	47	49	-	36	26	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	918	815	1047	908	821	1013	1599	-	-	1558	-	-
Stage 1	992	874	-	970	858	-	-	-	-	-	-	-
Stage 2	967	854	-	980	874	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	902	804	1037	889	810	994	1599	-	-	1543	-	-
Mov Cap-2 Maneuver	902	804	-	889	810	-	-	-	-	-	-	-
Stage 1	992	871	-	960	849	-	-	-	-	-	-	-
Stage 2	952	845	-	968	871	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9	0	1.5
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1599	-	-	-	913	1543	-	-
HCM Lane V/C Ratio	-	-	-	-	0.025	0.003	-	-
HCM Control Delay (s)	0	-	-	0	9	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0	-	-

OnPoint - Oceanside
12: Mission Ave & Project Dwy 1

Opening Day Baseline
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕			↕
Traffic Vol, veh/h	0	666	1195	0	0	0
Future Vol, veh/h	0	666	1195	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	724	1299	0	0	0

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	- 650
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	-	-	-	0 412
Stage 1	0	-	-	-	0 -
Stage 2	0	-	-	-	0 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	- 412
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

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

OnPoint - Oceanside
13: Foussat Rd & Project Dwy 2

Opening Day Baseline
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗↗↗	↗↗	
Traffic Vol, veh/h	0	0	0	147	193	0
Future Vol, veh/h	0	0	0	147	193	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	160	210	0

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	105	-
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	929	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	929	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	0	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	-	-

OnPoint - Oceanside
1: Airport Rd & SR 76

Opening Day Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰	↰	↰	↰↰	↰	↰	↰	↰	↰	↰	↰
Traffic Volume (veh/h)	23	2132	71	80	1334	25	109	93	108	39	69	40
Future Volume (veh/h)	23	2132	71	80	1334	25	109	93	108	39	69	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	2268	76	85	1419	27	116	99	115	41	73	43
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	253	2316	1025	92	1953	863	133	109	127	53	178	146
Arrive On Green	0.14	0.65	0.65	0.05	0.55	0.55	0.07	0.14	0.14	0.03	0.09	0.09
Sat Flow, veh/h	1781	3554	1573	1781	3554	1571	1781	779	905	1781	1870	1535
Grp Volume(v), veh/h	24	2268	76	85	1419	27	116	0	214	41	73	43
Grp Sat Flow(s),veh/h/ln	1781	1777	1573	1781	1777	1571	1781	0	1684	1781	1870	1535
Q Serve(g_s), s	2.3	122.9	3.5	9.5	59.9	1.2	12.9	0.0	25.0	4.6	7.4	4.0
Cycle Q Clear(g_c), s	2.3	122.9	3.5	9.5	59.9	1.2	12.9	0.0	25.0	4.6	7.4	4.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.54	1.00		1.00
Lane Grp Cap(c), veh/h	253	2316	1025	92	1953	863	133	0	236	53	178	146
V/C Ratio(X)	0.09	0.98	0.07	0.93	0.73	0.03	0.88	0.00	0.91	0.78	0.41	0.29
Avail Cap(c_a), veh/h	253	2316	1025	92	2313	1022	140	0	244	56	183	150
HCM Platoon Ratio	1.00	1.00	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	0.96	0.00	0.96	1.00	1.00	1.00
Uniform Delay (d), s/veh	74.6	33.5	12.8	94.5	33.8	12.6	91.6	0.0	84.7	96.4	85.2	49.3
Incr Delay (d2), s/veh	0.1	14.5	0.1	69.2	2.4	0.1	37.6	0.0	31.7	42.8	0.6	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	56.3	1.4	6.2	26.8	0.6	7.4	0.0	13.1	2.8	3.6	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.7	48.0	12.9	163.7	36.2	12.7	129.2	0.0	116.5	139.3	85.8	49.7
LnGrp LOS	E	D	B	F	D	B	F	A	F	F	F	D
Approach Vol, veh/h	2368				1531				330		157	
Approach Delay, s/veh	47.1				42.8				121.0		89.9	
Approach LOS	D				D				F		F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.0	138.3	20.6	25.1	36.4	117.9	11.6	34.1				
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.1	8.0	* 8	* 5.7	6.1				
Max Green Setting (Gmax), s	* 10	128.9	* 16	19.6	9.0	* 1.3E2	* 6.3	29.0				
Max Q Clear Time (g_c+I), s	11.5	124.9	14.9	9.4	4.3	61.9	6.6	27.0				
Green Ext Time (p_c), s	0.0	4.0	0.0	0.2	0.0	48.0	0.0	0.2				
Intersection Summary												
HCM 6th Ctrl Delay	52.7											
HCM 6th LOS	D											
Notes												

OnPoint - Oceanside
2: Foussat Rd & SR 76

Opening Day Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰↱	↱↱	↰	↰↱	↱↱		↰	↱↱	↰	↰↱	↱↱	↰
Traffic Volume (veh/h)	106	2099	84	132	1332	86	62	56	105	58	96	66
Future Volume (veh/h)	106	2099	84	132	1332	86	62	56	105	58	96	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	110	2186	88	138	1388	90	65	58	109	60	100	69
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	617	2360	1048	156	1844	818	168	655	199	122	408	306
Arrive On Green	0.18	0.66	0.66	0.05	0.52	0.52	0.05	0.13	0.13	0.04	0.11	0.11
Sat Flow, veh/h	3456	3554	1578	3456	3554	1576	3456	5106	1548	3456	3554	2668
Grp Volume(v), veh/h	110	2186	88	138	1388	90	65	58	109	60	100	69
Grp Sat Flow(s),veh/h/ln	1728	1777	1578	1728	1777	1576	1728	1702	1548	1728	1777	1334
Q Serve(g_s), s	5.4	107.4	4.0	7.9	61.7	4.6	3.6	2.0	13.2	3.4	5.1	3.4
Cycle Q Clear(g_c), s	5.4	107.4	4.0	7.9	61.7	4.6	3.6	2.0	13.2	3.4	5.1	3.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	617	2360	1048	156	1844	818	168	655	199	122	408	306
V/C Ratio(X)	0.18	0.93	0.08	0.89	0.75	0.11	0.39	0.09	0.55	0.49	0.25	0.23
Avail Cap(c_a), veh/h	617	2360	1048	156	2077	921	173	996	302	126	645	484
HCM Platoon Ratio	1.00	1.00	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	69.7	29.3	12.0	95.0	38.0	15.1	92.2	76.9	81.7	94.7	80.6	41.5
Incr Delay (d2), s/veh	0.1	7.8	0.2	40.3	2.9	0.3	0.5	0.0	0.9	1.1	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	47.3	1.5	4.5	27.9	2.3	1.7	0.9	5.4	1.6	2.4	1.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.7	37.1	12.1	135.3	40.9	15.4	92.8	76.9	82.6	95.9	80.7	41.7
LnGrp LOS	E	D	B	F	D	B	F	E	F	F	F	D
Approach Vol, veh/h	2384			1616			232			229		
Approach Delay, s/veh	37.7			47.5			84.0			72.9		
Approach LOS	D			D			F			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	140.8	15.4	29.1	43.7	111.8	12.7	31.8					
Change Period (Y+Rc), s	8.0	* 5.7	6.1	8.0	* 8	* 5.7	6.1					
Max Green Setting (Gmax), s	119.2	* 10	36.3	11.3	1.2E2	* 7.3	39.0					
Max Q Clear Time (g_c+I),s	109.4	5.6	7.1	7.4	63.7	5.4	15.2					
Green Ext Time (p_c), s	0.0	9.7	0.0	0.4	0.0	40.1	0.0	0.3				
Intersection Summary												
HCM 6th Ctrl Delay	45.5											
HCM 6th LOS	D											
Notes												

OnPoint - Oceanside
3: Airport Rd & Mission Ave

Opening Day Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	1272	11	15	858	55	15	10	17	64	11	45
Future Volume (veh/h)	31	1272	11	15	858	55	15	10	17	64	11	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	1368	12	16	923	59	16	11	18	78	0	48
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	50	2376	21	31	2195	140	42	29	47	290	0	124
Arrive On Green	0.03	0.66	0.66	0.03	1.00	1.00	0.07	0.07	0.07	0.08	0.00	0.08
Sat Flow, veh/h	1781	3610	32	1781	3390	217	599	412	673	3563	0	1527
Grp Volume(v), veh/h	33	673	707	16	484	498	45	0	0	78	0	48
Grp Sat Flow(s)/ln/1781	1777	1864	1781	1777	1829	1684	0	0	1781	0	1527	
Q Serve(g_s), s	2.2	25.0	25.0	1.1	0.0	0.0	3.1	0.0	0.0	2.5	0.0	3.6
Cycle Q Clear(g_c), s	2.2	25.0	25.0	1.1	0.0	0.0	3.1	0.0	0.0	2.5	0.0	3.6
Prop In Lane	1.00		0.02	1.00		0.12	0.36		0.40	1.00		1.00
Lane Grp Cap(c), veh/h	50	1170	1227	31	1151	1185	117	0	0	290	0	124
V/C Ratio(X)	0.67	0.58	0.58	0.52	0.42	0.42	0.38	0.00	0.00	0.27	0.00	0.39
Avail Cap(c_a), veh/h	98	1170	1227	77	1151	1185	286	0	0	606	0	260
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.00	0.00	0.88	0.00	0.88
Uniform Delay (d), s/veh	57.8	11.3	11.3	57.4	0.0	0.0	53.3	0.0	0.0	51.8	0.0	52.3
Incr Delay (d2), s/veh	14.3	2.1	2.0	12.4	1.1	1.0	2.9	0.0	0.0	0.6	0.0	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	10.4	0.6	0.3	0.3	1.4	0.0	0.0	1.1	0.0	1.5	
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.1	13.3	13.3	69.9	1.1	1.0	56.3	0.0	0.0	52.4	0.0	54.7
LnGrp LOS	E	B	B	E	A	A	E	A	A	D	A	D
Approach Vol, veh/h	1413			998			45			126		
Approach Delay, s/veh	14.7			2.2			56.3			53.3		
Approach LOS	B			A			E			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	85.2			14.4			8.7			13.0		
Change Period (Y+Rc), s	6.2			4.6			5.4			6.2		
Max Green Setting (Gmax), s	53.2			20.4			6.6			51.8		
Max Q Clear Time (g_c+I),s	27.0			5.6			4.2			2.0		
Green Ext Time (p_c), s	0.0			22.3			0.5			0.0		
Intersection Summary												
HCM 6th Ctrl Delay			12.4									
HCM 6th LOS			B									
Notes												

OnPoint - Oceanside
4: Roymar Rd & Mission Ave

Opening Day Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	1263	79	101	819	17	70	0	146	22	0	22
Future Volume (veh/h)	21	1263	79	101	819	17	70	0	146	22	0	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	1358	85	109	881	18	75	0	157	24	0	24
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	40	2126	896	132	2208	45	60	0	356	60	0	356
Arrive On Green	0.02	0.57	0.57	0.15	1.00	1.00	0.23	0.00	0.23	0.23	0.00	0.23
Sat Flow, veh/h	1781	3741	1577	1781	3561	73	0	0	1564	0	0	1564
Grp Volume(v), veh/h	23	1358	85	109	440	459	75	0	157	24	0	24
Grp Sat Flow(s),veh/h/ln	1781	1870	1577	1781	1777	1857	0	0	1564	0	0	1564
Q Serve(g_s), s	1.5	29.5	3.0	7.1	0.0	0.0	0.0	0.0	10.3	0.0	0.0	1.4
Cycle Q Clear(g_c), s	1.5	29.5	3.0	7.1	0.0	0.0	27.3	0.0	10.3	27.3	0.0	1.4
Prop In Lane	1.00		1.00	1.00		0.04	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	40	2126	896	132	1102	1151	60	0	356	60	0	356
V/C Ratio(X)	0.58	0.64	0.09	0.82	0.40	0.40	1.25	0.00	0.44	0.40	0.00	0.07
Avail Cap(c_a), veh/h	88	2126	896	147	1102	1151	60	0	356	60	0	356
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.82	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.1	17.6	11.8	50.3	0.0	0.0	60.0	0.0	39.8	60.0	0.0	36.4
Incr Delay (d2), s/veh	10.4	1.2	0.2	28.1	1.1	1.0	197.8	0.0	0.9	4.3	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	12.6	1.1	4.0	0.3	0.3	5.1	0.0	4.1	0.8	0.0	0.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.6	18.8	12.0	78.5	1.1	1.0	257.8	0.0	40.7	64.3	0.0	36.4
LnGrp LOS	E	B	B	E	A	A	F	A	D	E	A	D
Approach Vol, veh/h	1466			1008			232			48		
Approach Delay, s/veh	19.2			9.4			110.9			50.3		
Approach LOS	B			A			F			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	34.0	74.0		32.0	7.8	80.2		32.0				
Change Period (Y+Rc), s	5.1	5.8		* 4.7	5.1	5.8		* 4.7				
Max Green Setting (Gmax), s	67.2			* 27	5.9	71.2		* 27				
Max Q Clear Time (g_c+I),s	31.5			29.3	3.5	2.0		29.3				
Green Ext Time (p_c), s	0.0	30.4		0.0	0.0	28.3		0.0				

Intersection Summary

HCM 6th Ctrl Delay	23.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

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

OnPoint - Oceanside
5: Foussat Rd & Mission Ave

Opening Day Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	1297	65	30	753	39	50	94	29	61	121	115
Future Volume (veh/h)	83	1297	65	30	753	39	50	94	29	61	121	115
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.97	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	88	1380	69	32	801	41	53	100	31	65	129	122
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	588	2184	109	49	1158	570	119	259	77	127	352	1182
Arrive On Green	0.66	1.00	1.00	0.05	0.65	0.65	0.03	0.10	0.10	0.04	0.10	0.10
Sat Flow, veh/h	1781	3443	172	1781	3554	1570	3456	2681	793	3456	3554	2649
Grp Volume(v), veh/h	88	711	738	32	801	41	53	65	66	65	129	122
Grp Sat Flow(s),veh/h/ln	1781	1777	1838	1781	1777	1570	1728	1777	1698	1728	1777	1324
Q Serve(g_s), s	2.2	0.0	0.0	2.1	17.2	0.3	1.8	4.1	4.4	2.2	4.1	0.5
Cycle Q Clear(g_c), s	2.2	0.0	0.0	2.1	17.2	0.3	1.8	4.1	4.4	2.2	4.1	0.5
Prop In Lane	1.00		0.09	1.00		1.00	1.00		0.47	1.00		1.00
Lane Grp Cap(c), veh/h	588	1127	1166	49	1158	570	119	172	164	127	352	1182
V/C Ratio(X)	0.15	0.63	0.63	0.66	0.69	0.07	0.44	0.38	0.40	0.51	0.37	0.10
Avail Cap(c_a), veh/h	588	1127	1166	88	1697	808	150	342	327	158	693	1437
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.1	0.0	0.0	56.2	17.1	5.4	56.8	50.8	51.0	56.7	50.6	9.6
Incr Delay (d2), s/veh	0.1	2.7	2.6	13.7	3.3	0.2	2.6	1.4	1.6	3.1	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.8	1.1	5.1	0.3	0.8	1.9	2.0	1.0	1.8	0.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.2	2.7	2.6	69.8	20.4	5.6	59.4	52.2	52.6	59.8	51.2	9.6
LnGrp LOS	B	A	A	E	C	A	E	D	D	E	D	A
Approach Vol, veh/h	1537			874			184			316		
Approach Delay, s/veh	3.3			21.5			54.4			36.9		
Approach LOS	A			C			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	82.9	9.7	18.0	46.4	45.9	10.0	17.7					
Change Period (Y+Rc), s	6.1	6.8	5.6	6.1	6.8	* 6.8	5.6	6.1				
Max Green Setting (Gmax), s	60.9	5.2	23.4	9.5	* 57	5.5	23.1					
Max Q Clear Time (g_c+I),s	2.0	3.8	6.1	4.2	19.2	4.2	6.4					
Green Ext Time (p_c), s	0.0	47.4	0.0	1.1	0.1	20.0	0.0	0.6				

Intersection Summary

HCM 6th Ctrl Delay	15.7
HCM 6th LOS	B

Notes

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

OnPoint - Oceanside
6: Copperwood Wy & Mission Ave

Opening Day Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	4	1280	91	55	700	7	96	2	108	5	1	7
Future Volume (veh/h)	4	1280	91	55	700	7	96	2	108	5	1	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.97	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	1391	99	60	761	8	104	2	117	5	1	8
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	6	2221	158	77	2523	27	199	4	175	9	2	14
Arrive On Green	0.01	1.00	1.00	0.09	1.00	1.00	0.11	0.11	0.11	0.02	0.02	0.02
Sat Flow, veh/h	1781	3364	239	1781	3602	38	1749	34	1543	569	114	911
Grp Volume(v), veh/h	4	732	758	60	375	394	106	0	117	14	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1825	1781	1777	1863	1783	0	1543	1594	0	0
Q Serve(g_s), s	0.3	0.0	0.0	4.0	0.0	0.0	6.7	0.0	8.7	1.0	0.0	0.0
Cycle Q Clear(g_c), s	0.3	0.0	0.0	4.0	0.0	0.0	6.7	0.0	8.7	1.0	0.0	0.0
Prop In Lane	1.00		0.13	1.00		0.02	0.98		1.00	0.36		0.57
Lane Grp Cap(c), veh/h	6	1173	1205	77	1244	1305	202	0	175	25	0	0
V/C Ratio(X)	0.72	0.62	0.63	0.78	0.30	0.30	0.52	0.00	0.67	0.57	0.00	0.00
Avail Cap(c_a), veh/h	46	1173	1205	132	1244	1305	376	0	325	69	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.74	0.74	0.74	0.97	0.97	0.97	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	59.6	0.0	0.0	54.3	0.0	0.0	50.1	0.0	51.0	58.7	0.0	0.0
Incr Delay (d2), s/veh	80.9	1.9	1.8	6.2	0.6	0.6	2.1	0.0	4.3	18.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.6	0.6	1.8	0.2	0.2	3.1	0.0	3.6	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	140.5	1.9	1.8	60.5	0.6	0.6	52.2	0.0	55.4	77.3	0.0	0.0
LnGrp LOS	F	A	A	E	A	A	D	A	E	E	A	A
Approach Vol, veh/h	1494			829			223				14	
Approach Delay, s/veh	2.2			4.9			53.9				77.3	
Approach LOS	A			A			D				E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	80.3	85.0		6.5	5.5	89.8		18.2				
Change Period (Y+Rc), s	5.1	5.8		4.6	5.1	5.8		4.6				
Max Green Setting (Gmax), s	60.5			5.2	3.1	66.3		25.3				
Max Q Clear Time (g_c+I), s	2.0			3.0	2.3	2.0		10.7				
Green Ext Time (p_c), s	0.0	48.3		0.0	0.0	22.0		0.8				
Intersection Summary												
HCM 6th Ctrl Delay				8.0								
HCM 6th LOS				A								

OnPoint - Oceanside
7: Frontier Dr & Mission Ave

Opening Day Baseline
Timing Plan: PM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↱	↰	↱	↰	↱
Traffic Volume (veh/h)	1245	45	45	747	28	41
Future Volume (veh/h)	1245	45	45	747	28	41
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99	1.00		1.00	1.00	0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	1284	46	46	770	29	42
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	2653	95	59	2965	52	75
Arrive On Green	1.00	1.00	0.03	0.83	0.08	0.08
Sat Flow, veh/h	3592	125	1781	3647	654	947
Grp Volume(v), veh/h	652	678	46	770	72	0
Grp Sat Flow(s),veh/h/ln	1777	1847	1781	1777	1623	0
Q Serve(g_s), s	0.0	0.0	3.1	5.5	5.1	0.0
Cycle Q Clear(g_c), s	0.0	0.0	3.1	5.5	5.1	0.0
Prop In Lane	0.07	1.00		0.40	0.58	
Lane Grp Cap(c), veh/h	1348	1401	59	2965	128	0
V/C Ratio(X)	0.48	0.48	0.78	0.26	0.56	0.00
Avail Cap(c_a), veh/h	1348	1401	162	2965	357	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.75	0.75	0.93	0.93	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	57.6	2.1	53.2	0.0
Incr Delay (d2), s/veh	0.9	0.9	7.3	0.2	3.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.4	1.5	1.4	2.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.9	0.9	64.9	2.3	57.0	0.0
LnGrp LOS	A	A	E	A	E	A
Approach Vol, veh/h	1330			816	72	
Approach Delay, s/veh	0.9			5.8	57.0	
Approach LOS	A			A	E	
Timer - Assigned Phs	1	2		6		8
Phs Duration (G+Y+Rc), s	96.8			105.9		14.1
Change Period (Y+Rc), s	5.1	5.8		5.8		4.6
Max Green Setting (Gmax), s	67.2			83.2		26.4
Max Q Clear Time (g_c+I), s	2.0			7.5		7.1
Green Ext Time (p_c), s	0.0	47.0		24.3		0.2
Intersection Summary						
HCM 6th Ctrl Delay				4.5		
HCM 6th LOS				A		
Notes						
User approved volume balancing among the lanes for turning movement.						

OnPoint - Oceanside
8: Mission Ave & Fireside St

Opening Day Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱					↰	↱	↰
Traffic Volume (veh/h)	234	1042	0	0	665	97	0	0	0	50	0	113
Future Volume (veh/h)	234	1042	0	0	665	97	0	0	0	50	0	113
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	0.99					1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00					1.00	1.00	1.00
Work Zone On Approach	No			No						No		
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870				1870	0	1870
Adj Flow Rate, veh/h	241	1074	0	0	686	100				52	0	116
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97				0.97	0.97	0.97
Percent Heavy Veh, %	2	2	0	2	2	2				2	0	2
Cap, veh/h	270	2920	0	1	1951	284				163	0	145
Arrive On Green	0.15	0.82	0.00	0.00	0.63	0.63				0.09	0.00	0.09
Sat Flow, veh/h	1781	3647	0	1781	3109	453				1781	0	1585
Grp Volume(v), veh/h	241	1074	0	0	392	394				52	0	116
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1785				1781	0	1585
Q Serve(g_s), s	15.9	9.3	0.0	0.0	12.6	12.7				3.3	0.0	8.6
Cycle Q Clear(g_c), s	15.9	9.3	0.0	0.0	12.6	12.7				3.3	0.0	8.6
Prop In Lane	1.00	0.00	1.00	0.00	0.25					1.00	1.00	
Lane Grp Cap(c), veh/h	270	2920	0	1	1115	1120				163	0	145
V/C Ratio(X)	0.89	0.37	0.00	0.00	0.35	0.35				0.32	0.00	0.80
Avail Cap(c_a), veh/h	474	2920	0	74	1115	1120				407	0	362
HCM Platoon Ratio	1.00	1.00	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	49.9	2.7	0.0	0.0	10.7	10.7				51.0	0.0	53.4
Incr Delay (d2), s/veh	4.2	0.3	0.0	0.0	0.9	0.9				1.1	0.0	9.6
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	4	2.5	0.0	0.0	5.1	5.1				1.5	0.0	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.1	3.0	0.0	0.0	11.6	11.6				52.1	0.0	63.0
LnGrp LOS	D	A	A	A	B	B				D	A	E
Approach Vol, veh/h	1315			786						168		
Approach Delay, s/veh	12.4			11.6						59.7		
Approach LOS	B			B						E		
Timer - Assigned Phs	1	2		4	5	6						
Phs Duration (G+Y+Rc), s	104.4			15.6	23.3	81.1						
Change Period (Y+Rc), s	5.1	5.8		4.6	5.1	5.8						
Max Green Setting (Gmax), s	72.1			27.4	31.9	45.2						
Max Q Clear Time (g_c+I), s	11.3			10.6	17.9	14.7						
Green Ext Time (p_c), s	0.0	35.3		0.4	0.3	16.1						
Intersection Summary												
HCM 6th Ctrl Delay			15.6									
HCM 6th LOS			B									

OnPoint - Oceanside
9: El Camino Real & Mission Ave

Opening Day Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱					↰	↱	↰
Traffic Volume (veh/h)	368	602	148	122	273	102	222	700	252	167	421	289
Future Volume (veh/h)	368	602	148	122	273	102	222	700	252	167	421	289
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	0.99	1.00				0.99	1.00	0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No						No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	400	654	0	133	297	111	241	761	274	182	458	314
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	398	986		237	586	214	399	839	351	431	861	562
Arrive On Green	0.12	0.28	0.00	0.07	0.23	0.23	0.22	0.22	0.22	0.24	0.24	0.24
Sat Flow, veh/h	3456	3554	1585	3456	2539	927	1781	3741	1564	1781	3554	1565
Grp Volume(v), veh/h	400	654	0	133	206	202	241	761	274	182	458	314
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1689	1781	1870	1564	1781	1777	1565
Q Serve(g_s), s	16.7	23.6	0.0	5.4	14.6	15.2	17.6	28.7	23.9	12.5	16.3	23.4
Cycle Q Clear(g_c), s	16.7	23.6	0.0	5.4	14.6	15.2	17.6	28.7	23.9	12.5	16.3	23.4
Prop In Lane	1.00	1.00	1.00	1.00	0.55	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	398	986		237	410	390	399	839	351	431	861	562
V/C Ratio(X)	1.01	0.66		0.56	0.50	0.52	0.60	0.91	0.78	0.42	0.53	0.56
Avail Cap(c_a), veh/h	398	1279		279	578	550	412	864	361	681	1358	781
HCM Platoon Ratio	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.2	46.4	0.0	65.4	48.5	48.7	50.5	54.8	52.9	46.4	47.8	37.5
Incr Delay (d2), s/veh	46.4	3.5	0.0	2.1	4.3	4.9	2.4	13.0	10.3	0.7	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.0	0.0	0.0	2.5	7.0	7.0	8.2	15.1	10.4	5.7	7.3	9.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	110.5	49.9	0.0	67.5	52.8	53.6	52.8	67.8	63.2	47.0	48.3	38.3
LnGrp LOS	F	D		E	D	D	D	E	E	D	D	D
Approach Vol, veh/h	1054		A	541			1276			954		
Approach Delay, s/veh	72.9			56.7			64.0			44.8		
Approach LOS	E			E			E			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	47.0			41.4	24.0	40.3		39.3				
Change Period (Y+Rc), s	6.8			6.3	7.3	6.8		6.8				
Max Green Setting (Gmax), s	52.2			55.4	16.7	47.2		33.5				
Max Q Clear Time (g_c+I), s	25.6			25.4	18.7	17.2		30.7				
Green Ext Time (p_c), s	0.1	12.7		5.2	0.0	7.9		1.8				
Intersection Summary												
HCM 6th Ctrl Delay			60.6									
HCM 6th LOS			E									
Notes												
User approved volume balancing among the lanes for turning movement.												
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.												

OnPoint - Oceanside
10: Douglas Dr & Mission Ave

Opening Day Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	65	997	50	35	433	37	58	92	28	32	105	79
Future Volume (veh/h)	65	997	50	35	433	37	58	92	28	32	105	79
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	0.99	1.00	0.99	1.00	1.00	0.99	1.00	0.98	1.00	0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	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	66	1017	51	36	442	38	59	94	29	33	107	81
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	182	1456	645	65	1303	112	88	548	162	61	374	259
Arrive On Green	0.05	0.41	0.41	0.04	0.39	0.39	0.05	0.20	0.20	0.03	0.19	0.19
Sat Flow, veh/h	3456	3554	1573	1781	3310	283	1781	2694	796	1781	1993	1380
Grp Volume(v), veh/h	66	1017	51	36	236	244	59	61	62	33	94	94
Grp Sat Flow(s),veh/h/ln	1728	1777	1573	1781	1777	1817	1781	1777	1713	1781	1777	1596
Q Serve(g_s), s	1.2	16.0	1.3	1.3	6.3	6.3	2.2	1.9	2.0	1.2	3.1	3.4
Cycle Q Clear(g_c), s	1.2	16.0	1.3	1.3	6.3	6.3	2.2	1.9	2.0	1.2	3.1	3.4
Prop In Lane	1.00	1.00	1.00	1.00	0.16	1.00	1.00	0.46	1.00	1.00	0.86	0.86
Lane Grp Cap(c), veh/h	182	1456	645	65	699	715	88	361	348	61	334	300
V/C Ratio(X)	0.36	0.70	0.08	0.56	0.34	0.34	0.67	0.17	0.18	0.54	0.28	0.31
Avail Cap(c_a), veh/h	271	1719	761	132	851	871	155	925	892	150	920	826
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.9	16.5	12.2	32.0	14.3	14.4	31.6	22.2	22.3	32.1	23.5	23.7
Incr Delay (d2), s/veh	1.2	1.6	0.1	7.3	0.6	0.6	8.4	0.3	0.3	7.3	0.7	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	6.2	0.4	0.7	2.4	2.5	1.1	0.8	0.8	0.6	1.3	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.2	18.1	12.3	39.3	15.0	15.0	40.0	22.5	22.6	39.4	24.2	24.5
LnGrp LOS	C	B	B	D	B	B	D	C	C	D	C	C
Approach Vol, veh/h	1134			516			182			221		
Approach Delay, s/veh	18.6			16.7			28.2			26.6		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s/6	33.5	8.4	18.1	8.7	32.4	7.4	19.1					
Change Period (Y+Rc), s 5.1	5.8	5.1	5.4	5.1	5.8	5.1	5.4					
Max Green Setting (Gmax),s	32.7	5.9	35.0	5.3	32.4	5.7	35.2					
Max Q Clear Time (g_c+I),s	18.0	4.2	5.4	3.2	8.3	3.2	4.0					
Green Ext Time (p_c), s 0.0	9.7	0.0	1.6	0.0	5.5	0.0	1.0					

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

OnPoint - Oceanside
11: Roymar Rd & Via de la Valle

Opening Day Baseline
Timing Plan: PM Peak

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Vol, veh/h	0	0	0	9	0	3	0	27	13	6	35	0
Future Vol, veh/h	0	0	0	9	0	3	0	27	13	6	35	0
Conflicting Peds, #/hr	0	0	0	10	0	10	0	0	10	10	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	10	0	3	0	29	14	6	38	0

Major/Minor	Minor2	Minor1	Major1	Major2								
Conflicting Flow All	98	103	48	106	96	56	38	0	0	53	0	0
Stage 1	50	50	-	46	46	-	-	-	-	-	-	-
Stage 2	48	53	-	60	50	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	884	787	1021	873	794	1011	1572	-	-	1553	-	-
Stage 1	963	853	-	968	857	-	-	-	-	-	-	-
Stage 2	965	851	-	951	853	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	870	776	1011	854	783	992	1572	-	-	1538	-	-
Mov Cap-2 Maneuver	870	776	-	854	783	-	-	-	-	-	-	-
Stage 1	963	850	-	958	848	-	-	-	-	-	-	-
Stage 2	953	842	-	938	850	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.1	0	1.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1572	-	-	-	885	1538	-	-
HCM Lane V/C Ratio	-	-	-	-	0.015	0.004	-	-
HCM Control Delay (s)	0	-	-	0	9.1	7.4	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-	-

OnPoint - Oceanside
12: Mission Ave & Project Dwy 1

Opening Day Baseline
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	1445	937	0	0	0
Future Vol, veh/h	0	1445	937	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1571	1018	0	0	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	- 0 - 509
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	-	- - 0 509
Stage 1	0	-	- - 0 -
Stage 2	0	-	- - 0 -
Platoon blocked, %	-	-	- - -
Mov Cap-1 Maneuver	-	-	- - - 509
Mov Cap-2 Maneuver	-	-	- - -
Stage 1	-	-	- - -
Stage 2	-	-	- - -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

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

OnPoint - Oceanside
13: Foussat Rd & Project Dwy 2

Opening Day Baseline
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↑		↑↑↑	↑↑	
Traffic Vol, veh/h	0	0	0	223	297	0
Future Vol, veh/h	0	0	0	223	297	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	242	323	0

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	- 162	- 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	0 854	0 - -	- - -
Stage 1	0 - 0	- - -	- - -
Stage 2	0 - 0	- - -	- - -
Platoon blocked, %	-	- - -	- - -
Mov Cap-1 Maneuver	- 854	- - -	- - -
Mov Cap-2 Maneuver	- - -	- - -	- - -
Stage 1	- - -	- - -	- - -
Stage 2	- - -	- - -	- - -

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

OnPoint - Oceanside
1: Airport Rd & SR 76

Opening Day with Project
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	24	1339	81	59	2085	25	130	27	89	38	31	11
Future Volume (veh/h)	24	1339	81	59	2085	25	130	27	89	38	31	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	1395	84	61	2172	26	135	28	93	40	32	11
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	192	2321	1027	77	2052	907	131	49	163	79	191	157
Arrive On Green	0.11	0.65	0.65	0.04	0.58	0.58	0.07	0.13	0.13	0.04	0.10	0.10
Sat Flow, veh/h	1781	3554	1573	1781	3554	1571	1781	373	1240	1781	1870	1539
Grp Volume(v), veh/h	25	1395	84	61	2172	26	135	0	121	40	32	11
Grp Sat Flow(s),veh/h/ln	1781	1777	1573	1781	1777	1571	1781	0	1613	1781	1870	1539
Q Serve(g_s), s	2.5	44.8	3.9	6.8	115.5	1.0	14.7	0.0	14.1	4.4	3.1	1.0
Cycle Q Clear(g_c), s	2.5	44.8	3.9	6.8	115.5	1.0	14.7	0.0	14.1	4.4	3.1	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.77	1.00		1.00
Lane Grp Cap(c), veh/h	192	2321	1027	77	2052	907	131	0	212	79	191	157
V/C Ratio(X)	0.13	0.60	0.08	0.79	1.06	0.03	1.03	0.00	0.57	0.50	0.17	0.07
Avail Cap(c_a), veh/h	192	2321	1027	80	2052	907	131	0	315	89	321	264
HCM Platoon Ratio	1.00	1.00	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	0.96	0.00	0.96	1.00	1.00	1.00
Uniform Delay (d), s/veh	80.8	19.8	12.7	94.7	42.3	9.7	92.6	0.0	81.6	93.4	82.0	52.1
Incr Delay (d2), s/veh	0.1	1.2	0.2	35.3	37.4	0.1	85.6	0.0	0.9	1.8	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	19.2	1.5	3.9	60.6	0.6	10.0	0.0	6.0	2.1	1.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.9	21.0	12.9	130.0	79.7	9.8	178.2	0.0	82.5	95.2	82.1	52.2
LnGrp LOS	F	C	B	F	F	A	F	A	F	F	F	D
Approach Vol, veh/h		1504			2259			256			83	
Approach Delay, s/veh		21.5			80.2			133.0			84.5	
Approach LOS		C			F			F			F	

Timer - Assigned Phs												
Phs Duration (G+Y+Rc), s	14.4	138.6	20.4	26.6	29.5	123.5	14.6	32.3				
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.1	8.0	* 8	* 5.7	6.1				
Max Green Setting (Gmax), s	* 9	116.5	* 15	34.3	10.0	* 12E2	* 10	39.0				
Max Q Clear Time (g_c+I1), s	8.8	46.8	16.7	5.1	4.5	117.5	6.4	16.1				
Green Ext Time (p_c), s	0.0	49.0	0.0	0.1	0.0	0.0	0.0	0.4				
Intersection Summary												
HCM 6th Ctrl Delay			62.1									
HCM 6th LOS			E									

Notes

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

OnPoint - Oceanside
2: Foussat Rd & SR 76

Opening Day with Project
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	30	1373	87	121	2100	34	37	43	114	52	32	41
Future Volume (veh/h)	30	1373	87	121	2100	34	37	43	114	52	32	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	30	1387	88	122	2121	34	37	43	115	53	32	41
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	491	2154	956	207	1821	808	196	739	225	213	532	403
Arrive On Green	0.14	0.61	0.61	0.06	0.51	0.51	0.06	0.14	0.14	0.06	0.15	0.15
Sat Flow, veh/h	3456	3554	1577	3456	3554	1576	3456	5106	1552	3456	3554	2696
Grp Volume(v), veh/h	30	1387	88	122	2121	34	37	43	115	53	32	41
Grp Sat Flow(s),veh/h/ln	1728	1777	1577	1728	1777	1576	1728	1702	1552	1728	1777	1348
Q Serve(g_s), s	1.5	50.4	4.7	6.9	102.5	1.6	2.0	1.5	13.7	2.9	1.5	2.0
Cycle Q Clear(g_c), s	1.5	50.4	4.7	6.9	102.5	1.6	2.0	1.5	13.7	2.9	1.5	2.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	491	2154	956	207	1821	808	196	739	225	213	532	403
V/C Ratio(X)	0.06	0.64	0.09	0.59	1.16	0.04	0.19	0.06	0.51	0.25	0.06	0.10
Avail Cap(c_a), veh/h	491	2154	956	207	1821	808	225	1174	357	225	817	620
HCM Platoon Ratio	1.00	1.00	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	74.2	25.4	16.4	91.6	48.8	13.1	89.9	73.8	79.0	89.4	73.0	41.3
Incr Delay (d2), s/veh	0.0	1.5	0.2	3.0	80.5	0.1	0.2	0.0	0.7	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	22.0	1.8	3.2	65.5	0.9	0.9	0.6	5.6	1.3	0.7	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.2	26.9	16.6	94.6	129.2	13.2	90.1	73.8	79.7	89.7	73.0	41.3
LnGrp LOS	E	C	B	F	F	F	F	E	E	F	E	D
Approach Vol, veh/h		1505			2277			195			126	
Approach Delay, s/veh		27.3			125.7			80.4			69.7	
Approach LOS		C			F			F			E	

Timer - Assigned Phs												
Phs Duration (G+Y+Rc), s	17.7	129.3	17.0	36.0	36.4	110.5	18.0	35.0				
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.1	8.0	* 8	* 5.7	6.1				
Max Green Setting (Gmax), s	* 13	103.5	* 13	46.0	13.0	* 1E2	* 13	46.0				
Max Q Clear Time (g_c+I1), s	52.4	4.0	4.0	3.5	104.5	4.9	15.7					
Green Ext Time (p_c), s	0.0	38.8	0.0	0.2	0.0	0.0	0.0	0.3				
Intersection Summary												
HCM 6th Ctrl Delay				85.7								
HCM 6th LOS				F								

Notes

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

OnPoint - Oceanside
3: Airport Rd & Mission Ave

Opening Day with Project
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	38	590	6	7	1084	117	13	20	19	44	17	17
Future Volume (veh/h)	38	590	6	7	1084	117	13	20	19	44	17	17
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	0.99	1.00	0.99	1.00	1.00	0.96	1.00	0.97	1.00	0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	39	608	6	7	1118	121	13	21	20	32	37	18
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	59	2210	22	16	1903	206	33	53	51	160	168	137
Arrive On Green	0.03	0.61	0.61	0.01	0.39	0.39	0.08	0.08	0.08	0.09	0.09	0.09
Sat Flow, veh/h	1781	3605	36	1781	3232	349	411	664	632	1781	1870	1532
Grp Volume(v), veh/h	39	300	314	7	614	625	54	0	0	32	37	18
Grp Sat Flow(s),veh/h/ln	1781	1777	1864	1781	1777	1804	1707	0	0	1781	1870	1532
Q Serve(g_s), s	2.2	7.8	7.9	0.4	27.2	27.3	3.0	0.0	0.0	1.7	1.8	1.1
Cycle Q Clear(g_c), s	2.2	7.8	7.9	0.4	27.2	27.3	3.0	0.0	0.0	1.7	1.8	1.1
Prop In Lane	1.00		0.02	1.00		0.19	0.24		0.37	1.00		1.00
Lane Grp Cap(c), veh/h	59	1089	1143	16	1046	1062	137	0	0	160	168	137
V/C Ratio(X)	0.66	0.28	0.28	0.44	0.59	0.59	0.39	0.00	0.00	0.20	0.22	0.13
Avail Cap(c_a), veh/h	93	1089	1143	89	1046	1062	348	0	0	363	382	313
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	0.86	0.86	0.86	1.00	0.00	0.00	0.96	0.96	0.96
Uniform Delay (d), s/veh	47.8	9.0	9.0	49.5	20.7	20.7	43.7	0.0	0.0	42.2	42.3	41.9
Incr Delay (d2), s/veh	12.0	0.6	0.6	16.0	2.1	2.1	2.6	0.0	0.0	0.8	0.9	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	4.2	3.0	3.2	0.2	12.5	12.7	1.4	0.0	0.0	0.8	0.9	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.8	9.6	9.6	65.5	22.8	22.8	46.3	0.0	0.0	43.0	43.2	42.5
LnGrp LOS	E	A	A	E	C	C	D	A	A	D	D	D
Approach Vol, veh/h	653			1246			54			87		
Approach Delay, s/veh	12.6			23.0			46.3			43.0		
Approach LOS	B			C			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	67.5			13.6	8.7	65.1		12.6				
Change Period (Y+Rc), s	5.4	6.2		4.6	5.4	6.2		4.6				
Max Green Setting (Gmax), s	33.4			20.4	5.2	33.2		20.4				
Max Q Clear Time (g_c+I),s	9.9			3.8	4.2	29.3		5.0				
Green Ext Time (p_c), s	0.0	10.1		0.3	0.0	3.6		0.2				

Intersection Summary

HCM 6th Ctrl Delay	21.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

OnPoint - Oceanside
4: Roymar Rd & Mission Ave

Opening Day with Project
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	45	554	48	88	1135	19	67	0	103	88	0	10
Future Volume (veh/h)	45	554	48	88	1135	19	67	0	103	88	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	0.99	1.00	0.99	1.00	1.00	0.99	1.00	0.99	1.00	0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	46	571	49	91	1170	20	69	0	106	91	0	10
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	64	1858	783	114	1876	32	72	0	444	72	0	444
Arrive On Green	0.04	0.50	0.50	0.13	1.00	1.00	0.28	0.00	0.28	0.28	0.00	0.28
Sat Flow, veh/h	1781	3741	1575	1781	3574	61	0	0	1568	0	0	1568
Grp Volume(v), veh/h	46	571	49	91	582	608	69	0	106	91	0	10
Grp Sat Flow(s),veh/h/ln	1781	1870	1575	1781	1777	1859	0	0	1568	0	0	1568
Q Serve(g_s), s	2.6	9.1	1.6	5.0	0.0	0.0	0.0	0.0	5.2	0.0	0.0	0.5
Cycle Q Clear(g_c), s	2.6	9.1	1.6	5.0	0.0	0.0	28.3	0.0	5.2	28.3	0.0	0.5
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	64	1858	783	114	933	976	72	0	444	72	0	444
V/C Ratio(X)	0.72	0.31	0.06	0.80	0.62	0.62	0.96	0.00	0.24	1.26	0.00	0.02
Avail Cap(c_a), veh/h	105	1858	783	141	933	976	72	0	444	72	0	444
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	47.7	14.9	13.1	42.9	0.0	0.0	50.0	0.0	27.6	50.0	0.0	25.9
Incr Delay (d2), s/veh	13.5	0.4	0.2	22.1	3.1	3.0	91.4	0.0	0.3	192.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	3.9	0.6	2.8	0.8	0.8	3.5	0.0	2.0	5.6	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.2	15.4	13.2	65.0	3.1	3.0	141.4	0.0	27.8	242.6	0.0	25.9
LnGrp LOS	E	B	B	E	A	A	F	A	C	F	A	C
Approach Vol, veh/h	666			1281			175			101		
Approach Delay, s/veh	18.4			7.5			72.6			221.1		
Approach LOS	B			A			E			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	51.5	55.5		33.0	8.7	58.3		33.0				
Change Period (Y+Rc), s	5.1	5.8		* 4.7	5.1	5.8		* 4.7				
Max Green Setting (Gmax), s	48.2			* 28	5.9	50.2		* 28				
Max Q Clear Time (g_c+I),s	11.1			30.3	4.6	2.0		30.3				
Green Ext Time (p_c), s	0.0	13.8		0.0	0.0	33.5		0.0				

Intersection Summary

HCM 6th Ctrl Delay	25.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

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

OnPoint - Oceanside
5: Foussat Rd & Mission Ave

Opening Day with Project
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱		↰	↱	
Traffic Volume (veh/h)	125	561	53	22	1087	30	48	79	35	32	70	91
Future Volume (veh/h)	125	561	53	22	1087	30	48	79	35	32	70	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.97	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	130	584	55	23	1132	31	50	82	36	33	73	95
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	426	1967	185	42	1340	640	130	246	101	104	332	914
Arrive On Green	0.48	1.00	1.00	0.05	0.75	0.75	0.04	0.10	0.10	0.01	0.03	0.03
Sat Flow, veh/h	1781	3281	308	1781	3554	1572	3456	2433	999	3456	3554	2640
Grp Volume(v), veh/h	130	316	323	23	1132	31	50	58	60	33	73	95
Grp Sat Flow(s),veh/h/ln	1781	1777	1813	1781	1777	1572	1728	1777	1655	1728	1777	1320
Q Serve(g_s), s	4.5	0.0	0.0	1.3	21.6	0.1	1.4	3.1	3.4	0.9	2.0	0.4
Cycle Q Clear(g_c), s	4.5	0.0	0.0	1.3	21.6	0.1	1.4	3.1	3.4	0.9	2.0	0.4
Prop In Lane	1.00		0.17	1.00		1.00	1.00		0.60	1.00		1.00
Lane Grp Cap(c), veh/h	426	1065	1087	42	1340	640	130	179	167	104	332	914
V/C Ratio(X)	0.31	0.30	0.30	0.55	0.85	0.05	0.39	0.33	0.36	0.32	0.22	0.10
Avail Cap(c_a), veh/h	426	1065	1087	100	1439	684	173	409	381	173	817	1274
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.92	0.92	0.92	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	0.0	0.0	47.1	10.3	2.4	47.0	41.8	41.9	48.5	44.9	11.5
Incr Delay (d2), s/veh	0.4	0.7	0.7	9.8	6.2	0.1	1.9	1.0	1.3	1.7	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	0.7	4.8	0.1	0.6	1.4	1.4	0.4	0.9	0.5	
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.4	0.7	0.7	56.9	16.5	2.5	48.9	42.8	43.2	50.2	45.2	11.5
LnGrp LOS	C	A	A	E	B	A	D	D	D	D	D	B
Approach Vol, veh/h	769			1186			168			201		
Approach Delay, s/veh	4.2			16.9			44.8			30.1		
Approach LOS	A			B			D			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	66.7	9.4	15.4	30.7	44.5	8.6	16.2					
Change Period (Y+Rc), s	6.1	6.8	5.6	6.1	6.8	* 6.8	5.6	6.1				
Max Green Setting (Gmax), s	41.8	5.0	23.0	6.9	* 41	5.0	23.0					
Max Q Clear Time (g_c+I), s	2.0	3.4	4.0	6.5	23.6	2.9	5.4					
Green Ext Time (p_c), s	0.0	14.6	0.0	0.7	0.0	14.1	0.0	0.5				

Intersection Summary

HCM 6th Ctrl Delay	15.9
HCM 6th LOS	B

Notes

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

OnPoint - Oceanside
6: Copperwood Wy & Mission Ave

Opening Day with Project
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱		↰	↱	
Traffic Volume (veh/h)	7	508	90	91	1067	8	47	6	41	4	0	7
Future Volume (veh/h)	7	508	90	91	1067	8	47	6	41	4	0	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	524	93	94	1100	8	48	6	42	4	0	7
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	9	1942	343	118	2551	19	120	15	114	8	0	13
Arrive On Green	0.01	1.00	1.00	0.13	1.00	1.00	0.08	0.08	0.08	0.01	0.00	0.01
Sat Flow, veh/h	1781	3014	533	1781	3616	26	1592	199	1522	576	0	1008
Grp Volume(v), veh/h	7	308	309	94	541	567	54	0	42	11	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1770	1781	1777	1865	1791	0	1522	1584	0	0
Q Serve(g_s), s	0.4	0.0	0.0	5.1	0.0	0.0	2.9	0.0	2.6	0.7	0.0	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.0	5.1	0.0	0.0	2.9	0.0	2.6	0.7	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.01	0.89		1.00	0.36		0.64
Lane Grp Cap(c), veh/h	9	1145	1140	118	1253	1316	135	0	114	21	0	0
V/C Ratio(X)	0.74	0.27	0.27	0.80	0.43	0.43	0.40	0.00	0.37	0.53	0.00	0.00
Avail Cap(c_a), veh/h	69	1145	1140	230	1253	1316	455	0	387	86	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	0.92	0.92	0.92	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	49.4	0.0	0.0	42.7	0.0	0.0	44.1	0.0	44.0	49.0	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.6	0.6	4.2	1.0	1.0	1.9	0.0	2.0	19.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	2.3	0.3	0.3	1.3	0.0	1.0	0.4	0.0	0.0	
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	120.5	0.6	0.6	46.9	1.0	1.0	46.0	0.0	45.9	68.1	0.0	0.0
LnGrp LOS	F	A	A	D	A	A	D	A	D	E	A	A
Approach Vol, veh/h	624			1202			96			11		
Approach Delay, s/veh	1.9			4.6			46.0			68.1		
Approach LOS	A			A			D			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	70.2			5.9	5.6	76.3		12.1				
Change Period (Y+Rc), s	5.1			4.6	5.1	5.8		4.6				
Max Green Setting (Gmax), s	36.2			5.4	3.9	45.2		25.4				
Max Q Clear Time (g_c+I), s	2.0			2.7	2.4	2.0		4.9				
Green Ext Time (p_c), s	0.0	13.2		0.0	0.0	28.8		0.3				

Intersection Summary

HCM 6th Ctrl Delay	6.1
HCM 6th LOS	A

OnPoint - Oceanside
7: Frontier Dr & Mission Ave

Opening Day with Project
Timing Plan: AM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	500	45	63	1130	39	43
Future Volume (veh/h)	500	45	63	1130	39	43
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99	1.00		1.00	0.97	
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	1900	1900
Adj Flow Rate, veh/h	521	47	66	1177	41	45
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	2328	209	85	2862	70	77
Arrive On Green	0.23	0.23	0.05	0.81	0.09	0.09
Sat Flow, veh/h	3388	296	1781	3647	775	850
Grp Volume(v), veh/h	280	288	66	1177	87	0
Grp Sat Flow(s),veh/h/ln	1870	1870	1870	1870	1900	1900
Q Serve(g_s), s	12.8	12.8	3.7	9.6	5.1	0.0
Cycle Q Clear(g_c), s	12.8	12.8	3.7	9.6	5.1	0.0
Prop In Lane	0.16	1.00		0.47	0.52	
Lane Grp Cap(c), veh/h	1255	1282	85	2862	149	0
V/C Ratio(X)	0.22	0.22	0.77	0.41	0.58	0.00
Avail Cap(c_a), veh/h	1255	1282	265	2862	451	0
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.91	0.91	1.00	0.00
Uniform Delay (d), s/veh	16.1	16.2	47.1	2.8	43.7	0.0
Incr Delay (d2), s/veh	0.4	0.4	5.0	0.4	3.6	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	16.2	6.3	1.7	2.4	2.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.5	16.6	52.1	3.2	47.3	0.0
LnGrp LOS	B	B	D	A	D	A
Approach Vol, veh/h	568		1243	87		
Approach Delay, s/veh	16.6		5.8	47.3		
Approach LOS	B		A	D		
Timer - Assigned Phs	1	2		6	8	
Phs Duration (G+Y+Rc), s	9.9	76.5		86.3	13.7	
Change Period (Y+Rc), s	5.1	5.8		5.8	4.6	
Max Green Setting (Gmax), s	42.2			62.2	27.4	
Max Q Clear Time (g_c+I), s	14.8			11.6	7.1	
Green Ext Time (p_c), s	0.0	10.7		34.7	0.2	

Intersection Summary

HCM 6th Ctrl Delay	10.9
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

OnPoint - Oceanside
8: Mission Ave & Fireside St

Opening Day with Project
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	17	550	0	0	1134	9	0	0	0	31	0	54
Future Volume (veh/h)	17	550	0	0	1134	9	0	0	0	31	0	54
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	0.99					1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach	No		No	No						No		
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870				1870	0	1870
Adj Flow Rate, veh/h	18	579	0	0	1194	9				33	0	57
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	2	2	2				2	0	2
Cap, veh/h	21	2997	0	2	2821	21				94	0	83
Arrive On Green	0.02	1.00	0.00	0.00	0.78	0.78				0.05	0.00	0.05
Sat Flow, veh/h	1781	3647	0	1781	3615	27				1781	0	1585
Grp Volume(v), veh/h	18	579	0	0	587	616				33	0	57
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1865				1781	0	1585
Q Serve(g_s), s	1.0	0.0	0.0	0.0	10.8	10.8				1.8	0.0	3.5
Cycle Q Clear(g_c), s	1.0	0.0	0.0	0.0	10.8	10.8				1.8	0.0	3.5
Prop In Lane	1.00	0.00	1.00	0.01						1.00	0.00	1.00
Lane Grp Cap(c), veh/h	21	2997	0	2	1387	1456				94	0	83
V/C Ratio(X)	0.85	0.19	0.00	0.00	0.42	0.42				0.35	0.00	0.68
Avail Cap(c_a), veh/h	123	2997	0	89	1387	1456				452	0	403
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	48.7	0.0	0.0	0.0	3.6	3.6				45.7	0.0	46.5
Incr Delay (d2), s/veh	27.6	0.1	0.0	0.0	0.9	0.9				2.2	0.0	9.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.1	0.0	0.0	3.2	3.3				0.8	0.0	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.3	0.1	0.0	0.0	4.5	4.5				48.0	0.0	56.0
LnGrp LOS	E	A	A	A	A	A				D	A	E
Approach Vol, veh/h	597			1203						90		
Approach Delay, s/veh	2.4			4.5						53.0		
Approach LOS	A			A						D		
Timer - Assigned Phs	1	2		4	5	6						
Phs Duration (G+Y+Rc), s	0.0	90.1		9.9	6.3	83.8						
Change Period (Y+Rc), s	5.1	5.8		4.6	5.1	5.8						
Max Green Setting (Gmax), s	54.1			25.4	6.9	52.2						
Max Q Clear Time (g_c+I), s	2.0			5.5	3.0	12.8						
Green Ext Time (p_c), s	0.0	14.9		0.2	0.0	29.1						

Intersection Summary

HCM 6th Ctrl Delay	6.2
HCM 6th LOS	A

OnPoint - Oceanside

9: El Camino Real & Mission Ave

Opening Day with Project

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	153	275	120	156	501	24	150	215	91	87	734	418
Future Volume (veh/h)	153	275	120	156	501	24	150	215	91	87	734	418
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	0.99	1.00	1.00	0.97	1.00	0.99	1.00	0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	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	159	286	0	162	522	25	127	265	95	91	765	435
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	281	955		281	928	44	173	363	149	589	1175	648
Arrive On Green	0.08	0.27	0.00	0.08	0.27	0.27	0.10	0.10	0.10	0.33	0.33	0.33
Sat Flow, veh/h	3456	3554	1585	3456	3450	165	1781	3741	1536	1781	3554	1571
Grp Volume(v), veh/h	159	286	0	162	268	279	127	265	95	91	765	435
Grp Sat Flow(s), veh/h/ln	1728	1777	1585	1728	1777	1838	1781	1870	1536	1781	1777	1571
Q Serve(g_s), s	5.4	7.8	0.0	5.5	15.9	16.0	8.5	8.4	7.3	4.4	22.5	27.6
Cycle Q Clear(g_c), s	5.4	7.8	0.0	5.5	15.9	16.0	8.5	8.4	7.3	4.4	22.5	27.6
Prop In Lane	1.00	1.00	1.00	1.00	0.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	281	955		281	478	494	173	363	149	589	1175	648
V/C Ratio(X)	0.57	0.30		0.58	0.56	0.56	0.74	0.73	0.64	0.15	0.65	0.67
Avail Cap(c_a), veh/h	415	1350		392	663	686	253	532	218	800	1597	835
HCM Platoon Ratio	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.1	35.6	0.0	54.2	38.5	38.6	53.7	53.7	53.2	28.9	34.9	29.3
Incr Delay (d2), s/veh	1.8	0.8	0.0	1.9	4.7	4.6	6.0	2.8	4.5	0.1	0.6	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	0.4	3.5	0.0	2.5	7.6	7.8	4.1	4.1	3.0	1.9	9.8	10.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.9	36.4	0.0	56.0	43.3	43.2	59.8	56.6	57.7	29.0	35.6	30.7
LnGrp LOS	E	D		E	D	D	E	E	E	C	D	C
Approach Vol, veh/h	445	A		709			487			1291		
Approach Delay, s/veh	43.4			46.1			57.6			33.4		
Approach LOS	D			D			E			C		
Timer - Assigned Phs	1	2		4	5	6	8					
Phs Duration (G+Y+Rc), s	39.7			46.8	17.3	39.7	18.7					
Change Period (Y+Rc), s	6.8			6.3	7.3	6.8	6.8					
Max Green Setting (Gmax), s	46.5			55.0	14.7	45.7	17.4					
Max Q Clear Time (g_c+I), s	9.8			29.6	7.4	18.0	10.5					
Green Ext Time (p_c), s	0.2	6.0		8.2	0.3	10.3	1.4					

Intersection Summary

HCM 6th Ctrl Delay	42.0
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

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

OnPoint - Oceanside

10: Douglas Dr & Mission Ave

Opening Day with Project

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	52	385	55	31	640	42	50	111	24	22	104	64
Future Volume (veh/h)	52	385	55	31	640	42	50	111	24	22	104	64
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	0.99	1.00	1.00	0.99	1.00	0.99	1.00	0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	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	55	405	58	33	674	44	53	117	25	23	109	67
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	172	1273	563	63	1162	76	87	658	137	47	440	251
Arrive On Green	0.05	0.36	0.36	0.04	0.34	0.34	0.05	0.23	0.23	0.03	0.20	0.20
Sat Flow, veh/h	3456	3554	1572	1781	3384	221	1781	2922	607	1781	2167	1236
Grp Volume(v), veh/h	55	405	58	33	354	364	53	70	72	23	88	88
Grp Sat Flow(s), veh/h/ln	1728	1777	1572	1781	1777	1828	1781	1777	1751	1781	1777	1626
Q Serve(g_s), s	0.9	5.0	1.5	1.1	9.8	9.9	1.8	1.9	2.0	0.8	2.5	2.8
Cycle Q Clear(g_c), s	0.9	5.0	1.5	1.1	9.8	9.9	1.8	1.9	2.0	0.8	2.5	2.8
Prop In Lane	1.00	1.00	1.00	1.00	0.12	1.00	1.00	0.35	1.00	1.00	0.76	0.76
Lane Grp Cap(c), veh/h	172	1273	563	63	610	628	87	400	395	47	361	330
V/C Ratio(X)	0.32	0.32	0.10	0.53	0.58	0.58	0.61	0.17	0.18	0.49	0.24	0.27
Avail Cap(c_a), veh/h	292	1674	740	174	860	885	275	1143	1127	162	1031	944
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.7	14.0	12.9	28.6	16.2	16.2	28.1	18.8	18.9	28.9	20.2	20.3
Incr Delay (d2), s/veh	1.1	0.3	0.2	6.7	1.9	1.8	6.7	0.3	0.3	7.6	0.5	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	0.4	1.9	0.5	0.6	3.9	4.0	0.9	0.8	0.8	0.4	1.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.7	14.3	13.1	35.3	18.1	18.0	34.9	19.1	19.2	36.5	20.6	20.9
LnGrp LOS	C	B	B	D	B	B	C	B	B	D	C	C
Approach Vol, veh/h	518			751			195			199		
Approach Delay, s/veh	15.7			18.8			23.4			22.6		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	27.4	8.0	17.6	8.1	26.5	6.7	19.0					
Change Period (Y+Rc), s	5.1	5.8	5.1	5.4	5.1	5.8	5.1	5.4				
Max Green Setting (Gmax), s	28.4	9.3	35.0	5.1	29.2	5.5	38.8					
Max Q Clear Time (g_c+I), s	7.0	3.8	4.8	2.9	11.9	2.8	4.0					
Green Ext Time (p_c), s	0.0	5.1	0.0	1.5	0.0	7.3	0.0	1.2				

Intersection Summary

HCM 6th Ctrl Delay	18.8
HCM 6th LOS	B

OnPoint - Oceanside
11: Roymar Rd & Via de la Valle

Opening Day with Project
Timing Plan: AM Peak

Intersection												
Int Delay, s/veh	5.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	84	0	38	0	26	37	4	16	0
Future Vol, veh/h	0	0	0	84	0	38	0	26	37	4	16	0
Conflicting Peds, #/hr	0	0	0	10	0	10	0	0	10	10	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	94	0	43	0	29	42	4	18	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	108	107	28	96	86	70	18	0	0	81	0	0
Stage 1	26	26	-	60	60	-	-	-	-	-	-	-
Stage 2	82	81	-	36	26	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	871	783	1047	887	804	993	1599	-	-	1517	-	-
Stage 1	992	874	-	951	845	-	-	-	-	-	-	-
Stage 2	926	828	-	980	874	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	823	773	1037	868	794	974	1599	-	-	1503	-	-
Mov Cap-2 Maneuver	823	773	-	868	794	-	-	-	-	-	-	-
Stage 1	992	871	-	941	837	-	-	-	-	-	-	-
Stage 2	877	820	-	968	871	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.7	0	1.5
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1599	-	-	-	898	1503	-	-
HCM Lane V/C Ratio	-	-	-	-	0.153	0.003	-	-
HCM Control Delay (s)	0	-	-	0	9.7	7.4	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.5	0	-	-

OnPoint - Oceanside
12: Mission Ave & Project Dwy 1

Opening Day with Project
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↓			↗
Traffic Vol, veh/h	0	740	1183	39	0	59
Future Vol, veh/h	0	740	1183	39	0	59
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	804	1286	42	0	64

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	-	0	-	0	-	664
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	-	-	-	0	403
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	403
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	15.6
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	403
HCM Lane V/C Ratio	-	-	-	0.159
HCM Control Delay (s)	-	-	-	15.6
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.6

OnPoint - Oceanside
13: Foussat Rd & Project Dwy 2

Opening Day with Project
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗↗↗	↗↗	
Traffic Vol, veh/h	0	0	0	194	193	98
Future Vol, veh/h	0	0	0	194	193	98
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	211	210	107

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	- 159	- 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	0 858	0 -	- -
Stage 1	0 -	0 -	- -
Stage 2	0 -	0 -	- -
Platoon blocked, %	- -	- -	- -
Mov Cap-1 Maneuver	- 858	- -	- -
Mov Cap-2 Maneuver	- -	- -	- -
Stage 1	- -	- -	- -
Stage 2	- -	- -	- -

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- -	- -	- -
HCM Lane V/C Ratio	- -	- -	- -
HCM Control Delay (s)	- 0	- -	- -
HCM Lane LOS	- A	- -	- -
HCM 95th %tile Q(veh)	- -	- -	- -

OnPoint - Oceanside
1: Airport Rd & SR 76

Opening Day with Project
Timing Plan: PM Peak

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	↗	↗↗	↗	↗	↗↗	↗	↗	↗	↗	↗	↗	↗
Lane Configurations		↗↗	↗	↗	↗↗	↗	↗	↗	↗	↗	↗	↗
Traffic Volume (veh/h)	23	2167	71	80	1308	25	169	93	108	39	69	40
Future Volume (veh/h)	23	2167	71	80	1308	25	169	93	108	39	69	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No		No		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	2305	76	85	1391	27	180	99	115	41	73	43
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	284	2348	1039	92	1924	850	197	102	118	53	94	74
Arrive On Green	0.16	0.66	0.66	0.05	0.54	0.54	0.11	0.13	0.13	0.03	0.05	0.05
Sat Flow, veh/h	1781	3554	1573	1781	3554	1570	1781	778	904	1781	1870	1490
Grp Volume(v), veh/h	24	2305	76	85	1391	27	180	0	214	41	73	43
Grp Sat Flow(s),veh/h/ln	1781	1777	1573	1781	1777	1570	1781	0	1683	1781	1870	1490
Q Serve(g_s), s	2.3	125.3	3.4	9.5	59.0	1.3	20.0	0.0	25.3	4.6	7.7	4.3
Cycle Q Clear(g_c), s	2.3	125.3	3.4	9.5	59.0	1.3	20.0	0.0	25.3	4.6	7.7	4.3
Prop In Lane	1.00		1.00	1.00		1.00		1.00	0.54	1.00		1.00
Lane Grp Cap(c), veh/h	284	2348	1039	92	1924	850	197	0	220	53	94	74
V/C Ratio(X)	0.08	0.98	0.07	0.93	0.72	0.03	0.92	0.00	0.97	0.78	0.78	0.58
Avail Cap(c_a), veh/h	284	2348	1039	92	2310	1021	224	0	220	83	94	74
HCM Platoon Ratio	1.00	1.00	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	0.96	0.00	0.96	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.6	32.8	12.1	94.5	34.6	13.2	88.0	0.0	86.5	96.4	93.9	53.4
Incr Delay (d2), s/veh	0.0	14.8	0.1	69.2	2.4	0.1	32.6	0.0	51.1	8.9	31.1	7.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	57.2	1.3	6.2	26.5	0.6	11.1	0.0	14.3	2.3	4.6	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.7	47.5	12.2	163.7	37.0	13.3	120.6	0.0	137.6	105.3	125.0	60.5
LnGrp LOS	E	D	B	F	D	B	F	A	F	F	F	E
Approach Vol, veh/h	2405				1503				394		157	
Approach Delay, s/veh	46.7				43.7				129.9		102.2	
Approach LOS	D				D				F		F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	140.1	27.8	16.1	39.9	116.3	11.6	32.3
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.1	8.0	* 8	* 5.7	6.1
Max Green Setting (Gmax), s	* 10	129.0	* 25	10.0	9.3	* 1.3E2	* 9.3	25.9
Max Q Clear Time (g_c+I), s	11.5	127.3	22.0	9.7	4.3	61.0	6.6	27.3
Green Ext Time (p_c), s	0.0	1.7	0.1	0.0	0.0	47.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	55.0
HCM 6th LOS	D
Notes	
User approved pedestrian interval to be less than phase max green.	
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.	

OnPoint - Oceanside
2: Foussat Rd & SR 76

Opening Day with Project
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↱	↰	↰	↱	↱	↰	↱	↰
Traffic Volume (veh/h)	106	2080	138	193	1306	86	62	63	157	58	103	66
Future Volume (veh/h)	106	2080	138	193	1306	86	62	63	157	58	103	66
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	0.99	1.00	1.00	1.00	0.98	1.00	0.96	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	No	No	No	No	No	No	No	No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	110	2167	144	201	1360	90	65	66	164	60	107	69
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	578	2297	1020	156	1821	808	168	746	227	122	471	356
Arrive On Green	0.17	0.65	0.65	0.05	0.51	0.51	0.05	0.15	0.15	0.04	0.13	0.13
Sat Flow, veh/h	3456	3554	1578	3456	3554	1576	3456	5106	1552	3456	3554	2685
Grp Volume(v), veh/h	110	2167	144	201	1360	90	65	66	164	60	107	69
Grp Sat Flow(s),veh/h/ln	1728	1777	1578	1728	1777	1576	1728	1702	1552	1728	1777	1342
Q Serve(g_s), s	5.5	110.6	7.1	9.0	60.5	4.7	3.6	2.2	20.2	3.4	5.4	3.3
Cycle Q Clear(g_c), s	5.5	110.6	7.1	9.0	60.5	4.7	3.6	2.2	20.2	3.4	5.4	3.3
Prop In Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	578	2297	1020	156	1821	808	168	746	227	122	471	356
V/C Ratio(X)	0.19	0.94	0.14	1.29	0.75	0.11	0.39	0.09	0.72	0.49	0.23	0.19
Avail Cap(c_a), veh/h	578	2297	1020	156	2077	921	178	970	295	143	640	483
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.6	32.1	13.8	95.5	38.5	15.6	92.2	73.9	81.5	94.7	77.6	40.7
Incr Delay (d2), s/veh	0.1	9.5	0.3	171.0	2.8	0.3	0.5	0.0	3.7	1.1	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	49.6	2.7	7.8	27.4	2.3	1.7	1.0	8.4	1.6	2.5	1.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.7	41.6	14.1	266.5	41.4	15.9	92.8	73.9	85.2	95.9	77.7	40.8
LnGrp LOS	E	D	B	F	D	B	F	E	F	F	E	D
Approach Vol, veh/h	2421			1651			295			236		
Approach Delay, s/veh	41.3			67.4			84.4			71.5		
Approach LOS	D			E			F			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.7	137.2	15.4	32.6	41.5	110.5	12.7	35.3				
Change Period (Y+Rc), s	5.7	8.0	* 5.7	6.1	8.0	* 8	* 5.7	6.1				
Max Green Setting (Gmax), s	119.2	* 10	36.0	11.3*	1.2E2	* 8.3	38.0					
Max Q Clear Time (g_c+I),s	112.6	5.6	7.4	7.5	62.5	5.4	22.2					
Green Ext Time (p_c), s	0.0	6.6	0.0	0.4	0.0	40.0	0.0	0.3				

Intersection Summary

HCM 6th Ctrl Delay	55.0
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

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

OnPoint - Oceanside
3: Airport Rd & Mission Ave

Opening Day with Project
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↱	↰	↰	↱	↱	↰	↱	↰
Traffic Volume (veh/h)	31	1300	11	15	885	75	15	10	17	64	11	45
Future Volume (veh/h)	31	1300	11	15	885	75	15	10	17	64	11	45
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	0.99	1.00	0.99	1.00	1.00	1.00	0.96	1.00	0.96	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	No	No	No	No	No	No	No	No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	1398	12	16	952	81	16	11	18	78	0	48
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	50	2376	20	31	2145	183	42	29	47	290	0	124
Arrive On Green	0.03	0.66	0.66	0.03	1.00	1.00	0.07	0.07	0.07	0.08	0.00	0.08
Sat Flow, veh/h	1781	3610	31	1781	3312	282	599	412	673	3563	0	1527
Grp Volume(v), veh/h	33	688	722	16	511	522	45	0	0	78	0	48
Grp Sat Flow(s),veh/h/ln	1781	1777	1865	1781	1777	1817	1684	0	0	1781	0	1527
Q Serve(g_s), s	2.2	25.9	25.9	1.1	0.0	0.0	3.1	0.0	0.0	2.5	0.0	3.6
Cycle Q Clear(g_c), s	2.2	25.9	25.9	1.1	0.0	0.0	3.1	0.0	0.0	2.5	0.0	3.6
Prop In Lane	1.00	1.00	0.02	1.00	0.16	0.36	0.40	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	50	1170	1227	31	1151	1177	117	0	0	290	0	124
V/C Ratio(X)	0.67	0.59	0.59	0.52	0.44	0.44	0.38	0.00	0.00	0.27	0.00	0.39
Avail Cap(c_a), veh/h	98	1170	1227	77	1151	1177	286	0	0	606	0	260
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.93	0.93	0.93	1.00	0.00	0.00	0.78	0.00	0.78
Uniform Delay (d), s/veh	57.8	11.4	11.4	57.4	0.0	0.0	53.3	0.0	0.0	51.8	0.0	52.3
Incr Delay (d2), s/veh	14.3	2.2	2.1	12.2	1.2	1.1	2.9	0.0	0.0	0.5	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	14.2	10.3	10.8	0.6	0.4	0.4	1.4	0.0	0.0	1.1	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.1	13.6	13.5	69.6	1.2	1.1	56.3	0.0	0.0	52.3	0.0	54.4
LnGrp LOS	E	B	B	E	A	A	E	A	A	D	A	D
Approach Vol, veh/h	1443			1049			45			126		
Approach Delay, s/veh	14.9			2.2			56.3			53.1		
Approach LOS	B			A			E			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	85.2			14.4	8.7	83.9		13.0				
Change Period (Y+Rc), s	6.2			4.6	5.4	6.2		4.6				
Max Green Setting (Gmax), s	53.2			20.4	6.6	51.8		20.4				
Max Q Clear Time (g_c+I),s	27.9			5.6	4.2	2.0		5.1				
Green Ext Time (p_c), s	0.0	21.9		0.5	0.0	27.8		0.2				

Intersection Summary

HCM 6th Ctrl Delay	12.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

OnPoint - Oceanside
4: Roymar Rd & Mission Ave

Opening Day with Project
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	1256	79	114	866	17	70	0	146	107	0	22
Future Volume (veh/h)	56	1256	79	114	866	17	70	0	146	107	0	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99	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	No	No	No	No	No	No	No	No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	1351	85	123	931	18	75	0	157	115	0	24
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	77	2096	883	146	1136	41	60	0	356	60	0	356
Arrive On Green	0.04	0.56	0.56	0.16	1.00	1.00	0.23	0.00	0.23	0.23	0.00	0.23
Sat Flow, veh/h	1781	3741	1577	1781	3565	69	0	0	1564	0	0	1564
Grp Volume(v), veh/h	60	1351	85	123	464	485	75	0	157	115	0	24
Grp Sat Flow(s),veh/h/ln	1781	1870	1577	1781	1777	1857	0	0	1564	0	0	1564
Q Serve(g_s), s	4.0	29.8	3.0	8.0	0.0	0.0	0.0	0.0	10.3	0.0	0.0	1.4
Cycle Q Clear(g_c), s	4.0	29.8	3.0	8.0	0.0	0.0	27.3	0.0	10.3	27.3	0.0	1.4
Prop In Lane	1.00	1.00	1.00	1.00	0.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	77	2096	883	146	1065	1113	60	0	356	60	0	356
V/C Ratio(X)	0.78	0.64	0.10	0.84	0.44	0.44	1.25	0.00	0.44	1.92	0.00	0.07
Avail Cap(c_a), veh/h	88	2096	883	147	1065	1113	60	0	356	60	0	356
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.81	0.81	0.81	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.8	18.2	12.3	49.4	0.0	0.0	60.0	0.0	39.8	60.0	0.0	36.4
Incr Delay (d2), s/veh	26.6	1.3	0.2	32.9	1.3	1.2	197.8	0.0	0.9	467.8	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	12.8	1.1	4.6	0.4	0.4	5.1	0.0	4.1	9.6	0.0	0.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.5	19.4	12.4	82.3	1.3	1.2	257.8	0.0	40.7	527.8	0.0	36.4
LnGrp LOS	F	B	B	F	A	A	F	A	D	F	A	D
Approach Vol, veh/h	1496			1072			232			139		
Approach Delay, s/veh	21.6			10.6			110.9			443.0		
Approach LOS	C			B			F			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	35.0	73.0		32.0	10.3	77.7		32.0				
Change Period (Y+Rc), s	5.1	5.8		* 4.7	5.1	5.8		* 4.7				
Max Green Setting (Gmax), s	67.2			* 27	5.9	71.2		* 27				
Max Q Clear Time (g_c+I), s	31.8			29.3	6.0	2.0		29.3				
Green Ext Time (p_c), s	0.0	30.0		0.0	0.0	30.7		0.0				

Intersection Summary

HCM 6th Ctrl Delay	44.5
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

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

OnPoint - Oceanside
5: Foussat Rd & Mission Ave

Opening Day with Project
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	1324	72	30	781	39	57	94	29	61	121	115
Future Volume (veh/h)	141	1324	72	30	781	39	57	94	29	61	121	115
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	0.99	1.00	1.00	0.97	1.00	1.00	0.95	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	No	No	No	No	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	150	1409	77	32	831	41	61	100	31	65	129	122
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	534	2173	118	49	1265	618	125	259	77	127	346	1093
Arrive On Green	0.60	1.00	1.00	0.04	0.47	0.47	0.04	0.10	0.10	0.04	0.10	0.10
Sat Flow, veh/h	1781	3426	187	1781	3554	1572	3456	2681	793	3456	3554	2646
Grp Volume(v), veh/h	150	729	757	32	831	41	61	65	66	65	129	122
Grp Sat Flow(s),veh/h/ln	1781	1777	1836	1781	1777	1572	1728	1777	1698	1728	1777	1323
Q Serve(g_s), s	4.9	0.0	0.0	2.1	21.4	0.4	2.1	4.1	4.4	2.2	4.1	0.5
Cycle Q Clear(g_c), s	4.9	0.0	0.0	2.1	21.4	0.4	2.1	4.1	4.4	2.2	4.1	0.5
Prop In Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.47	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	534	1127	1164	49	1265	618	125	172	164	127	346	1093
V/C Ratio(X)	0.28	0.65	0.65	0.66	0.66	0.07	0.49	0.38	0.40	0.51	0.37	0.11
Avail Cap(c_a), veh/h	534	1127	1164	88	1697	809	150	342	327	158	693	1352
HCM Platoon Ratio	2.00	2.00	2.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.96	0.96	0.96	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.8	0.0	0.0	57.3	26.0	7.5	56.7	50.8	51.0	56.7	50.7	11.1
Incr Delay (d2), s/veh	0.3	2.9	2.8	13.5	2.6	0.2	2.9	1.4	1.6	3.1	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.9	1.1	8.7	0.3	1.0	1.9	2.0	1.0	1.9	0.7	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.1	2.9	2.8	70.8	28.6	7.7	59.7	52.2	52.6	59.8	51.4	11.2
LnGrp LOS	B	A	A	E	C	A	E	D	D	E	D	B
Approach Vol, veh/h	1636			904			192			316		
Approach Delay, s/veh	4.2			29.1			54.7			37.6		
Approach LOS	A			C			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	82.9	9.9	17.8	42.8	49.5	10.0	17.7					
Change Period (Y+Rc), s	6.1	6.8	5.6	6.1	6.8	* 6.8	5.6	6.1				
Max Green Setting (Gmax), s	60.9	5.2	23.4	9.5	* 57	5.5	23.1					
Max Q Clear Time (g_c+I), s	2.0	4.1	6.1	6.9	23.4	4.2	6.4					
Green Ext Time (p_c), s	0.0	48.4	0.0	1.1	0.1	19.3	0.0	0.6				

Intersection Summary

HCM 6th Ctrl Delay	18.3
HCM 6th LOS	B

Notes

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

OnPoint - Oceanside
6: Copperwood Wy & Mission Ave

Opening Day with Project
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	4	1307	91	55	728	7	96	2	108	5	1	7
Future Volume (veh/h)	4	1307	91	55	728	7	96	2	108	5	1	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	0.99	1.00	0.99	1.00	1.00	0.97	1.00	0.93	1.00	0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	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	1421	99	60	791	8	104	2	117	5	1	8
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	6	2225	154	77	2524	26	199	4	175	9	2	14
Arrive On Green	0.01	1.00	1.00	0.09	1.00	1.00	0.11	0.11	0.11	0.02	0.02	0.02
Sat Flow, veh/h	1781	3369	234	1781	3604	36	1749	34	1543	569	114	911
Grp Volume(v), veh/h	4	747	773	60	390	409	106	0	117	14	0	0
Grp Sat Flow(s), veh/h/ln	1781	1777	1826	1781	1777	1863	1783	0	1543	1594	0	0
Q Serve(g_s), s	0.3	0.0	0.0	4.0	0.0	0.0	6.7	0.0	8.7	1.0	0.0	0.0
Cycle Q Clear(g_c), s	0.3	0.0	0.0	4.0	0.0	0.0	6.7	0.0	8.7	1.0	0.0	0.0
Prop In Lane	1.00	0.13	1.00	0.02	0.98	1.00	0.36	1.00	0.36	0.57	0.57	0.57
Lane Grp Cap(c), veh/h	6	1173	1206	77	1244	1305	202	0	175	25	0	0
V/C Ratio(X)	0.72	0.64	0.64	0.78	0.31	0.31	0.52	0.00	0.67	0.57	0.00	0.00
Avail Cap(c_a), veh/h	46	1173	1206	132	1244	1305	376	0	325	69	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.72	0.72	0.72	0.97	0.97	0.97	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	59.6	0.0	0.0	54.3	0.0	0.0	50.1	0.0	51.0	58.7	0.0	0.0
Incr Delay (d2), s/veh	79.4	1.9	1.9	6.2	0.6	0.6	2.1	0.0	4.3	18.6	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.2	0.6	0.6	1.8	0.2	0.2	3.1	0.0	3.6	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	138.9	1.9	1.9	60.5	0.6	0.6	52.2	0.0	55.4	77.3	0.0	0.0
LnGrp LOS	F	A	A	E	A	A	D	A	E	E	A	A
Approach Vol, veh/h	1524			859			223			14		
Approach Delay, s/veh	2.3			4.8			53.9			77.3		
Approach LOS	A			A			D			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	30.3	85.0		6.5	5.5	89.8		18.2				
Change Period (Y+Rc), s	5.1	5.8		4.6	5.1	5.8		4.6				
Max Green Setting (Gmax), s	60.5			5.2	3.1	66.3		25.3				
Max Q Clear Time (g_c+I), s	2.0			3.0	2.3	2.0		10.7				
Green Ext Time (p_c), s	0.0	49.1		0.0	0.0	23.2		0.8				
Intersection Summary												
HCM 6th Ctrl Delay				7.9								
HCM 6th LOS				A								

OnPoint - Oceanside
7: Frontier Dr & Mission Ave

Opening Day with Project
Timing Plan: PM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↱	↰	↱	↰	↱
Traffic Volume (veh/h)	1272	45	45	775	28	41
Future Volume (veh/h)	1272	45	45	775	28	41
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99	1.00	1.00	1.00	0.96	0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	1311	46	46	799	29	42
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	2656	93	59	2965	52	75
Arrive On Green	1.00	1.00	0.03	0.83	0.08	0.08
Sat Flow, veh/h	3595	123	1781	3647	654	947
Grp Volume(v), veh/h	665	692	46	799	72	0
Grp Sat Flow(s), veh/h/ln	1777	1847	1781	1777	1623	0
Q Serve(g_s), s	0.0	0.0	3.1	5.8	5.1	0.0
Cycle Q Clear(g_c), s	0.0	0.0	3.1	5.8	5.1	0.0
Prop In Lane	0.07	1.00		0.40	0.58	
Lane Grp Cap(c), veh/h	1348	1401	59	2965	128	0
V/C Ratio(X)	0.49	0.49	0.78	0.27	0.56	0.00
Avail Cap(c_a), veh/h	1348	1401	162	2965	357	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.74	0.74	0.92	0.92	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	57.6	2.1	53.2	0.0
Incr Delay (d2), s/veh	1.0	0.9	7.3	0.2	3.8	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.4	1.5	1.4	2.2	0.0	
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	1.0	0.9	64.8	2.3	57.0	0.0
LnGrp LOS	A	A	E	A	E	A
Approach Vol, veh/h	1357			845	72	
Approach Delay, s/veh	0.9			5.7	57.0	
Approach LOS	A			A	E	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	96.8				105.9	14.1
Change Period (Y+Rc), s	5.8				5.8	4.6
Max Green Setting (Gmax), s	67.2				83.2	26.4
Max Q Clear Time (g_c+I), s	2.0				7.8	7.1
Green Ext Time (p_c), s	0.0	48.0			25.6	0.2
Intersection Summary						
HCM 6th Ctrl Delay				4.5		
HCM 6th LOS				A		
Notes						
User approved volume balancing among the lanes for turning movement.						

OnPoint - Oceanside
8: Mission Ave & Fireside St

Opening Day with Project
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱					↰	↱	↰
Traffic Volume (veh/h)	234	1069	0	0	693	97	0	0	0	50	0	113
Future Volume (veh/h)	234	1069	0	0	693	97	0	0	0	50	0	113
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach	No			No						No		
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870				1870	0	1870
Adj Flow Rate, veh/h	241	1102	0	0	714	100				52	0	116
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97				0.97	0.97	0.97
Percent Heavy Veh, %	2	2	0	2	2	2				2	0	2
Cap, veh/h	270	2920	0	1	1962	275				163	0	145
Arrive On Green	0.15	0.82	0.00	0.00	0.63	0.63				0.09	0.00	0.09
Sat Flow, veh/h	1781	3647	0	1781	3127	438				1781	0	1585
Grp Volume(v), veh/h	241	1102	0	0	406	408				52	0	116
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1787				1781	0	1585
Q Serve(g_s), s	15.9	9.6	0.0	0.0	13.2	13.2				3.3	0.0	8.6
Cycle Q Clear(g_c), s	15.9	9.6	0.0	0.0	13.2	13.2				3.3	0.0	8.6
Prop In Lane	1.00		0.00	1.00		0.24				1.00		1.00
Lane Grp Cap(c), veh/h	270	2920	0	1	1115	1122				163	0	145
V/C Ratio(X)	0.89	0.38	0.00	0.00	0.36	0.36				0.32	0.00	0.80
Avail Cap(c_a), veh/h	474	2920	0	74	1115	1122				407	0	362
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	49.9	2.8	0.0	0.0	10.8	10.8				51.0	0.0	53.4
Incr Delay (d2), s/veh	4.1	0.3	0.0	0.0	0.9	0.9				1.1	0.0	9.6
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	4	2.6	0.0	0.0	5.3	5.3				1.5	0.0	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.1	3.1	0.0	0.0	11.7	11.7				52.1	0.0	63.0
LnGrp LOS	D	A	A	A	B	B				D	A	E
Approach Vol, veh/h	1343				814					168		
Approach Delay, s/veh	12.2				11.7					59.7		
Approach LOS	B				B					E		

Timer - Assigned Phs												
Phs Duration (G+Y+Rc), s	0.0	104.4		15.6	23.3	81.1						
Change Period (Y+Rc), s	5.1	5.8		4.6	5.1	5.8						
Max Green Setting (Gmax), s	72.1			27.4	31.9	45.2						
Max Q Clear Time (g_c+I), s	11.6			10.6	17.9	15.2						
Green Ext Time (p_c), s	0.0	36.3		0.4	0.3	16.5						

Intersection Summary												
HCM 6th Ctrl Delay				15.5								
HCM 6th LOS				B								

OnPoint - Oceanside
9: El Camino Real & Mission Ave

Opening Day with Project
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱					↰	↱	↰
Traffic Volume (veh/h)	381	609	155	122	280	102	229	700	252	167	421	303
Future Volume (veh/h)	381	609	155	122	280	102	229	700	252	167	421	303
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No						No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	414	662	0	133	304	111	249	761	274	182	458	329
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	417	984		234	573	205	397	833	348	440	878	578
Arrive On Green	0.12	0.28	0.00	0.07	0.22	0.22	0.22	0.22	0.22	0.25	0.25	0.25
Sat Flow, veh/h	3456	3554	1585	3456	2556	913	1781	3741	1564	1781	3554	1566
Grp Volume(v), veh/h	414	662	0	133	209	206	249	761	274	182	458	329
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1691	1781	1870	1564	1781	1777	1566
Q Serve(g_s), s	17.6	24.3	0.0	5.5	15.2	15.8	18.5	29.1	24.2	12.6	16.3	24.7
Cycle Q Clear(g_c), s	17.6	24.3	0.0	5.5	15.2	15.8	18.5	29.1	24.2	12.6	16.3	24.7
Prop In Lane	1.00		1.00	1.00	0.54	1.00		1.00	1.00	1.00		1.00
Lane Grp Cap(c), veh/h	417	984		234	398	379	397	833	348	440	878	578
V/C Ratio(X)	0.99	0.67		0.57	0.53	0.54	0.63	0.91	0.79	0.41	0.52	0.57
Avail Cap(c_a), veh/h	417	1264		276	559	533	407	854	357	673	1342	782
HCM Platoon Ratio	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.5	47.1	0.0	66.3	50.1	50.3	51.5	55.6	53.7	46.3	47.7	37.1
Incr Delay (d2), s/veh	42.2	3.7	0.0	2.2	4.9	5.5	2.9	13.9	10.9	0.6	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	11.3	0.0	2.5	7.4	7.3	8.7	15.4	10.6	5.7	7.4	9.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	106.7	50.8	0.0	68.5	54.9	55.7	54.5	69.6	64.6	46.9	48.2	38.0
LnGrp LOS	F	D		E	D	E	D	E	E	D	D	D
Approach Vol, veh/h	1076		A		548			1284			969	
Approach Delay, s/veh	72.3				58.5			65.6			44.5	
Approach LOS	E				E			E			D	

Timer - Assigned Phs												
Phs Duration (G+Y+Rc), s	7.3	47.4		42.6	25.0	39.7		39.5				
Change Period (Y+Rc), s	7.3	6.8		6.3	7.3	6.8		6.8				
Max Green Setting (Gmax), s	52.2			55.4	17.7	46.2		33.5				
Max Q Clear Time (g_c+I), s	26.3			26.7	19.6	17.8		31.1				
Green Ext Time (p_c), s	0.1	12.6		5.2	0.0	7.8		1.6				

Intersection Summary												
HCM 6th Ctrl Delay				61.2								
HCM 6th LOS				E								

Notes
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

OnPoint - Oceanside
10: Douglas Dr & Mission Ave

Opening Day with Project
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	65	1004	50	35	440	37	58	99	28	32	112	79
Future Volume (veh/h)	65	1004	50	35	440	37	58	99	28	32	112	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	0.99	1.00	0.99	1.00	0.99	1.00	0.98	1.00	0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	66	1024	51	36	449	38	59	101	29	33	114	81
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	181	1460	646	65	1308	110	88	556	154	61	384	251
Arrive On Green	0.05	0.41	0.41	0.04	0.39	0.39	0.05	0.20	0.20	0.03	0.19	0.19
Sat Flow, veh/h	3456	3554	1573	1781	3315	279	1781	2741	756	1781	2044	1337
Grp Volume(v), veh/h	66	1024	51	36	240	247	59	64	66	33	98	97
Grp Sat Flow(s),veh/h/ln	1728	1777	1573	1781	1777	1818	1781	1777	1721	1781	1777	1604
Q Serve(g_s), s	1.3	16.2	1.3	1.3	6.4	6.5	2.2	2.0	2.2	1.2	3.2	3.5
Cycle Q Clear(g_c), s	1.3	16.2	1.3	1.3	6.4	6.5	2.2	2.0	2.2	1.2	3.2	3.5
Prop In Lane	1.00	1.00	1.00	1.00	0.15	1.00	1.00	0.44	1.00	0.83		
Lane Grp Cap(c), veh/h	181	1460	646	65	701	717	88	361	349	61	333	301
V/C Ratio(X)	0.36	0.70	0.08	0.56	0.34	0.34	0.67	0.18	0.19	0.54	0.29	0.32
Avail Cap(c_a), veh/h	270	1715	759	131	850	869	155	923	894	150	918	828
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.0	16.5	12.2	32.1	14.4	14.4	31.7	22.3	22.4	32.2	23.7	23.8
Incr Delay (d2), s/veh	1.2	1.6	0.1	7.3	0.6	0.6	8.5	0.3	0.4	7.3	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	0.5	6.2	0.5	0.7	2.5	2.6	1.1	0.8	0.9	0.6	1.3	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.2	18.2	12.3	39.4	15.0	15.0	40.1	22.7	22.7	39.5	24.4	24.7
LnGrp LOS	C	B	B	D	B	B	D	C	C	D	C	C
Approach Vol, veh/h	1141			523			189			228		
Approach Delay, s/veh	18.7			16.7			28.1			26.7		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s/6	33.6	8.5	18.1	8.7	32.5	7.4	19.2					
Change Period (Y+Rc), s 5.1	5.8	5.1	5.4	5.1	5.8	5.1	5.4					
Max Green Setting (Gmax),s	32.7	5.9	35.0	5.3	32.4	5.7	35.2					
Max Q Clear Time (g_c+I),s	18.2	4.2	5.5	3.3	8.5	3.2	4.2					
Green Ext Time (p_c), s	0.0	9.7	0.0	1.7	0.0	5.6	0.0	1.0				

Intersection Summary

HCM 6th Ctrl Delay	19.9
HCM 6th LOS	B

OnPoint - Oceanside
11: Roymar Rd & Via de la Valle

Opening Day with Project
Timing Plan: PM Peak

Intersection												
Int Delay, s/veh	5.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Vol, veh/h	0	0	0	94	0	42	0	27	48	6	35	0
Future Vol, veh/h	0	0	0	94	0	42	0	27	48	6	35	0
Conflicting Peds, #/hr	0	0	0	10	0	10	0	0	10	10	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	101	0	45	0	29	52	6	38	0

Major/Minor	Minor2	Minor1	Major1	Major2								
Conflicting Flow All	138	141	48	125	115	75	38	0	0	91	0	0
Stage 1	50	50	-	65	65	-	-	-	-	-	-	-
Stage 2	88	91	-	60	50	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	833	750	1021	849	775	986	1572	-	-	1504	-	-
Stage 1	963	853	-	946	841	-	-	-	-	-	-	-
Stage 2	920	820	-	951	853	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	784	740	1011	830	764	967	1572	-	-	1490	-	-
Mov Cap-2 Maneuver	784	740	-	830	764	-	-	-	-	-	-	-
Stage 1	963	850	-	937	833	-	-	-	-	-	-	-
Stage 2	869	812	-	938	850	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	10	0	1.1
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1572	-	-	-	868	1490	-	-
HCM Lane V/C Ratio	-	-	-	-	0.168	0.004	-	-
HCM Control Delay (s)	0	-	-	0	10	7.4	0	-
HCM Lane LOS	A	-	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.6	0	-	-

OnPoint - Oceanside
12: Mission Ave & Project Dwy 1

Opening Day with Project
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕			↕
Traffic Vol, veh/h	0	1537	923	49	0	74
Future Vol, veh/h	0	1537	923	49	0	74
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1671	1003	53	0	80

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	- 0 - 528
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	-	- - 0 495
Stage 1	0	-	- - 0 -
Stage 2	0	-	- - 0 -
Platoon blocked, %	-	-	- - -
Mov Cap-1 Maneuver	-	-	- - - 495
Mov Cap-2 Maneuver	-	-	- - -
Stage 1	-	-	- - -
Stage 2	-	-	- - -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	13.7
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	495
HCM Lane V/C Ratio	-	-	-	0.162
HCM Control Delay (s)	-	-	-	13.7
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.6

OnPoint - Oceanside
13: Foussat Rd & Project Dwy 2

Opening Day with Project
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↕		↕↕↕	↕↕	
Traffic Vol, veh/h	0	0	0	281	297	121
Future Vol, veh/h	0	0	0	281	297	121
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	305	323	132

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	- 228	- 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	0 775	0 - -	- - -
Stage 1	0 - 0	- - -	- - -
Stage 2	0 - 0	- - -	- - -
Platoon blocked, %	- - -	- - -	- - -
Mov Cap-1 Maneuver	- 775	- - -	- - -
Mov Cap-2 Maneuver	- - -	- - -	- - -
Stage 1	- - -	- - -	- - -
Stage 2	- - -	- - -	- - -

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

APPENDIX G

HORIZON YEAR CONDITIONS SYNCHRO PEAK-HOUR INTERSECTION ANALYSIS
SHEETS

OnPoint - Oceanside
1: Airport Rd & SR 76

Horizon Year Baseline
Timing Plan: AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	1765	81	59	2742	36	81	27	116	49	31	13
Future Volume (veh/h)	26	1765	81	59	2742	36	81	27	116	49	31	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	1918	88	64	2980	39	88	29	126	53	34	14
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	165	2265	1002	79	2052	907	106	43	187	84	246	204
Arrive On Green	0.09	0.64	0.64	0.04	0.58	0.58	0.06	0.14	0.14	0.05	0.13	0.13
Sat Flow, veh/h	1781	3554	1573	1781	3554	1571	1781	300	1303	1781	1870	1549
Grp Volume(v), veh/h	28	1918	88	64	2980	39	88	0	155	53	34	14
Grp Sat Flow(s),veh/h/ln	1781	1777	1573	1781	1777	1571	1781	0	1603	1781	1870	1549
Q Serve(g_s), s	2.9	85.1	4.3	7.1	115.5	1.6	9.8	0.0	18.3	5.8	3.2	1.3
Cycle Q Clear(g_c), s	2.9	85.1	4.3	7.1	115.5	1.6	9.8	0.0	18.3	5.8	3.2	1.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.81	1.00		1.00
Lane Grp Cap(c), veh/h	165	2265	1002	79	2052	907	106	0	230	84	246	204
V/C Ratio(X)	0.17	0.85	0.09	0.81	1.45	0.04	0.83	0.00	0.67	0.63	0.14	0.07
Avail Cap(c_a), veh/h	165	2265	1002	80	2052	907	161	0	313	89	289	239
HCM Platoon Ratio	1.00	1.00	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	0.95	0.00	0.95	1.00	1.00	1.00
Uniform Delay (d), s/veh	83.7	28.6	13.9	94.7	42.3	9.6	93.0	0.0	81.2	93.5	76.8	50.2
Incr Delay (d2), s/veh	0.2	4.1	0.2	41.4	206.2	0.1	11.3	0.0	1.2	8.7	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	37.3	1.7	4.2	108.7	0.8	4.9	0.0	7.7	2.9	1.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.8	32.7	14.1	136.1	248.5	9.7	104.3	0.0	82.4	102.3	76.9	50.3
LnGrp LOS	F	C	B	F	F	A	F	A	F	F	E	D
Approach Vol, veh/h	2034			3083			243			101		
Approach Delay, s/veh	32.6			243.1			90.3			86.5		
Approach LOS	C			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.6	135.4	17.6	32.4	26.5	123.5	15.2	34.8				
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.1	8.0	* 8	* 5.7	6.1				
Max Green Setting (Gmax), s	* 9	116.5	* 18	30.9	10.0	* 12E2	* 10	39.0				
Max Q Clear Time (g_c+I1), s	9.1	87.1	11.8	5.2	4.9	117.5	7.8	20.3				
Green Ext Time (p_c), s	0.0	28.2	0.0	0.1	0.0	0.0	0.0	0.5				
Intersection Summary												
HCM 6th Ctrl Delay	155.0											
HCM 6th LOS	F											
Notes												

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

OnPoint - Oceanside
2: Foussat Rd & SR 76

Horizon Year Baseline
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	64	1689	95	71	2653	34	93	38	72	52	27	90
Future Volume (veh/h)	64	1689	95	71	2653	34	93	38	72	52	27	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	70	1836	103	77	2884	37	101	41	78	57	29	98
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	528	2195	974	204	1821	808	224	682	207	215	466	352
Arrive On Green	0.15	0.62	0.62	0.06	0.51	0.51	0.06	0.13	0.13	0.06	0.13	0.13
Sat Flow, veh/h	3456	3554	1577	3456	3554	1576	3456	5106	1549	3456	3554	2683
Grp Volume(v), veh/h	70	1836	103	77	2884	37	101	41	78	57	29	98
Grp Sat Flow(s),veh/h/ln	1728	1777	1577	1728	1777	1576	1728	1702	1549	1728	1777	1342
Q Serve(g_s), s	3.5	81.8	5.3	4.3	102.5	1.7	5.6	1.4	9.2	3.1	1.4	4.9
Cycle Q Clear(g_c), s	3.5	81.8	5.3	4.3	102.5	1.7	5.6	1.4	9.2	3.1	1.4	4.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	528	2195	974	204	1821	808	224	682	207	215	466	352
V/C Ratio(X)	0.13	0.84	0.11	0.38	1.58	0.05	0.45	0.06	0.38	0.26	0.06	0.28
Avail Cap(c_a), veh/h	528	2195	974	207	1821	808	225	1174	356	225	817	617
HCM Platoon Ratio	1.00	1.00	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	73.3	30.3	15.7	90.5	48.8	13.0	90.1	75.7	79.1	89.4	76.1	43.3
Incr Delay (d2), s/veh	0.0	4.0	0.2	0.4	265.2	0.1	0.5	0.0	0.4	0.2	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	14.6	36.1	2.1	2.0	112.3	0.9	2.6	0.6	3.7	1.4	0.7	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.3	34.2	15.9	91.0	314.0	13.1	90.6	75.7	79.5	89.7	76.2	43.4
LnGrp LOS	E	C	B	F	F	F	F	E	E	F	E	D
Approach Vol, veh/h	2009			2998			220			184		
Approach Delay, s/veh	34.7			304.5			83.9			62.9		
Approach LOS	C			F			F			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.7	131.5	18.7	32.3	38.5	110.5	18.2	32.8				
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.1	8.0	* 8	* 5.7	6.1				
Max Green Setting (Gmax), s	* 12	103.5	* 13	46.0	13.0	* 1E2	* 13	46.0				
Max Q Clear Time (g_c+I1), s	9.1	83.8	7.6	6.9	5.5	104.5	5.1	11.2				
Green Ext Time (p_c), s	0.0	19.0	0.0	0.2	0.0	0.0	0.0	0.2				
Intersection Summary												
HCM 6th Ctrl Delay	187.2											
HCM 6th LOS	F											
Notes												

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

OnPoint - Oceanside
3: Airport Rd & Mission Ave

Horizon Year Baseline
Timing Plan: AM Peak

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↲	↰	↱	↲	↰	↱	↲	↰	↱	↲
Traffic Volume (veh/h)	41	696	11	7	1319	101	18	22	19	44	17	25
Future Volume (veh/h)	41	696	11	7	1319	101	18	22	19	44	17	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	0.99	1.00	0.99	1.00	1.00	0.96	1.00	0.97		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	45	757	12	8	1434	110	20	24	21	33	39	27
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	64	2170	34	18	1941	148	45	54	47	163	171	140
Arrive On Green	0.04	0.61	0.61	0.01	0.58	0.58	0.08	0.08	0.08	0.09	0.09	0.09
Sat Flow, veh/h	1781	3580	57	1781	3343	255	529	635	556	1781	1870	1533
Grp Volume(v), veh/h	45	376	393	8	759	785	65	0	0	33	39	27
Grp Sat Flow(s),veh/h/ln	1781	1777	1860	1781	1777	1822	1720	0	0	1781	1870	1533
Q Serve(g_s), s	2.5	10.6	10.6	0.4	31.3	31.8	3.6	0.0	0.0	1.7	1.9	1.6
Cycle Q Clear(g_c), s	2.5	10.6	10.6	0.4	31.3	31.8	3.6	0.0	0.0	1.7	1.9	1.6
Prop In Lane	1.00	0.03	1.00	0.14	0.31		0.32	1.00		1.00		
Lane Grp Cap(c), veh/h	64	1077	1127	18	1031	1058	145	0	0	163	171	140
V/C Ratio(X)	0.71	0.35	0.35	0.45	0.74	0.74	0.45	0.00	0.00	0.20	0.23	0.19
Avail Cap(c_a), veh/h	89	1077	1127	89	1031	1058	351	0	0	363	382	313
HCM Platoon Ratio	1.00	1.00	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	0.00	0.00	0.96	0.96	0.96
Uniform Delay (d), s/veh	47.7	9.8	9.8	49.2	15.4	15.5	43.6	0.0	0.0	42.1	42.2	42.0
Incr Delay (d2), s/veh	13.9	0.9	0.9	13.6	3.8	3.8	3.1	0.0	0.0	0.8	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	4.1	4.3	0.3	12.7	13.2	1.6	0.0	0.0	0.8	0.9	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.6	10.7	10.7	62.9	19.1	19.3	46.6	0.0	0.0	42.9	43.1	42.9
LnGrp LOS	E	B	B	E	B	B	D	A	A	D	D	D
Approach Vol, veh/h		814			1552			65		99		
Approach Delay, s/veh		13.5			19.4			46.6		43.0		
Approach LOS		B			B			D		D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	66.8			13.7	9.0	64.2		13.0				
Change Period (Y+Rc), s	5.4	6.2		4.6	5.4	6.2		4.6				
Max Green Setting (Gmax), s	33.4			20.4	5.0	33.4		20.4				
Max Q Clear Time (g_c+I), s	12.6			3.9	4.5	33.8		5.6				
Green Ext Time (p_c), s	0.0	11.7		0.4	0.0	0.0		0.3				

Intersection Summary

HCM 6th Ctrl Delay	19.1
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

OnPoint - Oceanside
4: Roymar Rd & Mission Ave

Horizon Year Baseline
Timing Plan: AM Peak

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↲	↰	↱	↲	↰	↱	↲	↰	↱	↲
Traffic Volume (veh/h)	21	673	48	78	1317	19	67	0	103	19	0	15
Future Volume (veh/h)	21	673	48	78	1317	19	67	0	103	19	0	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	0.99	1.00	0.99	1.00	1.00	0.99	1.00	0.99	1.00	0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	732	52	85	1432	21	73	0	112	21	0	16
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	42	1872	788	108	1926	28	72	0	444	72	0	444
Arrive On Green	0.02	0.50	0.50	0.12	1.00	1.00	0.28	0.00	0.28	0.28	0.00	0.28
Sat Flow, veh/h	1781	3741	1576	1781	3585	53	0	0	1568	0	0	1568
Grp Volume(v), veh/h	23	732	52	85	709	744	73	0	112	21	0	16
Grp Sat Flow(s),veh/h/ln	1781	1870	1576	1781	1777	1860	0	0	1568	0	0	1568
Q Serve(g_s), s	1.3	12.2	1.7	4.6	0.0	0.0	0.0	0.0	5.5	0.0	0.0	0.7
Cycle Q Clear(g_c), s	1.3	12.2	1.7	4.6	0.0	0.0	28.3	0.0	5.5	28.3	0.0	0.7
Prop In Lane	1.00	1.00	1.00		0.03	1.00		1.00	1.00	1.00		1.00
Lane Grp Cap(c), veh/h	42	1872	788	108	955	1000	72	0	444	72	0	444
V/C Ratio(X)	0.55	0.39	0.07	0.79	0.74	0.74	1.01	0.00	0.25	0.29	0.00	0.04
Avail Cap(c_a), veh/h	94	1872	788	191	955	1000	72	0	444	72	0	444
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.3	15.5	12.9	43.3	0.0	0.0	50.0	0.0	27.7	50.0	0.0	26.0
Incr Delay (d2), s/veh	10.2	0.6	0.2	11.9	5.2	5.0	110.0	0.0	0.3	2.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	5.2	0.6	2.3	1.4	1.4	4.0	0.0	2.1	0.6	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.5	16.1	13.1	55.2	5.2	5.0	160.0	0.0	28.0	52.2	0.0	26.0
LnGrp LOS	E	B	B	E	A	A	F	A	C	D	A	C
Approach Vol, veh/h		807			1538			185		37		
Approach Delay, s/veh		17.1			7.9			80.1		40.9		
Approach LOS		B			A			F		D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	55.8			33.0	7.5	59.5		33.0				
Change Period (Y+Rc), s	5.1	5.8		* 4.7	5.1	5.8		* 4.7				
Max Green Setting (Gmax), s	45.4			* 28	5.3	50.8		* 28				
Max Q Clear Time (g_c+I), s	14.2			30.3	3.3	2.0		30.3				
Green Ext Time (p_c), s	0.1	16.4		0.0	0.0	40.6		0.0				

Intersection Summary

HCM 6th Ctrl Delay	16.5
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

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

OnPoint - Oceanside
5: Foussat Rd & Mission Ave

Horizon Year Baseline
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱		↰	↱	
Traffic Volume (veh/h)	78	650	48	39	1283	52	43	83	57	57	75	91
Future Volume (veh/h)	78	650	48	39	1283	52	43	83	57	57	75	91
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	0.99	1.00	0.99	1.00	1.00	0.97	1.00	0.96		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	85	707	52	42	1395	57	47	90	62	62	82	99
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	328	1905	140	61	1462	712	126	229	144	142	409	821
Arrive On Green	0.37	1.00	1.00	0.07	0.82	0.82	0.04	0.11	0.11	0.01	0.04	0.04
Sat Flow, veh/h	1781	3355	247	1781	3554	1573	3456	2072	1299	3456	3554	2669
Grp Volume(v), veh/h	85	374	385	42	1395	57	47	76	76	62	82	99
Grp Sat Flow(s),veh/h/ln	1781	1777	1824	1781	1777	1573	1728	1777	1594	1728	1777	1334
Q Serve(g_s), s	3.3	0.0	0.0	2.3	32.4	0.2	1.3	4.0	4.5	1.8	2.2	0.4
Cycle Q Clear(g_c), s	3.3	0.0	0.0	2.3	32.4	0.2	1.3	4.0	4.5	1.8	2.2	0.4
Prop In Lane	1.00		0.14	1.00		1.00	1.00		0.81	1.00		1.00
Lane Grp Cap(c), veh/h	328	1009	1036	61	1462	712	126	197	176	142	409	821
V/C Ratio(X)	0.26	0.37	0.37	0.68	0.95	0.08	0.37	0.39	0.43	0.44	0.20	0.12
Avail Cap(c_a), veh/h	328	1009	1036	118	1475	718	173	409	367	173	817	1127
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.84	0.84	0.84	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.8	0.0	0.0	46.0	8.1	1.4	47.1	41.3	41.5	48.2	43.6	13.5
Incr Delay (d2), s/veh	0.4	1.0	1.0	10.8	13.2	0.2	1.8	1.2	1.7	2.1	0.2	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	0.4	0.3	0.3	1.2	5.9	0.1	0.6	1.8	1.8	0.8	1.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.3	1.0	1.0	56.8	21.3	1.6	48.9	42.6	43.2	50.3	43.9	13.5
LnGrp LOS	C	A	A	E	C	A	D	D	D	D	D	B
Approach Vol, veh/h	844			1494			199			243		
Approach Delay, s/veh	3.7			21.5			44.3			33.2		
Approach LOS	A			C			D			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	63.6	9.2	17.6	25.2	47.9	9.7	17.2					
Change Period (Y+Rc), s	6.1	6.8	5.6	6.1	6.8	* 6.8	5.6	6.1				
Max Green Setting (Gmax), s	40.8	5.0	23.0	5.9	* 42	5.0	23.0					
Max Q Clear Time (g_c+I),s	2.0	3.3	4.2	5.3	34.4	3.8	6.5					
Green Ext Time (p_c), s	0.0	17.7	0.0	0.8	0.0	6.8	0.0	0.7				

Intersection Summary

HCM 6th Ctrl Delay	18.7
HCM 6th LOS	B

Notes

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

OnPoint - Oceanside
6: Copperwood Wy & Mission Ave

Horizon Year Baseline
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱		↰	↱	
Traffic Volume (veh/h)	11	611	103	102	1321	8	54	6	47	4	0	7
Future Volume (veh/h)	11	611	103	102	1321	8	54	6	47	4	0	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00	0.99	1.00		0.96	1.00		0.94	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	664	112	111	1436	9	59	7	51	4	0	8
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	15	1900	320	137	2512	16	132	16	126	7	0	15
Arrive On Green	0.02	1.00	1.00	0.15	1.00	1.00	0.08	0.08	0.08	0.01	0.00	0.01
Sat Flow, veh/h	1781	3038	512	1781	3620	23	1600	190	1527	525	0	1051
Grp Volume(v), veh/h	12	388	388	111	705	740	66	0	51	12	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1781	1777	1866	1790	0	1527	1576	0	0	0
Q Serve(g_s), s	0.7	0.0	0.0	6.0	0.0	0.0	3.5	0.0	3.2	0.8	0.0	0.0
Cycle Q Clear(g_c), s	0.7	0.0	0.0	6.0	0.0	0.0	3.5	0.0	3.2	0.8	0.0	0.0
Prop In Lane	1.00		0.29	1.00		0.01	0.89		1.00	0.33		0.67
Lane Grp Cap(c), veh/h	15	1111	1109	137	1233	1295	148	0	126	22	0	0
V/C Ratio(X)	0.79	0.35	0.35	0.81	0.57	0.57	0.45	0.00	0.40	0.54	0.00	0.00
Avail Cap(c_a), veh/h	55	1111	1109	233	1233	1295	451	0	385	80	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94	0.83	0.83	0.83	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	49.1	0.0	0.0	41.6	0.0	0.0	43.7	0.0	43.5	49.0	0.0	0.0
Incr Delay (d2), s/veh	57.1	0.8	0.8	3.5	1.6	1.5	2.1	0.0	2.1	18.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.3	0.3	2.6	0.5	0.6	1.6	0.0	1.3	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	106.2	0.8	0.8	45.1	1.6	1.5	45.8	0.0	45.6	67.5	0.0	0.0
LnGrp LOS	F	A	A	D	A	A	D	A	D	E	A	A
Approach Vol, veh/h	788			1556			117			12		
Approach Delay, s/veh	2.4			4.7			45.7			67.5		
Approach LOS	A			A			D			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	62.8	68.3		6.0	6.0	75.2		12.9				
Change Period (Y+Rc), s	5.1	5.8		4.6	5.1	5.8		4.6				
Max Green Setting (Gmax), s	36.5	3.1		5.1	3.1	46.5		25.2				
Max Q Clear Time (g_c+I),s	2.0	2.8		2.7	2.0	5.5						
Green Ext Time (p_c), s	0.1	17.1		0.0	0.0	37.4		0.4				

Intersection Summary

HCM 6th Ctrl Delay	6.2
HCM 6th LOS	A

OnPoint - Oceanside
7: Frontier Dr & Mission Ave

Horizon Year Baseline
Timing Plan: AM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	581	63	63	1376	54	43
Future Volume (veh/h)	581	63	63	1376	54	43
Initial Q (Qb), veh	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
Work Zone On Approach	No	No	No	No	No	No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	632	68	68	1496	59	47
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	2243	241	88	2821	94	75
Arrive On Green	0.23	0.23	0.05	0.79	0.10	0.10
Sat Flow, veh/h	3328	347	1781	3647	919	732
Grp Volume(v), veh/h	347	353	68	1496	107	0
Grp Sat Flow(s),veh/h/ln	1870	1870	1777	1667	0	0
Q Serve(g_s), s	16.1	16.1	3.8	15.0	6.2	0.0
Cycle Q Clear(g_c), s	16.1	16.1	3.8	15.0	6.2	0.0
Prop In Lane	0.19	1.00	0.55	0.44		
Lane Grp Cap(c), veh/h	1232	1252	88	2821	170	0
V/C Ratio(X)	0.28	0.28	0.78	0.53	0.63	0.00
Avail Cap(c_a), veh/h	1232	1252	194	2821	423	0
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.83	0.83	1.00	0.00
Uniform Delay (d), s/veh	18.0	18.0	47.0	3.7	43.1	0.0
Incr Delay (d2), s/veh	0.5	0.5	4.5	0.6	3.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	1.8	3.9	2.7	0.0	
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.6	18.6	51.5	4.3	46.8	0.0
LnGrp LOS	B	B	D	A	D	A
Approach Vol, veh/h	700		1564	107		
Approach Delay, s/veh	18.6		6.3	46.8		
Approach LOS	B		A	D		
Timer - Assigned Phs	1	2		6	8	
Phs Duration (G+Y+Rc), s	30.0	75.2		85.2	14.8	
Change Period (Y+Rc), s	5.1	5.8		5.8	4.6	
Max Green Setting (Gmax), s	48.2			64.2	25.4	
Max Q Clear Time (g_c+ID), s	18.1			17.0	8.2	
Green Ext Time (p_c), s	0.0	14.1		40.2	0.2	

Intersection Summary

HCM 6th Ctrl Delay	11.8
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

OnPoint - Oceanside
8: Mission Ave & Fireside St

Horizon Year Baseline
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	17	647	0	0	1360	15	0	0	0	45	0	54
Future Volume (veh/h)	17	647	0	0	1360	15	0	0	0	45	0	54
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	0.99					1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No				No	No	No
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870				1870	0	1870
Adj Flow Rate, veh/h	18	703	0	0	1478	16				49	0	59
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	2	2	2				2	0	2
Cap, veh/h	21	2985	0	2	2798	30				100	0	89
Arrive On Green	0.00	0.28	0.00	0.00	0.78	0.78				0.06	0.00	0.06
Sat Flow, veh/h	1781	3647	0	1781	3601	39				1781	0	1585
Grp Volume(v), veh/h	18	703	0	0	729	765				49	0	59
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1863				1781	0	1585
Q Serve(g_s), s	1.0	15.3	0.0	0.0	15.5	15.5				2.7	0.0	3.6
Cycle Q Clear(g_c), s	1.0	15.3	0.0	0.0	15.5	15.5				2.7	0.0	3.6
Prop In Lane	1.00	0.00	1.00	0.02						1.00		1.00
Lane Grp Cap(c), veh/h	21	2985	0	2	1381	1448				100	0	89
V/C Ratio(X)	0.85	0.24	0.00	0.00	0.53	0.53				0.49	0.00	0.66
Avail Cap(c_a), veh/h	100	2985	0	89	1381	1448				449	0	399
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	49.7	11.3	0.0	0.0	4.2	4.2				45.8	0.0	46.3
Incr Delay (d2), s/veh	27.0	0.2	0.0	0.0	1.4	1.4				3.7	0.0	8.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	0.0	0.0	4.6	4.8					1.3	0.0	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.8	11.5	0.0	0.0	5.7	5.6				49.5	0.0	54.5
LnGrp LOS	E	B	A	A	A	A				D	A	D
Approach Vol, veh/h	721			1494						108		
Approach Delay, s/veh	13.1			5.6						52.2		
Approach LOS	B			A						D		
Timer - Assigned Phs	1	2		4	5	6						
Phs Duration (G+Y+Rc), s	89.8			10.2	6.3	83.5						
Change Period (Y+Rc), s	5.1			4.6	5.1	5.8						
Max Green Setting (Gmax), s	54.3			25.2	5.6	53.7						
Max Q Clear Time (g_c+ID), s	17.3			5.6	3.0	17.5						
Green Ext Time (p_c), s	0.0	16.4		0.3	0.0	31.8						

Intersection Summary

HCM 6th Ctrl Delay	10.1
HCM 6th LOS	B

OnPoint - Oceanside

9: El Camino Real & Mission Ave

Horizon Year Baseline

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	143	420	115	266	766	39	145	215	155	143	737	407
Future Volume (veh/h)	143	420	115	266	766	39	145	215	155	143	737	407
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	0.99	1.00	1.00	0.97	1.00	1.00	0.99	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	No	No	No	No	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	155	457	0	289	833	42	131	272	168	155	801	442
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	240	984		340	1052	53	205	431	178	571	1139	613
Arrive On Green	0.07	0.28	0.00	0.10	0.31	0.31	0.12	0.12	0.12	0.32	0.32	0.32
Sat Flow, veh/h	3456	3554	1585	3456	3440	173	1781	3741	1544	1781	3554	1570
Grp Volume(v), veh/h	155	457	0	289	430	445	131	272	168	155	801	442
Grp Sat Flow(s), veh/h/ln	1728	1777	1585	1728	1777	1837	1781	1870	1544	1781	1777	1570
Q Serve(g_s), s	6.3	15.4	0.0	11.8	31.9	31.9	10.1	10.0	15.6	9.3	28.5	34.4
Cycle Q Clear(g_c), s	6.3	15.4	0.0	11.8	31.9	31.9	10.1	10.0	15.6	9.3	28.5	34.4
Prop In Lane	1.00	1.00	1.00	1.00	0.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	240	984		340	543	562	205	431	178	571	1139	613
V/C Ratio(X)	0.65	0.46		0.85	0.79	0.79	0.64	0.63	0.94	0.27	0.70	0.72
Avail Cap(c_a), veh/h	314	1096		403	594	614	205	431	178	681	1358	710
HCM Platoon Ratio	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.3	43.2	0.0	63.9	45.8	45.8	60.8	60.7	63.2	36.4	42.9	37.3
Incr Delay (d2), s/veh	2.9	1.6	0.0	13.9	11.2	10.9	6.4	2.9	51.2	0.3	1.3	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	7.0	0.0	0.0	5.9	15.8	16.3	5.0	4.9	8.6	4.2	12.8	13.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.2	44.8	0.0	77.8	57.0	56.7	67.2	63.7	114.4	36.6	44.2	40.3
LnGrp LOS	E	D		E	E	E	E	E	F	D	D	D
Approach Vol, veh/h	612	A		1164			571			1398		
Approach Delay, s/veh	50.7			62.1			79.4			42.1		
Approach LOS	D			E			E			D		
Timer - Assigned Phs	1	2		4	5	6	8					
Phs Duration (G+Y+Rc), s	21.4	46.6		52.5	17.3	50.8	23.4					
Change Period (Y+Rc), s	7.3	6.8		6.3	7.3	6.8	6.8					
Max Green Setting (Gmax), s	44.4			55.0	13.1	48.1	16.6					
Max Q Clear Time (g_c+I), s	17.4			36.4	8.3	33.9	17.6					
Green Ext Time (p_c), s	0.3	8.8		7.8	0.2	10.1	0.0					

Intersection Summary

HCM 6th Ctrl Delay	55.4
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

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

OnPoint - Oceanside

10: Douglas Dr & Mission Ave

Horizon Year Baseline

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	115	582	134	114	957	125	126	563	88	74	553	148
Future Volume (veh/h)	115	582	134	114	957	125	126	563	88	74	553	148
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	0.99	1.00	1.00	0.99	1.00	1.00	0.99	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	No	No	No	No	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	125	633	146	124	1040	136	137	612	96	80	601	161
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	186	1101	486	151	1076	141	132	976	153	103	832	222
Arrive On Green	0.05	0.31	0.31	0.08	0.34	0.34	0.07	0.32	0.32	0.06	0.30	0.30
Sat Flow, veh/h	3456	3554	1570	1781	3156	412	1781	3074	481	1781	2766	739
Grp Volume(v), veh/h	125	633	146	124	585	591	137	353	355	80	386	376
Grp Sat Flow(s), veh/h/ln	1728	1777	1570	1781	1777	1792	1781	1777	1778	1781	1777	1729
Q Serve(g_s), s	3.3	13.9	6.6	6.4	30.1	30.2	6.9	15.7	15.8	4.1	18.0	18.1
Cycle Q Clear(g_c), s	3.3	13.9	6.6	6.4	30.1	30.2	6.9	15.7	15.8	4.1	18.0	18.1
Prop In Lane	1.00	1.00	1.00	1.00	0.23	1.00	1.00	0.27	1.00		0.43	
Lane Grp Cap(c), veh/h	186	1101	486	151	606	611	132	564	565	103	535	520
V/C Ratio(X)	0.67	0.58	0.30	0.82	0.97	0.97	1.04	0.63	0.63	0.78	0.72	0.72
Avail Cap(c_a), veh/h	186	1101	486	151	606	611	132	661	662	140	669	651
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.2	26.9	24.4	41.8	30.1	30.1	43.0	27.0	27.1	43.2	29.0	29.0
Incr Delay (d2), s/veh	9.1	1.2	0.7	28.6	28.4	28.6	88.3	1.9	1.9	17.3	3.5	3.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh	4.6	5.9	2.5	4.0	17.1	17.3	6.2	6.8	6.8	2.3	8.0	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.3	28.1	25.2	70.4	58.5	58.7	131.3	28.9	29.0	60.6	32.5	32.7
LnGrp LOS	D	C	C	E	E	E	F	C	C	E	C	C
Approach Vol, veh/h	904			1300			845			842		
Approach Delay, s/veh	31.0			59.7			45.5			35.3		
Approach LOS	C			E			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	33.0	34.6	12.0	33.4	10.1	37.5	10.5	34.9				
Change Period (Y+Rc), s	5.1	5.8	5.1	5.4	5.1	5.8	5.1	5.4				
Max Green Setting (Gmax), s	28.8	6.9	35.0	5.0	31.7	7.3	34.6					
Max Q Clear Time (g_c+I), s	15.9	8.9	20.1	5.3	32.2	6.1	17.8					
Green Ext Time (p_c), s	0.0	6.4	0.0	5.8	0.0	0.0	5.6					

Intersection Summary

HCM 6th Ctrl Delay	44.7
HCM 6th LOS	D

OnPoint - Oceanside
11: Roymar Rd & Via de la Valle

Horizon Year Baseline
Timing Plan: AM Peak

Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	18	0	6	0	28	10	4	18	0
Future Vol, veh/h	0	0	0	18	0	6	0	28	10	4	18	0
Conflicting Peds, #/hr	0	0	0	10	0	10	0	0	10	10	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	20	0	7	0	30	11	4	20	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	77	79	30	84	74	56	20	0	0	51	0	0
Stage 1	28	28	-	46	46	-	-	-	-	-	-	-
Stage 2	49	51	-	38	28	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	912	811	1044	903	816	1011	1596	-	-	1555	-	-
Stage 1	989	872	-	968	857	-	-	-	-	-	-	-
Stage 2	964	852	-	977	872	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	896	800	1034	884	805	992	1596	-	-	1540	-	-
Mov Cap-2 Maneuver	896	800	-	884	805	-	-	-	-	-	-	-
Stage 1	989	869	-	958	848	-	-	-	-	-	-	-
Stage 2	949	843	-	965	869	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.1	0	1.3
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1596	-	-	-	909	1540	-	-
HCM Lane V/C Ratio	-	-	-	-	0.029	0.003	-	-
HCM Control Delay (s)	0	-	-	0	9.1	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0	-	-

OnPoint - Oceanside
12: Mission Ave & Project Dwy 1

Horizon Year Baseline
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕			↕
Traffic Vol, veh/h	0	776	1414	0	0	0
Future Vol, veh/h	0	776	1414	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	843	1537	0	0	0

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	-	0	-	0	-	769
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	-	-	-	0	344
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	344
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

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

OnPoint - Oceanside
13: Foussat Rd & Project Dwy 2

Horizon Year Baseline
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗↗↗	↘↘	
Traffic Vol, veh/h	0	0	0	203	223	0
Future Vol, veh/h	0	0	0	203	223	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	221	242	0

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	- 121	- 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	0 908	0 -	- -
Stage 1	0 -	0 -	- -
Stage 2	0 -	0 -	- -
Platoon blocked, %	- -	- -	- -
Mov Cap-1 Maneuver	- 908	- -	- -
Mov Cap-2 Maneuver	- -	- -	- -
Stage 1	- -	- -	- -
Stage 2	- -	- -	- -

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	- 0	-	-
HCM Lane LOS	- A	-	-
HCM 95th %tile Q(veh)	-	-	-

OnPoint - Oceanside
1: Airport Rd & SR 76

Horizon Year Baseline
Timing Plan: PM Peak

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	↗	↗↗	↗	↗	↗↗	↗	↗	↗	↗	↗	↗	↗
Lane Configurations		↗↗	↗	↗	↗↗	↗	↗	↗	↗	↗	↗	↗
Traffic Volume (veh/h)	27	2791	71	99	1756	39	109	93	115	59	69	41
Future Volume (veh/h)	27	2791	71	99	1756	39	109	93	115	59	69	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No			No				No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	3034	77	108	1909	42	118	101	125	64	75	45
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	87	2276	1007	101	2263	1001	135	108	134	56	187	154
Arrive On Green	0.05	0.64	0.64	0.06	0.64	0.64	0.08	0.14	0.14	0.03	0.10	0.10
Sat Flow, veh/h	1781	3554	1573	1781	3554	1573	1781	751	929	1781	1870	1537
Grp Volume(v), veh/h	29	3034	77	108	1909	42	118	0	226	64	75	45
Grp Sat Flow(s),veh/h/ln	1781	1777	1573	1781	1777	1573	1781	0	1680	1781	1870	1537
Q Serve(g_s), s	3.1	128.1	3.7	11.3	84.3	1.4	13.1	0.0	26.6	6.3	7.5	4.7
Cycle Q Clear(g_c), s	3.1	128.1	3.7	11.3	84.3	1.4	13.1	0.0	26.6	6.3	7.5	4.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.55	1.00		1.00
Lane Grp Cap(c), veh/h	87	2276	1007	101	2263	1001	135	0	242	56	187	154
V/C Ratio(X)	0.33	1.33	0.08	1.07	0.84	0.04	0.88	0.00	0.93	1.14	0.40	0.29
Avail Cap(c_a), veh/h	87	2276	1007	101	2313	1024	156	0	244	56	187	154
HCM Platoon Ratio	1.00	1.00	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	0.94	0.00	0.94	1.00	1.00	1.00
Uniform Delay (d), s/veh	92.0	36.0	13.6	94.3	28.5	7.1	91.5	0.0	84.7	96.9	84.4	62.8
Incr Delay (d2), s/veh	0.8	152.9	0.1	110.8	4.1	0.1	31.4	0.0	37.8	163.8	0.5	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	1.5	102.5	1.4	8.4	37.0	0.8	7.3	0.0	14.2	5.5	3.7	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	92.8	188.9	13.7	205.2	32.6	7.2	122.9	0.0	122.5	260.6	84.9	63.2
LnGrp LOS	F	F	B	F	C	A	F	A	F	F	F	E
Approach Vol, veh/h	3140				2059				344		184	
Approach Delay, s/veh	183.7				41.1				122.6		140.7	
Approach LOS	F				D				F		F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	136.1	20.8	26.1	17.7	135.4	12.0	34.9
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.1	8.0	* 8	* 5.7	6.1
Max Green Setting (Gmax), s	* 11	127.9	* 18	17.8	9.0	* 1.3E2	* 6.3	29.0
Max Q Clear Time (g_c+I), s	13.3	130.1	15.1	9.5	5.1	86.3	8.3	28.6
Green Ext Time (p_c), s	0.0	0.0	0.0	0.2	0.0	41.1	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	127.4
HCM 6th LOS	F

Notes

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

OnPoint - Oceanside
2: Foussat Rd & SR 76

Horizon Year Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	186	2521	177	132	1700	86	133	56	105	58	96	127
Future Volume (veh/h)	186	2521	177	132	1700	86	133	56	105	58	96	127
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	0.99	1.00		0.98	1.00		0.96	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	202	2740	192	143	1848	93	145	61	114	63	104	138
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	416	2353	1045	156	2044	907	179	664	201	122	404	303
Arrive On Green	0.12	0.66	0.66	0.05	0.58	0.58	0.05	0.13	0.13	0.04	0.11	0.11
Sat Flow, veh/h	3456	3554	1578	3456	3554	1577	3456	5106	1549	3456	3554	2667
Grp Volume(v), veh/h	202	2740	192	143	1848	93	145	61	114	63	104	138
Grp Sat Flow(s),veh/h/ln	1728	1777	1578	1728	1777	1577	1728	1702	1549	1728	1777	1334
Q Serve(g_s), s	10.9	132.4	9.4	8.2	92.1	4.0	8.3	2.1	13.8	3.6	5.3	7.6
Cycle Q Clear(g_c), s	10.9	132.4	9.4	8.2	92.1	4.0	8.3	2.1	13.8	3.6	5.3	7.6
Prop In Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	416	2353	1045	156	2044	907	179	664	201	122	404	303
V/C Ratio(X)	0.49	1.16	0.18	0.92	0.90	0.10	0.81	0.09	0.57	0.52	0.26	0.46
Avail Cap(c_a), veh/h	416	2353	1045	156	2059	914	245	996	302	126	570	428
HCM Platoon Ratio	1.00	1.00	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	82.2	33.8	13.0	95.1	37.6	10.9	93.8	76.6	81.7	94.8	80.9	51.0
Incr Delay (d2), s/veh	0.3	79.2	0.4	48.3	7.1	0.2	9.5	0.0	0.9	1.2	0.1	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	6.0	81.2	3.6	4.8	41.9	2.1	4.0	0.9	5.6	1.6	2.5	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.5	113.0	13.4	143.4	44.7	11.2	103.4	76.6	82.6	96.0	81.0	51.4
LnGrp LOS	F	F	B	F	D	B	F	E	F	F	F	D
Approach Vol, veh/h	3134			2084			320		305			
Approach Delay, s/veh	104.9			50.0			90.9		70.7			
Approach LOS	F			D			F		E			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.7	140.4	16.1	28.8	32.1	123.0	12.8	32.1				
Change Period (Y+Rc), s	5.7	8.0	* 5.7	6.1	8.0	* 8	* 5.7	6.1				
Max Green Setting (Gmax), s	119.2	* 14	32.1	12.3	* 12E2	* 7.3	39.0					
Max Q Clear Time (g_c+I),s	134.4	10.3	9.6	12.9	94.1	5.6	15.8					
Green Ext Time (p_c), s	0.0	0.0	0.1	0.5	0.0	21.0	0.0	0.3				
Intersection Summary												
HCM 6th Ctrl Delay				82.8								
HCM 6th LOS				F								
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

OnPoint - Oceanside
3: Airport Rd & Mission Ave

Horizon Year Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	40	1560	18	15	1078	55	22	11	17	64	11	50
Future Volume (veh/h)	40	1560	18	15	1078	55	22	11	17	64	11	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.99	1.00	0.99	1.00	0.99	1.00	0.96	1.00	0.96	1.00	0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	1696	20	16	1172	60	24	12	18	79	0	54
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	57	2355	28	31	2201	113	55	28	41	291	0	125
Arrive On Green	0.03	0.65	0.65	0.03	1.00	1.00	0.07	0.07	0.07	0.08	0.00	0.08
Sat Flow, veh/h	1781	3597	42	1781	3438	176	756	378	567	3563	0	1527
Grp Volume(v), veh/h	43	837	879	16	605	627	54	0	0	79	0	54
Grp Sat Flow(s),veh/h/ln	1781	1777	1862	1781	1777	1837	1702	0	0	1781	0	1527
Q Serve(g_s), s	2.9	36.9	37.0	1.1	0.0	0.0	3.6	0.0	0.0	2.5	0.0	4.0
Cycle Q Clear(g_c), s	2.9	36.9	37.0	1.1	0.0	0.0	3.6	0.0	0.0	2.5	0.0	4.0
Prop In Lane	1.00	0.02	1.00	0.10	0.44	0.33	1.00	0.33	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	57	1163	1219	31	1138	1176	124	0	0	291	0	125
V/C Ratio(X)	0.76	0.72	0.72	0.52	0.53	0.53	0.43	0.00	0.00	0.27	0.00	0.43
Avail Cap(c_a), veh/h	80	1163	1219	74	1138	1176	289	0	0	606	0	260
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.91	0.91	0.91	1.00	0.00	0.00	0.83	0.00	0.83
Uniform Delay (d), s/veh	57.6	13.5	13.5	57.4	0.0	0.0	53.2	0.0	0.0	51.8	0.0	52.5
Incr Delay (d2), s/veh	22.8	3.8	3.7	11.9	1.6	1.6	3.4	0.0	0.0	0.6	0.0	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	4.7	14.9	15.6	0.6	0.5	0.5	1.7	0.0	0.0	1.1	0.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.5	17.4	17.2	69.4	1.6	1.6	56.6	0.0	0.0	52.3	0.0	55.3
LnGrp LOS	F	B	B	E	A	A	E	A	A	D	A	E
Approach Vol, veh/h	1759			1248			54		133			
Approach Delay, s/veh	18.8			2.5			56.6		53.5			
Approach LOS	B			A			E		D			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	84.8			14.4	9.2	83.0		13.4				
Change Period (Y+Rc), s	6.2			4.6	5.4	6.2		4.6				
Max Green Setting (Gmax), s	53.4			20.4	5.4	53.0		20.4				
Max Q Clear Time (g_c+I),s	39.0			6.0	4.9	2.0		5.6				
Green Ext Time (p_c), s	0.0	13.8		0.5	0.0	34.7		0.2				
Intersection Summary												
HCM 6th Ctrl Delay				14.5								
HCM 6th LOS				B								
Notes												
User approved volume balancing among the lanes for turning movement.												

OnPoint - Oceanside
4: Roymar Rd & Mission Ave

Horizon Year Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↱	↱		↰	↱	↰	↱	↰
Traffic Volume (veh/h)	24	1510	79	101	998	18	70	0	146	22	0	30
Future Volume (veh/h)	24	1510	79	101	998	18	70	0	146	22	0	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	0.99	1.00	0.99	1.00	1.00	0.99	1.00	0.99	1.00	0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	1641	86	110	1085	20	76	0	159	24	0	33
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	43	2123	895	134	2207	41	60	0	356	60	0	356
Arrive On Green	0.02	0.57	0.57	0.15	1.00	1.00	0.23	0.00	0.23	0.23	0.00	0.23
Sat Flow, veh/h	1781	3741	1577	1781	3569	66	0	1564	0	0	1564	0
Grp Volume(v), veh/h	26	1641	86	110	540	565	76	0	159	24	0	33
Grp Sat Flow(s),veh/h/ln	1781	1870	1577	1781	1777	1858	0	0	1564	0	0	1564
Q Serve(g_s), s	1.7	40.6	3.0	7.2	0.0	0.0	0.0	0.0	10.5	0.0	0.0	2.0
Cycle Q Clear(g_c), s	1.7	40.6	3.0	7.2	0.0	0.0	27.3	0.0	10.5	27.3	0.0	2.0
Prop In Lane	1.00	1.00	1.00	1.00	0.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	43	2123	895	134	1099	1149	60	0	356	60	0	356
V/C Ratio(X)	0.60	0.77	0.10	0.82	0.49	0.49	1.27	0.00	0.45	0.40	0.00	0.09
Avail Cap(c_a), veh/h	91	2123	895	171	1099	1149	60	0	356	60	0	356
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.67	0.67	0.67	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.0	20.0	11.9	50.2	0.0	0.0	60.0	0.0	39.9	60.0	0.0	36.6
Incr Delay (d2), s/veh	8.8	1.9	0.1	21.8	1.6	1.5	203.9	0.0	0.9	4.3	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	17.4	1.1	3.8	0.5	0.5	5.2	0.0	4.1	0.8	0.0	0.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.8	21.9	12.0	72.0	1.6	1.5	263.9	0.0	40.7	64.3	0.0	36.7
LnGrp LOS	E	C	B	E	A	A	F	A	D	E	A	D
Approach Vol, veh/h	1753			1215			235			57		
Approach Delay, s/veh	22.1			7.9			112.9			48.3		
Approach LOS	C			A			F			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	34.1	73.9		32.0	8.0	80.0		32.0				
Change Period (Y+Rc), s	5.1	5.8		* 4.7	5.1	5.8		* 4.7				
Max Green Setting (Gmax), s	65.6			* 27	6.1	71.0		* 27				
Max Q Clear Time (g_c+I),s	42.6			29.3	3.7	2.0		29.3				
Green Ext Time (p_c), s	0.0	21.9		0.0	0.0	38.4		0.0				

Intersection Summary

HCM 6th Ctrl Delay	23.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

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

OnPoint - Oceanside
5: Foussat Rd & Mission Ave

Horizon Year Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↱	↱		↰	↱	↰	↱	↰
Traffic Volume (veh/h)	83	1576	65	54	903	66	50	98	52	103	129	115
Future Volume (veh/h)	83	1576	65	54	903	66	50	98	52	103	129	115
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	0.99	1.00	1.00	0.97	1.00	0.97	1.00	0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	90	1713	71	59	982	72	54	107	57	112	140	125
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	447	2097	86	76	1382	682	120	240	119	153	408	1006
Arrive On Green	0.50	1.00	1.00	0.06	0.52	0.52	0.03	0.11	0.11	0.04	0.11	0.11
Sat Flow, veh/h	1781	3477	143	1781	3554	1573	3456	2277	1128	3456	3554	2668
Grp Volume(v), veh/h	90	871	913	59	982	72	54	82	82	112	140	125
Grp Sat Flow(s),veh/h/ln	1781	1777	1844	1781	1777	1573	1728	1777	1628	1728	1777	1334
Q Serve(g_s), s	3.4	0.0	0.0	3.9	25.3	0.7	1.8	5.2	5.7	3.8	4.4	0.5
Cycle Q Clear(g_c), s	3.4	0.0	0.0	3.9	25.3	0.7	1.8	5.2	5.7	3.8	4.4	0.5
Prop In Lane	1.00	1.00	0.08	1.00	1.00	1.00	1.00	0.69	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	447	1072	1112	76	1382	682	120	187	171	153	408	1006
V/C Ratio(X)	0.20	0.81	0.82	0.78	0.71	0.11	0.45	0.44	0.48	0.73	0.34	0.12
Avail Cap(c_a), veh/h	447	1072	1112	79	1608	782	150	341	312	153	684	1213
HCM Platoon Ratio	2.00	2.00	2.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.94	0.94	0.94	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.2	0.0	0.0	56.1	23.8	5.8	56.8	50.3	50.6	56.7	49.0	12.9
Incr Delay (d2), s/veh	0.2	6.8	6.8	35.5	2.9	0.3	2.6	1.6	2.1	16.6	0.5	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	2.0	2.1	2.5	10.1	0.5	0.8	2.4	2.4	2.0	2.0	0.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.5	6.8	6.8	91.6	26.8	6.1	59.4	51.9	52.7	73.3	49.5	12.9
LnGrp LOS	C	A	A	F	C	A	E	D	D	E	D	B
Approach Vol, veh/h	1874			1113			218			377		
Approach Delay, s/veh	7.6			28.9			54.1			44.4		
Approach LOS	A			C			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	31.2	79.2	9.8	19.9	36.9	53.5	10.9	18.7				
Change Period (Y+Rc), s	6.1	6.8	5.6	6.1	6.8	* 6.8	5.6	6.1				
Max Green Setting (Gmax), s	61.8	5.2	23.1	12.8	* 54	5.3	23.0					
Max Q Clear Time (g_c+I),s	2.0	3.8	6.4	5.4	27.3	5.8	7.7					
Green Ext Time (p_c), s	0.0	55.3	0.0	1.2	0.1	19.4	0.0	0.7				

Intersection Summary

HCM 6th Ctrl Delay	20.9
HCM 6th LOS	C

Notes

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

OnPoint - Oceanside
6: Copperwood Wy & Mission Ave

Horizon Year Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	7	1624	103	62	886	7	109	2	122	6	1	9
Future Volume (veh/h)	7	1624	103	62	886	7	109	2	122	6	1	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	0.99	1.00	0.99	1.00	1.00	0.98	1.00	0.93		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	1765	112	67	963	8	118	2	133	7	1	10
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	10	2184	137	85	2475	21	215	4	189	12	2	17
Arrive On Green	0.01	1.00	1.00	0.10	1.00	1.00	0.12	0.12	0.12	0.02	0.02	0.02
Sat Flow, veh/h	1781	3394	213	1781	3612	30	1753	30	1546	622	89	888
Grp Volume(v), veh/h	8	916	961	67	474	497	120	0	133	18	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1830	1781	1777	1865	1783	0	1546	1598	0	0
Q Serve(g_s), s	0.5	0.0	0.0	4.4	0.0	0.0	7.6	0.0	9.9	1.3	0.0	0.0
Cycle Q Clear(g_c), s	0.5	0.0	0.0	4.4	0.0	0.0	7.6	0.0	9.9	1.3	0.0	0.0
Prop In Lane	1.00	0.12	1.00	0.02	0.98		1.00	0.39		0.56		
Lane Grp Cap(c), veh/h	10	1143	1178	85	1218	1278	218	0	189	30	0	0
V/C Ratio(X)	0.77	0.80	0.82	0.79	0.39	0.39	0.55	0.00	0.70	0.60	0.00	0.00
Avail Cap(c_a), veh/h	49	1143	1178	86	1218	1278	374	0	325	68	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.44	0.44	0.44	0.94	0.94	0.94	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	59.2	0.0	0.0	53.7	0.0	0.0	49.5	0.0	50.5	58.4	0.0	0.0
Incr Delay (d2), s/veh	39.4	2.7	2.9	32.6	0.9	0.8	2.1	0.0	4.7	17.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.9	0.9	2.7	0.3	0.3	3.5	0.0	4.1	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	98.6	2.7	2.9	86.3	0.9	0.8	51.7	0.0	55.2	76.0	0.0	0.0
LnGrp LOS	F	A	A	F	A	A	D	A	E	E	A	A
Approach Vol, veh/h	1885			1038			253			18		
Approach Delay, s/veh	3.2			6.4			53.5			76.0		
Approach LOS	A			A			D			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	83.0			6.9	5.8	88.0		19.3				
Change Period (Y+Rc), s	5.1	5.8		4.6	5.1	5.8		4.6				
Max Green Setting (Gmax), s	63.8			5.1	3.3	66.3		25.2				
Max Q Clear Time (g_c+I), s	2.0			3.3	2.5	2.0		11.9				
Green Ext Time (p_c), s	0.0	58.4		0.0	0.0	30.8		0.9				
Intersection Summary												
HCM 6th Ctrl Delay				8.6								
HCM 6th LOS				A								

OnPoint - Oceanside
7: Frontier Dr & Mission Ave

Horizon Year Baseline
Timing Plan: PM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↱	↰	↱	↰	↱
Traffic Volume (veh/h)	1531	60	45	931	43	41
Future Volume (veh/h)	1531	60	45	931	43	41
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99	1.00		1.00	0.97	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	1664	65	49	1012	47	45
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	2595	101	63	2922	76	73
Arrive On Green	1.00	1.00	0.04	0.82	0.09	0.09
Sat Flow, veh/h	3580	136	1781	3647	835	800
Grp Volume(v), veh/h	845	884	49	1012	93	0
Grp Sat Flow(s),veh/h/ln	1777	1845	1781	1777	1653	0
Q Serve(g_s), s	0.0	0.0	3.3	8.5	6.5	0.0
Cycle Q Clear(g_c), s	0.0	0.0	3.3	8.5	6.5	0.0
Prop In Lane	0.07	1.00		0.51	0.48	
Lane Grp Cap(c), veh/h	1323	1373	63	2922	150	0
V/C Ratio(X)	0.64	0.64	0.78	0.35	0.62	0.00
Avail Cap(c_a), veh/h	1323	1373	117	2922	347	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.49	0.49	0.85	0.85	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	57.4	2.6	52.5	0.0
Incr Delay (d2), s/veh	1.2	1.2	6.4	0.3	4.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.4	1.6	2.3	2.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	1.2	1.2	63.8	2.9	56.6	0.0
LnGrp LOS	A	A	E	A	E	A
Approach Vol, veh/h	1729			1061	93	
Approach Delay, s/veh	1.2			5.7	56.6	
Approach LOS	A			A	E	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	95.1				104.5	15.5
Change Period (Y+Rc), s	5.8				5.8	4.6
Max Green Setting (Gmax), s	71.4				84.4	25.2
Max Q Clear Time (g_c+I), s	2.0				10.5	8.5
Green Ext Time (p_c), s	0.0	62.4			36.0	0.2
Intersection Summary						
HCM 6th Ctrl Delay				4.6		
HCM 6th LOS				A		
Notes						
User approved volume balancing among the lanes for turning movement.						

OnPoint - Oceanside
8: Mission Ave & Fireside St

Horizon Year Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱					↰	↱	↰
Traffic Volume (veh/h)	248	1292	0	0	815	126	0	0	0	63	0	123
Future Volume (veh/h)	248	1292	0	0	815	126	0	0	0	63	0	123
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach	No			No						No		
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870				1870	0	1870
Adj Flow Rate, veh/h	270	1404	0	0	886	137				68	0	134
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	2	2	2				2	0	2
Cap, veh/h	299	2878	0	1	1847	286				184	0	164
Arrive On Green	0.17	0.81	0.00	0.00	0.60	0.60				0.10	0.00	0.10
Sat Flow, veh/h	1781	3647	0	1781	3080	476				1781	0	1585
Grp Volume(v), veh/h	270	1404	0	0	511	512				68	0	134
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1780				1781	0	1585
Q Serve(g_s), s	17.8	14.9	0.0	0.0	19.4	19.4				4.3	0.0	9.9
Cycle Q Clear(g_c), s	17.8	14.9	0.0	0.0	19.4	19.4				4.3	0.0	9.9
Prop In Lane	1.00		0.00	1.00		0.27				1.00		1.00
Lane Grp Cap(c), veh/h	299	2878	0	1	1066	1067				184	0	164
V/C Ratio(X)	0.90	0.49	0.00	0.00	0.48	0.48				0.37	0.00	0.82
Avail Cap(c_a), veh/h	444	2878	0	74	1066	1067				377	0	336
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.68	0.68	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	49.0	3.6	0.0	0.0	13.5	13.5				50.2	0.0	52.7
Incr Delay (d2), s/veh	8.9	0.4	0.0	0.0	1.5	1.5				1.2	0.0	9.5
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	6.6	4.2	0.0	0.0	8.0	8.0				2.0	0.0	8.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.9	4.0	0.0	0.0	15.0	15.0				51.4	0.0	62.2
LnGrp LOS	E	A	A	A	B	B				D	A	E
Approach Vol, veh/h	1674			1023						202		
Approach Delay, s/veh	12.7			15.0						58.6		
Approach LOS	B			B						E		
Timer - Assigned Phs	1	2		4	5	6						
Phs Duration (G+Y+Rc), s	103.0			17.0	25.2	77.8						
Change Period (Y+Rc), s	5.1	5.8		4.6	5.1	5.8						
Max Green Setting (Gmax), s	74.1			25.4	29.9	49.2						
Max Q Clear Time (g_c+I), s	16.9			11.9	19.8	21.4						
Green Ext Time (p_c), s	0.0	45.0		0.5	0.3	19.5						

Intersection Summary

HCM 6th Ctrl Delay	16.7
HCM 6th LOS	B

OnPoint - Oceanside
9: El Camino Real & Mission Ave

Horizon Year Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱		↰	↱	↰
Traffic Volume (veh/h)	368	931	150	209	451	153	241	700	423	242	421	289
Future Volume (veh/h)	368	931	150	209	451	153	241	700	423	242	421	289
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	400	1012	0	227	490	166	262	761	460	263	458	314
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	375	1098		248	709	238	385	808	338	421	839	542
Arrive On Green	0.11	0.31	0.00	0.07	0.27	0.27	0.22	0.22	0.22	0.24	0.24	0.24
Sat Flow, veh/h	3456	3554	1585	3456	2602	876	1781	3741	1563	1781	3554	1565
Grp Volume(v), veh/h	400	1012	0	227	334	322	262	761	460	263	458	314
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1701	1781	1870	1563	1781	1777	1565
Q Serve(g_s), s	17.7	44.8	0.0	10.6	27.4	27.7	22.0	32.6	35.2	21.6	18.4	26.8
Cycle Q Clear(g_c), s	17.7	44.8	0.0	10.6	27.4	27.7	22.0	32.6	35.2	21.6	18.4	26.8
Prop In Lane	1.00		1.00	1.00		0.51	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	375	1098		248	484	463	385	808	338	421	839	542
V/C Ratio(X)	1.07	0.92		0.91	0.69	0.70	0.68	0.94	1.36	0.63	0.55	0.58
Avail Cap(c_a), veh/h	375	1110		248	490	469	385	808	338	601	1199	700
HCM Platoon Ratio	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.6	54.4	0.0	75.1	53.1	53.2	58.7	62.9	63.9	55.8	54.6	43.8
Incr Delay (d2), s/veh	13.8	0.0	0.0	35.2	7.8	8.4	4.8	19.0	181.2	1.5	0.6	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	22.2	0.0	6.0	13.4	13.0	10.5	17.7	31.0	10.0	8.4	10.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	137.6	68.2	0.0	110.4	60.9	61.6	63.5	81.9	245.1	57.3	55.1	44.7
LnGrp LOS	F	E		F	E	E	E	F	F	E	E	D
Approach Vol, veh/h	1412		A	883			1483			1035		
Approach Delay, s/veh	87.9			73.9			129.3			52.5		
Approach LOS	F			E			F			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	59.0	57.2		44.8	25.0	51.2		42.0				
Change Period (Y+Rc), s	7.3	6.8		6.3	7.3	6.8		6.8				
Max Green Setting (Gmax), s	50.9			55.0	17.7	44.9		35.2				
Max Q Clear Time (g_c+I), s	17.6			46.8	28.8	19.7	29.7	37.2				
Green Ext Time (p_c), s	0.0	3.5		5.4	0.0	8.5		0.0				

Intersection Summary

HCM 6th Ctrl Delay	90.5
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

OnPoint - Oceanside
10: Douglas Dr & Mission Ave

Horizon Year Baseline
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	149	1609	113	120	629	128	138	521	105	102	580	190
Future Volume (veh/h)	149	1609	113	120	629	128	138	521	105	102	580	190
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		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	162	1749	123	130	684	139	150	566	114	111	630	207
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	182	1259	557	94	1040	211	94	865	174	131	826	271
Arrive On Green	0.05	0.35	0.35	0.05	0.35	0.35	0.05	0.29	0.29	0.07	0.31	0.31
Sat Flow, veh/h	3456	3554	1572	1781	2937	596	1781	2943	591	1781	2622	861
Grp Volume(v), veh/h	162	1749	123	130	414	409	150	341	339	111	427	410
Grp Sat Flow(s),veh/h/ln	1728	1777	1572	1781	1777	1757	1781	1777	1757	1781	1777	1706
Q Serve(g_s), s	4.4	33.6	5.2	5.0	18.6	18.6	5.0	15.9	16.0	5.8	20.5	20.6
Cycle Q Clear(g_c), s	4.4	33.6	5.2	5.0	18.6	18.6	5.0	15.9	16.0	5.8	20.5	20.6
Prop In Lane	1.00		1.00	1.00		0.34	1.00		0.34	1.00		0.50
Lane Grp Cap(c), veh/h	182	1259	557	94	629	622	94	522	516	131	559	537
V/C Ratio(X)	0.89	1.39	0.22	1.38	0.66	0.66	1.60	0.65	0.66	0.84	0.76	0.76
Avail Cap(c_a), veh/h	182	1259	557	94	629	622	94	618	611	131	656	629
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.7	30.6	21.5	44.9	25.8	25.8	44.9	29.3	29.3	43.4	29.3	29.3
Incr Delay (d2), s/veh	37.5	180.3	0.4	226.0	3.4	3.4	313.0	2.4	2.5	36.8	5.1	5.4
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	45.3	1.9	8.1	8.2	8.1	10.4	7.0	7.0	3.9	9.3	9.0	
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.2	210.9	21.9	270.9	29.2	29.2	358.0	31.7	31.8	80.2	34.4	34.7
LnGrp LOS	F	F	C	F	C	C	F	C	C	F	C	C
Approach Vol, veh/h	2034				953			830			948	
Approach Delay, s/veh	189.2				62.2			90.7			39.9	
Approach LOS	F				E			F			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	39.4	10.1	35.3	10.1	39.4	12.1	33.3					
Change Period (Y+Rc), s	5.1	5.8	5.1	5.4	5.1	5.8	5.1	5.4				
Max Green Setting (Gmax), s	33.6	5.0	35.0	5.0	33.6	7.0	33.0					
Max Q Clear Time (g_c+I),s	35.6	7.0	22.6	6.4	20.6	7.8	18.0					
Green Ext Time (p_c), s	0.0	0.0	0.0	5.7	0.0	7.0	0.0	5.1				

Intersection Summary

HCM 6th Ctrl Delay	117.0
HCM 6th LOS	F

OnPoint - Oceanside
11: Roymar Rd & Via de la Valle

Horizon Year Baseline
Timing Plan: PM Peak

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Vol, veh/h	0	0	0	11	0	4	0	30	14	7	39	0
Future Vol, veh/h	0	0	0	11	0	4	0	30	14	7	39	0
Conflicting Peds, #/hr	0	0	0	10	0	10	0	0	10	10	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	12	0	4	0	33	15	8	42	0

Major/Minor	Minor2	Minor1	Major1	Major2								
Conflicting Flow All	111	116	52	119	109	61	42	0	0	58	0	0
Stage 1	58	58	-	51	-	-	-	-	-	-	-	-
Stage 2	53	58	-	68	58	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	867	774	1016	857	781	1004	1567	-	-	1546	-	-
Stage 1	954	847	-	962	852	-	-	-	-	-	-	-
Stage 2	960	847	-	942	847	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	851	762	1006	837	769	985	1567	-	-	1531	-	-
Mov Cap-2 Maneuver	851	762	-	837	769	-	-	-	-	-	-	-
Stage 1	954	843	-	952	843	-	-	-	-	-	-	-
Stage 2	947	839	-	928	843	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.2	0	1.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1567	-	-	-	872	1531	-	-
HCM Lane V/C Ratio	-	-	-	-	0.019	0.005	-	-
HCM Control Delay (s)	0	-	-	0	9.2	7.4	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0	-	-

OnPoint - Oceanside
12: Mission Ave & Project Dwy 1

Horizon Year Baseline
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕			↕
Traffic Vol, veh/h	0	1724	1117	0	0	0
Future Vol, veh/h	0	1724	1117	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1874	1214	0	0	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	- 0 - 607
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	-	- - 0 439
Stage 1	0	-	- - 0 -
Stage 2	0	-	- - 0 -
Platoon blocked, %	-	-	- - -
Mov Cap-1 Maneuver	-	-	- - - 439
Mov Cap-2 Maneuver	-	-	- - -
Stage 1	-	-	- - -
Stage 2	-	-	- - -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

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

OnPoint - Oceanside
13: Foussat Rd & Project Dwy 2

Horizon Year Baseline
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↕		↕↕↕	↕↕	
Traffic Vol, veh/h	0	0	0	294	347	0
Future Vol, veh/h	0	0	0	294	347	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	320	377	0

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	- 189	- 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	0 821	0 - -	- - -
Stage 1	0 - 0	- - -	- - -
Stage 2	0 - 0	- - -	- - -
Platoon blocked, %	- - -	- - -	- - -
Mov Cap-1 Maneuver	- 821	- - -	- - -
Mov Cap-2 Maneuver	- - -	- - -	- - -
Stage 1	- - -	- - -	- - -
Stage 2	- - -	- - -	- - -

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

OnPoint - Oceanside
1: Airport Rd & SR 76

Horizon Year with Project
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	26	1792	81	59	2719	36	130	27	116	49	31	13
Future Volume (veh/h)	26	1792	81	59	2719	36	130	27	116	49	31	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	1948	88	64	2955	39	141	29	126	53	34	14
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	165	2265	1002	79	2052	907	157	43	187	84	192	158
Arrive On Green	0.09	0.64	0.64	0.04	0.58	0.58	0.09	0.14	0.14	0.05	0.10	0.10
Sat Flow, veh/h	1781	3554	1573	1781	3554	1571	1781	300	1303	1781	1870	1539
Grp Volume(v), veh/h	28	1948	88	64	2955	39	141	0	155	53	34	14
Grp Sat Flow(s),veh/h/ln	1781	1777	1573	1781	1777	1571	1781	0	1603	1781	1870	1539
Q Serve(g_s), s	2.9	88.0	4.3	7.1	115.5	1.6	15.7	0.0	18.3	5.8	3.3	1.3
Cycle Q Clear(g_c), s	2.9	88.0	4.3	7.1	115.5	1.6	15.7	0.0	18.3	5.8	3.3	1.3
Prop In Lane	1.00		1.00	1.00		1.00		1.00		1.00		1.00
Lane Grp Cap(c), veh/h	165	2265	1002	79	2052	907	157	0	230	84	192	158
V/C Ratio(X)	0.17	0.86	0.09	0.81	1.44	0.04	0.90	0.00	0.67	0.63	0.18	0.09
Avail Cap(c_a), veh/h	165	2265	1002	80	2052	907	161	0	313	89	289	238
HCM Platoon Ratio	1.00	1.00	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	0.95	0.00	0.95	1.00	1.00	1.00
Uniform Delay (d), s/veh	83.7	29.1	13.9	94.7	42.3	9.6	90.3	0.0	81.2	93.5	82.0	54.4
Incr Delay (d2), s/veh	0.2	4.6	0.2	41.4	200.8	0.1	39.1	0.0	1.2	8.7	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	38.7	1.7	4.2	107.2	0.8	9.0	0.0	7.7	2.9	1.6	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.8	33.7	14.1	136.1	243.0	9.7	129.4	0.0	82.4	102.3	82.2	54.5
LnGrp LOS	F	C	B	F	F	A	F	A	F	F	F	D
Approach Vol, veh/h	2064			3058				296				101
Approach Delay, s/veh	33.5			237.8				104.8				88.9
Approach LOS	C			F				F				F

Intersection Summary		
HCM 6th Ctrl Delay	151.6	
HCM 6th LOS	F	
Notes		

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

OnPoint - Oceanside
2: Foussat Rd & SR 76

Horizon Year with Project
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	64	1673	138	121	2630	34	93	43	114	52	32	90
Future Volume (veh/h)	64	1673	138	121	2630	34	93	43	114	52	32	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	70	1818	150	132	2859	37	101	47	124	57	35	98
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	478	2141	950	207	1821	808	224	755	230	215	517	392
Arrive On Green	0.14	0.60	0.60	0.06	0.51	0.51	0.06	0.15	0.15	0.06	0.15	0.15
Sat Flow, veh/h	3456	3554	1577	3456	3554	1576	3456	5106	1553	3456	3554	2694
Grp Volume(v), veh/h	70	1818	150	132	2859	37	101	47	124	57	35	98
Grp Sat Flow(s),veh/h/ln	1728	1777	1577	1728	1777	1576	1728	1702	1553	1728	1777	1347
Q Serve(g_s), s	3.6	83.3	8.4	7.5	102.5	1.7	5.6	1.6	14.8	3.1	1.7	4.9
Cycle Q Clear(g_c), s	3.6	83.3	8.4	7.5	102.5	1.7	5.6	1.6	14.8	3.1	1.7	4.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	478	2141	950	207	1821	808	224	755	230	215	517	392
V/C Ratio(X)	0.15	0.85	0.16	0.64	1.57	0.05	0.45	0.06	0.54	0.26	0.07	0.25
Avail Cap(c_a), veh/h	478	2141	950	207	1821	808	225	1174	357	225	817	620
HCM Platoon Ratio	1.00	1.00	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	75.8	32.4	17.5	91.9	48.8	13.0	90.1	73.3	78.9	89.4	73.8	43.3
Incr Delay (d2), s/veh	0.1	4.4	0.4	4.9	259.1	0.1	0.5	0.0	0.7	0.2	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	1.6	37.1	3.3	3.5	110.7	0.9	2.6	0.7	6.0	1.4	0.8	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.8	36.8	17.8	96.8	307.8	13.1	90.6	73.3	79.6	89.7	73.8	43.4
LnGrp LOS	E	D	B	F	F	F	F	E	E	F	E	D
Approach Vol, veh/h	2038			3028				272				190
Approach Delay, s/veh	36.8			295.0				82.6				62.9
Approach LOS	D			F				F				E

Intersection Summary		
HCM 6th Ctrl Delay	181.4	
HCM 6th LOS	F	
Notes		

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

OnPoint - Oceanside
3: Airport Rd & Mission Ave

Horizon Year with Project
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱		↰	↱	↱	↰	↱
Traffic Volume (veh/h)	41	718	11	7	1340	117	18	22	19	44	17	25
Future Volume (veh/h)	41	718	11	7	1340	117	18	22	19	44	17	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	45	780	12	8	1457	127	20	24	21	33	39	27
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	64	2171	33	18	1919	166	45	54	47	163	171	140
Arrive On Green	0.04	0.61	0.61	0.01	0.77	0.77	0.08	0.08	0.08	0.09	0.09	0.09
Sat Flow, veh/h	1781	3582	55	1781	3306	286	529	635	556	1781	1870	1533
Grp Volume(v), veh/h	45	387	405	8	779	805	65	0	0	33	39	27
Grp Sat Flow(s),veh/h/ln	1781	1777	1860	1781	1777	1816	1720	0	0	1781	1870	1533
Q Serve(g_s), s	2.5	11.0	11.0	0.4	24.0	24.6	3.6	0.0	0.0	1.7	1.9	1.6
Cycle Q Clear(g_c), s	2.5	11.0	11.0	0.4	24.0	24.6	3.6	0.0	0.0	1.7	1.9	1.6
Prop In Lane	1.00		0.03	1.00		0.16	0.31		0.32	1.00		1.00
Lane Grp Cap(c), veh/h	64	1077	1127	18	1031	1054	145	0	0	163	171	140
V/C Ratio(X)	0.71	0.36	0.36	0.45	0.76	0.76	0.45	0.00	0.00	0.20	0.23	0.19
Avail Cap(c_a), veh/h	89	1077	1127	89	1031	1054	351	0	0	363	382	313
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.71	0.71	0.71	1.00	0.00	0.00	0.96	0.96	0.96
Uniform Delay (d), s/veh	47.7	9.9	9.9	49.1	7.5	7.6	43.6	0.0	0.0	42.1	42.2	42.0
Incr Delay (d2), s/veh	13.9	0.9	0.9	12.2	3.7	3.8	3.1	0.0	0.0	0.8	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	4.4	0.3	5.9	6.2	1.6	0.0	0.0	0.8	0.9	0.6	
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.6	10.8	10.8	61.2	11.2	11.4	46.6	0.0	0.0	42.9	43.1	42.9
LnGrp LOS	E	B	B	E	B	B	D	A	A	D	D	D
Approach Vol, veh/h		837			1592			65		99		
Approach Delay, s/veh		13.6			11.5			46.6		43.0		
Approach LOS		B			B			D		D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	66.8			13.7	9.0	64.2		13.0				
Change Period (Y+Rc), s	5.4	6.2		4.6	5.4	6.2		4.6				
Max Green Setting (Gmax), s	33.4			20.4	5.0	33.4		20.4				
Max Q Clear Time (g_c+I),s	13.0			3.9	4.5	26.6		5.6				
Green Ext Time (p_c), s	0.0	11.9		0.4	0.0	6.5		0.3				

Intersection Summary

HCM 6th Ctrl Delay	14.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

OnPoint - Oceanside
4: Roymar Rd & Mission Ave

Horizon Year with Project
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱		↰	↱	↱	↰	↱
Traffic Volume (veh/h)	49	667	48	88	1354	19	67	0	103	88	0	15
Future Volume (veh/h)	49	667	48	88	1354	19	67	0	103	88	0	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		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	53	725	52	96	1472	21	73	0	112	96	0	16
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	69	1845	777	121	1874	27	72	0	444	72	0	444
Arrive On Green	0.04	0.49	0.49	0.14	1.00	1.00	0.28	0.00	0.28	0.28	0.00	0.28
Sat Flow, veh/h	1781	3741	1575	1781	3586	51	0	0	1568	0	0	1568
Grp Volume(v), veh/h	53	725	52	96	729	764	73	0	112	96	0	16
Grp Sat Flow(s),veh/h/ln	1781	1870	1575	1781	1777	1861	0	0	1568	0	0	1568
Q Serve(g_s), s	2.9	12.2	1.7	5.2	0.0	0.0	0.0	0.0	5.5	0.0	0.0	0.7
Cycle Q Clear(g_c), s	2.9	12.2	1.7	5.2	0.0	0.0	28.3	0.0	5.5	28.3	0.0	0.7
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	69	1845	777	121	928	972	72	0	444	72	0	444
V/C Ratio(X)	0.77	0.39	0.07	0.80	0.79	0.79	1.01	0.00	0.25	1.33	0.00	0.04
Avail Cap(c_a), veh/h	94	1845	777	191	928	972	72	0	444	72	0	444
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.95	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	47.6	15.9	13.3	42.6	0.0	0.0	50.0	0.0	27.7	50.0	0.0	26.0
Incr Delay (d2), s/veh	21.8	0.6	0.2	11.5	6.6	6.4	110.0	0.0	0.3	218.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	5.2	0.6	2.5	1.7	1.7	4.0	0.0	2.1	6.2	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.4	16.5	13.4	54.0	6.6	6.4	160.0	0.0	28.0	268.6	0.0	26.0
LnGrp LOS	E	B	B	D	A	A	F	A	C	F	A	C
Approach Vol, veh/h		830			1589			185		112		
Approach Delay, s/veh		19.7			9.4			80.1		234.0		
Approach LOS		B			A			F		F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	51.9	55.1		33.0	9.0	58.0		33.0				
Change Period (Y+Rc), s	5.1	5.8		* 4.7	5.1	5.8		* 4.7				
Max Green Setting (Gmax), s	30.3	45.4		* 28	5.3	50.8		* 28				
Max Q Clear Time (g_c+I),s	14.2			30.3	4.9	2.0		30.3				
Green Ext Time (p_c), s	0.1	16.2		0.0	0.0	41.4		0.0				

Intersection Summary

HCM 6th Ctrl Delay	26.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

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

OnPoint - Oceanside
5: Foussat Rd & Mission Ave

Horizon Year with Project
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱		↰	↱	
Traffic Volume (veh/h)	125	671	53	39	1305	52	48	83	57	57	75	91
Future Volume (veh/h)	125	671	53	39	1305	52	48	83	57	57	75	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	136	729	58	42	1418	57	52	90	62	62	82	99
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	325	1893	151	61	1467	715	132	229	144	142	403	812
Arrive On Green	0.36	1.00	1.00	0.07	0.83	0.83	0.04	0.11	0.11	0.01	0.04	0.04
Sat Flow, veh/h	1781	3333	265	1781	3554	1574	3456	2072	1299	3456	3554	2667
Grp Volume(v), veh/h	136	388	399	42	1418	57	52	76	76	62	82	99
Grp Sat Flow(s), veh/h/ln	1781	1777	1821	1781	1777	1574	1728	1777	1594	1728	1777	1333
Q Serve(g_s), s	5.7	0.0	0.0	2.3	34.4	0.2	1.5	4.0	4.5	1.8	2.2	0.4
Cycle Q Clear(g_c), s	5.7	0.0	0.0	2.3	34.4	0.2	1.5	4.0	4.5	1.8	2.2	0.4
Prop In Lane	1.00		0.15	1.00		1.00	1.00		0.81	1.00		1.00
Lane Grp Cap(c), veh/h	325	1009	1034	61	1467	715	132	197	176	142	403	812
V/C Ratio(X)	0.42	0.38	0.39	0.68	0.97	0.08	0.39	0.39	0.43	0.44	0.20	0.12
Avail Cap(c_a), veh/h	325	1009	1034	118	1475	718	173	409	367	173	817	1122
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.83	0.83	0.83	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	0.0	0.0	46.0	8.1	1.4	47.0	41.3	41.5	48.2	43.7	13.6
Incr Delay (d2), s/veh	0.9	1.1	1.1	10.6	14.8	0.2	1.9	1.2	1.7	2.1	0.2	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	0.3	0.3	1.2	6.2	0.1	0.7	1.8	1.8	0.8	1.0	0.6	
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.6	1.1	1.1	56.7	22.9	1.6	48.9	42.6	43.2	50.3	44.0	13.6
LnGrp LOS	C	A	A	E	C	A	D	D	D	D	D	B
Approach Vol, veh/h	923			1517			204			243		
Approach Delay, s/veh	5.2			23.0			44.4			33.2		
Approach LOS	A			C			D			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	63.6	9.4	17.4	25.0	48.1	9.7	17.2					
Change Period (Y+Rc), s	6.1	6.8	5.6	6.1	6.8	* 6.8	5.6	6.1				
Max Green Setting (Gmax), s	40.8	5.0	23.0	5.9	* 42	5.0	23.0					
Max Q Clear Time (g_c+I), s	2.0	3.5	4.2	7.7	36.4	3.8	6.5					
Green Ext Time (p_c), s	0.0	18.4	0.0	0.8	0.0	4.9	0.0	0.7				

Intersection Summary

HCM 6th Ctrl Delay	19.7
HCM 6th LOS	B

Notes

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

OnPoint - Oceanside
6: Copperwood Wy & Mission Ave

Horizon Year with Project
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱		↰	↱	
Traffic Volume (veh/h)	11	632	103	102	1343	8	54	6	47	4	0	7
Future Volume (veh/h)	11	632	103	102	1343	8	54	6	47	4	0	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	687	112	111	1460	9	59	7	51	4	0	8
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	15	1910	311	137	2512	15	132	16	126	7	0	15
Arrive On Green	0.02	1.00	1.00	0.15	1.00	1.00	0.08	0.08	0.08	0.01	0.00	0.01
Sat Flow, veh/h	1781	3055	498	1781	3621	22	1600	190	1527	525	0	1051
Grp Volume(v), veh/h	12	399	400	111	716	753	66	0	51	12	0	0
Grp Sat Flow(s), veh/h/ln	1781	1777	1776	1781	1777	1866	1790	0	1527	1576	0	0
Q Serve(g_s), s	0.7	0.0	0.0	6.0	0.0	0.0	3.5	0.0	3.2	0.8	0.0	0.0
Cycle Q Clear(g_c), s	0.7	0.0	0.0	6.0	0.0	0.0	3.5	0.0	3.2	0.8	0.0	0.0
Prop In Lane	1.00		0.28	1.00		0.01	0.89		1.00	0.33		0.67
Lane Grp Cap(c), veh/h	15	1111	1110	137	1233	1295	148	0	126	22	0	0
V/C Ratio(X)	0.79	0.36	0.36	0.81	0.58	0.58	0.45	0.00	0.40	0.54	0.00	0.00
Avail Cap(c_a), veh/h	55	1111	1110	233	1233	1295	451	0	385	80	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	0.82	0.82	0.82	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	49.1	0.0	0.0	41.6	0.0	0.0	43.7	0.0	43.5	49.0	0.0	0.0
Incr Delay (d2), s/veh	56.7	0.8	0.8	3.5	1.6	1.6	2.1	0.0	2.1	18.6	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.5	0.3	0.3	2.6	0.6	0.6	1.6	0.0	1.3	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	105.7	0.8	0.8	45.1	1.6	1.6	45.8	0.0	45.6	67.5	0.0	0.0
LnGrp LOS	F	A	A	D	A	A	D	A	D	E	A	A
Approach Vol, veh/h	811			1580			117			12		
Approach Delay, s/veh	2.4			4.7			45.7			67.5		
Approach LOS	A			A			D			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	62.8	68.3		6.0	6.0	75.2		12.9				
Change Period (Y+Rc), s	5.1	5.8		4.6	5.1	5.8		4.6				
Max Green Setting (Gmax), s	36.5	3.1		5.1	3.1	46.5		25.2				
Max Q Clear Time (g_c+I), s	2.0	2.8		2.7	2.0	5.5						
Green Ext Time (p_c), s	0.1	17.6		0.0	0.0	37.8		0.4				

Intersection Summary

HCM 6th Ctrl Delay	6.1
HCM 6th LOS	A

OnPoint - Oceanside
7: Frontier Dr & Mission Ave

Horizon Year with Project
Timing Plan: AM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	602	63	63	1398	54	43
Future Volume (veh/h)	602	63	63	1398	54	43
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99	1.00		1.00	0.97	
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	1900	1900
Adj Flow Rate, veh/h	654	68	68	1520	59	47
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	2252	234	88	2821	94	75
Arrive On Green	0.23	0.23	0.05	0.79	0.10	0.10
Sat Flow, veh/h	3340	337	1781	3647	919	732
Grp Volume(v), veh/h	358	364	68	1520	107	0
Grp Sat Flow(s),veh/h/ln	1870	1870	1777	1667	0	
Q Serve(g_s), s	16.6	16.7	3.8	15.4	6.2	0.0
Cycle Q Clear(g_c), s	16.6	16.7	3.8	15.4	6.2	0.0
Prop In Lane	0.19	1.00		0.55	0.44	
Lane Grp Cap(c), veh/h	1232	1253	88	2821	170	0
V/C Ratio(X)	0.29	0.29	0.78	0.54	0.63	0.00
Avail Cap(c_a), veh/h	1232	1253	194	2821	423	0
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.82	0.82	1.00	0.00
Uniform Delay (d), s/veh	18.2	18.2	47.0	3.7	43.1	0.0
Incr Delay (d2), s/veh	0.6	0.6	4.5	0.6	3.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	1.8	4.0	2.7	0.0	
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.8	18.8	51.5	4.3	46.8	0.0
LnGrp LOS	B	B	D	A	D	A
Approach Vol, veh/h	722		1588	107		
Approach Delay, s/veh	18.8		6.3	46.8		
Approach LOS	B		A	D		
Timer - Assigned Phs	1	2		6	8	
Phs Duration (G+Y+Rc), s	50.0	75.2		85.2	14.8	
Change Period (Y+Rc), s	5.1	5.8		5.8	4.6	
Max Green Setting (Gmax), s	48.2			64.2	25.4	
Max Q Clear Time (g_c+ID), s	18.7			17.4	8.2	
Green Ext Time (p_c), s	0.0	14.4		40.3	0.2	

Intersection Summary

HCM 6th Ctrl Delay	11.9
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

OnPoint - Oceanside
8: Mission Ave & Fireside St

Horizon Year with Project
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	17	668	0	0	1382	15	0	0	0	45	0	54
Future Volume (veh/h)	17	668	0	0	1382	15	0	0	0	45	0	54
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00	0.99					1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach	No		No	No						No		
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870				1870	0	1870
Adj Flow Rate, veh/h	18	726	0	0	1502	16				49	0	59
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	2	2	2				2	0	2
Cap, veh/h	21	2985	0	2	2799	30				100	0	89
Arrive On Green	0.00	0.28	0.00	0.00	0.78	0.78				0.06	0.00	0.06
Sat Flow, veh/h	1781	3647	0	1781	3602	38				1781	0	1585
Grp Volume(v), veh/h	18	726	0	0	741	777				49	0	59
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1863				1781	0	1585
Q Serve(g_s), s	1.0	15.8	0.0	0.0	15.9	16.0				2.7	0.0	3.6
Cycle Q Clear(g_c), s	1.0	15.8	0.0	0.0	15.9	16.0				2.7	0.0	3.6
Prop In Lane	1.00	0.00	1.00	0.02						1.00		1.00
Lane Grp Cap(c), veh/h	21	2985	0	2	1381	1448				100	0	89
V/C Ratio(X)	0.85	0.24	0.00	0.00	0.54	0.54				0.49	0.00	0.66
Avail Cap(c_a), veh/h	100	2985	0	89	1381	1448				449	0	399
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	49.7	11.5	0.0	0.0	4.3	4.3				45.8	0.0	46.3
Incr Delay (d2), s/veh	27.0	0.2	0.0	0.0	1.5	1.4				3.7	0.0	8.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	0.0	0.0	4.8	5.0					1.3	0.0	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.8	11.7	0.0	0.0	5.8	5.7				49.5	0.0	54.5
LnGrp LOS	E	B	A	A	A	A				D	A	D
Approach Vol, veh/h	744			1518						108		
Approach Delay, s/veh	13.3			5.7						52.2		
Approach LOS	B			A						D		
Timer - Assigned Phs	1	2		4	5	6						
Phs Duration (G+Y+Rc), s	89.8			10.2	6.3	83.5						
Change Period (Y+Rc), s	5.1	5.8		4.6	5.1	5.8						
Max Green Setting (Gmax), s	54.3			25.2	5.6	53.7						
Max Q Clear Time (g_c+ID), s	17.8			5.6	3.0	18.0						
Green Ext Time (p_c), s	0.0	16.9		0.3	0.0	31.8						

Intersection Summary

HCM 6th Ctrl Delay	10.2
HCM 6th LOS	B

OnPoint - Oceanside

9: El Camino Real & Mission Ave

Horizon Year with Project

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	153	425	120	266	771	39	150	215	155	143	737	418
Future Volume (veh/h)	153	425	120	266	771	39	150	215	155	143	737	418
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	0.99	1.00	1.00	0.97	1.00	0.99	1.00	0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	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	166	462	0	289	838	42	132	277	168	155	801	454
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	238	980		339	1050	53	204	428	176	578	1153	619
Arrive On Green	0.07	0.28	0.00	0.10	0.30	0.30	0.11	0.11	0.11	0.32	0.32	0.32
Sat Flow, veh/h	3456	3554	1585	3456	3442	172	1781	3741	1543	1781	3554	1570
Grp Volume(v), veh/h	166	462	0	289	433	447	132	277	168	155	801	454
Grp Sat Flow(s), veh/h/ln	1728	1777	1585	1728	1777	1837	1781	1870	1543	1781	1777	1570
Q Serve(g_s), s	6.8	15.7	0.0	12.0	32.5	32.5	10.3	10.3	15.7	9.3	28.5	35.8
Cycle Q Clear(g_c), s	6.8	15.7	0.0	12.0	32.5	32.5	10.3	10.3	15.7	9.3	28.5	35.8
Prop In Lane	1.00	1.00	1.00	1.00	0.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	238	980		339	542	560	204	428	176	578	1153	619
V/C Ratio(X)	0.70	0.47		0.85	0.80	0.80	0.65	0.65	0.95	0.27	0.69	0.73
Avail Cap(c_a), veh/h	312	1087		400	589	609	204	428	176	675	1346	704
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.1	43.8	0.0	64.4	46.4	46.4	61.5	61.5	63.9	36.3	42.8	37.6
Incr Delay (d2), s/veh	4.5	1.6	0.0	14.3	11.7	11.3	7.0	3.4	53.7	0.2	1.3	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	6.2	7.2	0.0	6.0	16.1	16.6	5.1	5.1	8.8	4.2	12.8	14.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	70.7	45.4	0.0	78.8	58.0	57.7	68.5	64.9	117.6	36.5	44.0	41.0
LnGrp LOS	E	D		E	E	E	E	E	F	D	D	D
Approach Vol, veh/h	628	A		1169			577			1410		
Approach Delay, s/veh	52.1			63.0			81.1			42.2		
Approach LOS	D			E			F			D		
Timer - Assigned Phs	1	2		4	5	6	8					
Phs Duration (G+Y+Rc), s	21.5	46.8		53.4	17.3	51.1	23.4					
Change Period (Y+Rc), s	7.3	6.8		6.3	7.3	6.8	6.8					
Max Green Setting (Gmax), s	44.4			55.0	13.1	48.1	16.6					
Max Q Clear Time (g_c+I), s	17.7			37.8	8.8	34.5	17.7					
Green Ext Time (p_c), s	0.3	8.9		7.5	0.2	9.8	0.0					

Intersection Summary

HCM 6th Ctrl Delay	56.2
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

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

OnPoint - Oceanside

10: Douglas Dr & Mission Ave

Horizon Year with Project

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	115	587	134	114	962	125	126	568	88	74	558	148
Future Volume (veh/h)	115	587	134	114	962	125	126	568	88	74	558	148
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	0.99	1.00	0.99	1.00	1.00	0.99	1.00	0.99	1.00	0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	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	125	638	146	124	1046	136	137	617	96	80	607	161
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	186	1099	485	151	1075	140	132	980	152	103	837	222
Arrive On Green	0.05	0.31	0.31	0.08	0.34	0.34	0.07	0.32	0.32	0.06	0.30	0.30
Sat Flow, veh/h	3456	3554	1570	1781	3159	410	1781	3078	478	1781	2773	734
Grp Volume(v), veh/h	125	638	146	124	588	594	137	356	357	80	389	379
Grp Sat Flow(s), veh/h/ln	1728	1777	1570	1781	1777	1792	1781	1777	1779	1781	1777	1730
Q Serve(g_s), s	3.3	14.1	6.6	6.4	30.4	30.5	6.9	15.9	16.0	4.1	18.2	18.3
Cycle Q Clear(g_c), s	3.3	14.1	6.6	6.4	30.4	30.5	6.9	15.9	16.0	4.1	18.2	18.3
Prop In Lane	1.00	1.00	1.00	1.00	0.23	1.00	1.00	0.27	1.00	0.42	1.00	0.42
Lane Grp Cap(c), veh/h	186	1099	485	151	605	610	132	566	566	103	537	522
V/C Ratio(X)	0.67	0.58	0.30	0.82	0.97	0.97	1.04	0.63	0.63	0.78	0.72	0.73
Avail Cap(c_a), veh/h	186	1099	485	151	605	610	132	660	661	140	668	650
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	27.1	24.5	41.9	30.3	30.3	43.1	27.0	27.1	43.3	29.0	29.1
Incr Delay (d2), s/veh	9.2	1.2	0.7	28.8	29.8	30.0	88.8	1.9	2.0	17.4	3.6	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	4.6	6.0	2.5	4.0	17.5	17.7	6.3	6.9	6.9	2.3	8.1	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.5	28.3	25.2	70.8	60.0	60.3	131.9	29.0	29.0	60.7	32.6	32.8
LnGrp LOS	D	C	C	E	E	E	F	C	C	E	C	C
Approach Vol, veh/h	909			1306			850			848		
Approach Delay, s/veh	31.1			61.2			45.6			35.4		
Approach LOS	C			E			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	33.0	34.6	12.0	33.5	10.1	37.5	10.5	35.1				
Change Period (Y+Rc), s	5.1	5.8	5.1	5.4	5.1	5.8	5.1	5.4				
Max Green Setting (Gmax), s	28.8	6.9	35.0	5.0	31.7	7.3	34.6					
Max Q Clear Time (g_c+I), s	16.1	8.9	20.3	5.3	32.5	6.1	18.0					
Green Ext Time (p_c), s	0.0	6.4	0.0	5.8	0.0	0.0	0.0	5.7				

Intersection Summary

HCM 6th Ctrl Delay	45.2
HCM 6th LOS	D

OnPoint - Oceanside
11: Roymar Rd & Via de la Valle

Horizon Year with Project
Timing Plan: AM Peak

Intersection												
Int Delay, s/veh	5.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	87	0	39	0	28	38	4	18	0
Future Vol, veh/h	0	0	0	87	0	39	0	28	38	4	18	0
Conflicting Peds, #/hr	0	0	0	10	0	10	0	0	10	10	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	95	0	42	0	30	41	4	20	0
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	110	109	30	99	89	71	20	0	0	81	0	0
Stage 1	28	28	-	61	61	-	-	-	-	-	-	-
Stage 2	82	81	-	38	28	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	868	781	1044	883	801	991	1596	-	-	1517	-	-
Stage 1	989	872	-	950	844	-	-	-	-	-	-	-
Stage 2	926	828	-	977	872	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	820	771	1034	864	791	972	1596	-	-	1503	-	-
Mov Cap-2 Maneuver	820	771	-	864	791	-	-	-	-	-	-	-
Stage 1	989	869	-	941	836	-	-	-	-	-	-	-
Stage 2	877	820	-	965	869	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	0		9.7		0		1.3					
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1596	-	-	-	895	1503	-	-				
HCM Lane V/C Ratio	-	-	-	-	0.153	0.003	-	-				
HCM Control Delay (s)	0	-	-	0	9.7	7.4	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	-	0.5	0	-	-				

OnPoint - Oceanside
12: Mission Ave & Project Dwy 1

Horizon Year with Project
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↓			↗
Traffic Vol, veh/h	0	850	1402	39	0	59
Future Vol, veh/h	0	850	1402	39	0	59
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	924	1524	42	0	64
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	783
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	-	-	-	0	337
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	337
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		18.2		
HCM LOS				C		
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	337		
HCM Lane V/C Ratio	-	-	-	0.19		
HCM Control Delay (s)	-	-	-	18.2		
HCM Lane LOS	-	-	-	C		
HCM 95th %tile Q(veh)	-	-	-	0.7		

OnPoint - Oceanside
13: Foussat Rd & Project Dwy 2

Horizon Year with Project
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗↗↗	↗↗	
Traffic Vol, veh/h	0	0	0	250	223	98
Future Vol, veh/h	0	0	0	250	223	98
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	272	242	107

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	- 175	- 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	0 838	0 -	- -
Stage 1	0 -	0 -	- -
Stage 2	0 -	0 -	- -
Platoon blocked, %	- -	- -	- -
Mov Cap-1 Maneuver	- 838	- -	- -
Mov Cap-2 Maneuver	- -	- -	- -
Stage 1	- -	- -	- -
Stage 2	- -	- -	- -

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	- 0	-	-
HCM Lane LOS	- A	-	-
HCM 95th %tile Q(veh)	-	-	-

OnPoint - Oceanside
1: Airport Rd & SR 76

Horizon Year with Project
Timing Plan: PM Peak

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	↗	↗↗	↗	↗	↗↗	↗	↗	↗	↗	↗	↗	↗
Lane Configurations		↗↗	↗	↗	↗↗	↗	↗	↗	↗	↗	↗	↗
Traffic Volume (veh/h)	27	2826	71	99	1730	39	169	93	115	59	69	41
Future Volume (veh/h)	27	2826	71	99	1730	39	169	93	115	59	69	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No			No				No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	3072	77	108	1880	42	184	101	125	64	75	45
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	91	2276	1007	101	2254	997	156	108	134	56	165	135
Arrive On Green	0.05	0.64	0.64	0.06	0.63	0.63	0.09	0.14	0.14	0.03	0.09	0.09
Sat Flow, veh/h	1781	3554	1573	1781	3554	1573	1781	751	929	1781	1870	1531
Grp Volume(v), veh/h	29	3072	77	108	1880	42	184	0	226	64	75	45
Grp Sat Flow(s),veh/h/ln	1781	1777	1573	1781	1777	1573	1781	0	1680	1781	1870	1531
Q Serve(g_s), s	3.1	128.1	3.7	11.3	82.2	1.5	17.5	0.0	26.6	6.3	7.6	4.8
Cycle Q Clear(g_c), s	3.1	128.1	3.7	11.3	82.2	1.5	17.5	0.0	26.6	6.3	7.6	4.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.55	1.00		1.00
Lane Grp Cap(c), veh/h	91	2276	1007	101	2254	997	156	0	242	56	165	135
V/C Ratio(X)	0.32	1.35	0.08	1.07	0.83	0.04	1.18	0.00	0.93	1.14	0.46	0.33
Avail Cap(c_a), veh/h	91	2276	1007	101	2313	1024	156	0	244	56	166	136
HCM Platoon Ratio	1.00	1.00	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	0.94	0.00	0.94	1.00	1.00	1.00
Uniform Delay (d), s/veh	91.5	36.0	13.6	94.3	28.4	7.3	91.2	0.0	84.7	96.9	86.6	64.3
Incr Delay (d2), s/veh	0.7	160.3	0.1	110.8	3.8	0.1	126.7	0.0	37.8	163.8	0.7	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	104.8	1.4	8.4	36.0	0.8	13.7	0.0	14.2	5.5	3.8	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	92.2	196.3	13.7	205.2	32.2	7.3	218.0	0.0	122.5	260.6	87.4	64.9
LnGrp LOS	F	F	B	F	C	A	F	A	F	F	F	E
Approach Vol, veh/h	3178			2030			410			184		
Approach Delay, s/veh	190.9			40.9			165.4			142.1		
Approach LOS	F			D			F			F		

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	136.1	23.2	23.7	18.3	134.8	12.0	34.9
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.1	8.0	* 8	* 5.7	6.1
Max Green Setting (Gmax), s	* 11	127.9	* 18	17.8	9.0	* 1.3E2	* 6.3	29.0
Max Q Clear Time (g_c+I), s	13.3	130.1	19.5	9.6	5.1	84.2	8.3	28.6
Green Ext Time (p_c), s	0.0	0.0	0.0	0.2	0.0	42.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	135.1
HCM 6th LOS	F

Notes

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

OnPoint - Oceanside
2: Foussat Rd & SR 76

Horizon Year with Project
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱	↰	↱	↰	↱	↰	↱
Traffic Volume (veh/h)	186	2502	231	193	1674	86	133	63	157	58	103	127
Future Volume (veh/h)	186	2502	231	193	1674	86	133	63	157	58	103	127
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	0.99	1.00			0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	202	2720	251	210	1820	93	145	68	171	63	112	138
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	350	2280	1012	156	2039	905	179	769	234	122	477	361
Arrive On Green	0.10	0.64	0.64	0.05	0.57	0.57	0.05	0.15	0.15	0.04	0.13	0.13
Sat Flow, veh/h	3456	3554	1578	3456	3554	1577	3456	5106	1553	3456	3554	2686
Grp Volume(v), veh/h	202	2720	251	210	1820	93	145	68	171	63	112	138
Grp Sat Flow(s),veh/h/ln	1728	1777	1578	1728	1777	1577	1728	1702	1553	1728	1777	1343
Q Serve(g_s), s	11.2	128.3	13.6	9.0	89.5	4.0	8.3	2.3	21.0	3.6	5.6	7.5
Cycle Q Clear(g_c), s	11.2	128.3	13.6	9.0	89.5	4.0	8.3	2.3	21.0	3.6	5.6	7.5
Prop In Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	350	2280	1012	156	2039	905	179	769	234	122	477	361
V/C Ratio(X)	0.58	1.19	0.25	1.35	0.89	0.10	0.81	0.09	0.73	0.52	0.23	0.38
Avail Cap(c_a), veh/h	350	2280	1012	156	2059	914	245	996	303	126	570	431
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	85.8	35.9	15.3	95.5	37.3	11.0	93.8	73.1	81.1	94.8	77.4	50.8
Incr Delay (d2), s/veh	1.6	91.6	0.6	194.0	6.5	0.2	9.5	0.0	4.0	1.2	0.1	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	16.1	83.2	5.2	8.3	40.6	2.1	4.0	1.0	8.8	1.6	2.6	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	87.3	127.4	15.9	289.5	43.7	11.3	103.4	73.1	85.1	96.0	77.5	51.0
LnGrp LOS	F	F	B	F	D	B	F	E	F	F	E	D
Approach Vol, veh/h	3173			2123			384			313		
Approach Delay, s/veh	116.1			66.6			89.9			69.5		
Approach LOS	F			E			F			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.7	136.3	16.1	33.0	28.2	122.7	12.8	36.2				
Change Period (Y+Rc), s	5.7	8.0	* 5.7	6.1	8.0	* 8	* 5.7	6.1				
Max Green Setting (Gmax), s	119.2	* 14	32.1	12.3*	1.2E2	* 7.3	39.0					
Max Q Clear Time (g_c+I),s	130.3	10.3	9.5	13.2	91.5	5.6	23.0					
Green Ext Time (p_c), s	0.0	0.0	0.1	0.5	0.0	23.2	0.0	0.4				
Intersection Summary												
HCM 6th Ctrl Delay				94.4								
HCM 6th LOS				F								
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

OnPoint - Oceanside
3: Airport Rd & Mission Ave

Horizon Year with Project
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱	↰	↱	↰	↱	↰	↱
Traffic Volume (veh/h)	40	1588	18	15	1105	75	22	11	17	64	11	50
Future Volume (veh/h)	40	1588	18	15	1105	75	22	11	17	64	11	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.99	1.00	0.99	1.00	0.99	1.00			0.96	1.00	0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	1726	20	16	1201	82	24	12	18	79	0	54
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	57	2356	27	31	2160	147	55	28	41	291	0	125
Arrive On Green	0.03	0.65	0.65	0.03	1.00	1.00	0.07	0.07	0.07	0.08	0.00	0.08
Sat Flow, veh/h	1781	3598	42	1781	3374	230	756	378	567	3563	0	1527
Grp Volume(v), veh/h	43	851	895	16	632	651	54	0	0	79	0	54
Grp Sat Flow(s),veh/h/ln	1781	1777	1862	1781	1777	1827	1702	0	0	1781	0	1527
Q Serve(g_s), s	2.9	38.1	38.3	1.1	0.0	0.0	3.6	0.0	0.0	2.5	0.0	4.0
Cycle Q Clear(g_c), s	2.9	38.1	38.3	1.1	0.0	0.0	3.6	0.0	0.0	2.5	0.0	4.0
Prop In Lane	1.00	0.02	1.00		0.13	0.44			0.33	1.00		1.00
Lane Grp Cap(c), veh/h	57	1163	1220	31	1138	1170	124	0	0	291	0	125
V/C Ratio(X)	0.76	0.73	0.73	0.52	0.56	0.56	0.43	0.00	0.00	0.27	0.00	0.43
Avail Cap(c_a), veh/h	80	1163	1220	74	1138	1170	289	0	0	606	0	260
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.88	0.88	0.88	1.00	0.00	0.00	0.82	0.00	0.82
Uniform Delay (d), s/veh	57.6	13.7	13.8	57.4	0.0	0.0	53.2	0.0	0.0	51.8	0.0	52.5
Incr Delay (d2), s/veh	22.8	4.1	3.9	11.5	1.7	1.7	3.4	0.0	0.0	0.6	0.0	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	14.7	15.4	16.2	0.6	0.5	0.5	1.7	0.0	0.0	1.1	0.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.5	17.8	17.7	69.0	1.7	1.7	56.6	0.0	0.0	52.3	0.0	55.2
LnGrp LOS	F	B	B	E	A	A	E	A	A	D	A	E
Approach Vol, veh/h	1789			1299			54			133		
Approach Delay, s/veh	19.3			2.5			56.6			53.5		
Approach LOS	B			A			E			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	84.8			14.4	9.2	83.0		13.4				
Change Period (Y+Rc), s	6.2			4.6	5.4	6.2		4.6				
Max Green Setting (Gmax), s	53.4			20.4	5.4	53.0		20.4				
Max Q Clear Time (g_c+I),s	40.3			6.0	4.9	2.0		5.6				
Green Ext Time (p_c), s	0.0	12.7		0.5	0.0	36.3		0.2				
Intersection Summary												
HCM 6th Ctrl Delay				14.6								
HCM 6th LOS				B								
Notes												
User approved volume balancing among the lanes for turning movement.												

OnPoint - Oceanside
4: Roymar Rd & Mission Ave

Horizon Year with Project
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	1503	79	114	1045	18	70	0	146	107	0	30
Future Volume (veh/h)	59	1503	79	114	1045	18	70	0	146	107	0	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	64	1634	86	124	1136	20	76	0	159	116	0	33
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	82	2093	882	148	2131	38	60	0	356	60	0	356
Arrive On Green	0.05	0.56	0.56	0.17	1.00	1.00	0.23	0.00	0.23	0.23	0.00	0.23
Sat Flow, veh/h	1781	3741	1577	1781	3572	63	0	0	1564	0	0	1564
Grp Volume(v), veh/h	64	1634	86	124	565	591	76	0	159	116	0	33
Grp Sat Flow(s),veh/h/ln	1781	1870	1577	1781	1777	1858	0	0	1564	0	0	1564
Q Serve(g_s), s	4.3	41.0	3.1	8.1	0.0	0.0	0.0	0.0	10.5	0.0	0.0	2.0
Cycle Q Clear(g_c), s	4.3	41.0	3.1	8.1	0.0	0.0	27.3	0.0	10.5	27.3	0.0	2.0
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	82	2093	882	148	1060	1108	60	0	356	60	0	356
V/C Ratio(X)	0.78	0.78	0.10	0.84	0.53	0.53	1.27	0.00	0.45	1.93	0.00	0.09
Avail Cap(c_a), veh/h	91	2093	882	171	1060	1108	60	0	356	60	0	356
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.65	0.65	0.65	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.6	20.7	12.3	49.3	0.0	0.0	60.0	0.0	39.9	60.0	0.0	36.6
Incr Delay (d2), s/veh	22.4	2.0	0.1	26.4	1.9	1.8	203.9	0.0	0.9	475.0	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	17.7	1.1	4.4	0.6	0.6	5.2	0.0	4.1	9.7	0.0	0.8	
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.0	22.6	12.5	75.6	1.9	1.8	263.9	0.0	40.7	535.0	0.0	36.7
LnGrp LOS	E	C	B	E	A	A	F	A	D	F	A	D
Approach Vol, veh/h	1784				1280		235		149			
Approach Delay, s/veh	24.2				9.0		112.9		424.6			
Approach LOS	C				A		F		F			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	72.9		32.0	10.6	77.4		32.0				
Change Period (Y+Rc), s	5.1	5.8		* 4.7	5.1	5.8		* 4.7				
Max Green Setting (Gmax), s	65.6			* 27	6.1	71.0		* 27				
Max Q Clear Time (g_c+I), s	43.0			29.3	6.3	2.0		29.3				
Green Ext Time (p_c), s	0.0	21.4		0.0	0.0	40.8		0.0				

Intersection Summary

HCM 6th Ctrl Delay	41.9
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

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

OnPoint - Oceanside
5: Foussat Rd & Mission Ave

Horizon Year with Project
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	1603	72	54	931	66	57	98	52	103	129	115
Future Volume (veh/h)	141	1603	72	54	931	66	57	98	52	103	129	115
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	153	1742	78	59	1012	72	62	107	57	112	140	125
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	436	2089	93	76	1404	692	126	240	119	153	402	984
Arrive On Green	0.49	1.00	1.00	0.06	0.53	0.53	0.04	0.11	0.11	0.04	0.11	0.11
Sat Flow, veh/h	1781	3464	154	1781	3554	1573	3456	2277	1128	3456	3554	2666
Grp Volume(v), veh/h	153	888	932	59	1012	72	62	82	82	112	140	125
Grp Sat Flow(s),veh/h/ln	1781	1777	1842	1781	1777	1573	1728	1777	1628	1728	1777	1333
Q Serve(g_s), s	6.4	0.0	0.0	3.9	26.1	0.7	2.1	5.2	5.7	3.8	4.4	0.5
Cycle Q Clear(g_c), s	6.4	0.0	0.0	3.9	26.1	0.7	2.1	5.2	5.7	3.8	4.4	0.5
Prop In Lane	1.00		0.08	1.00		1.00	1.00		0.69	1.00		1.00
Lane Grp Cap(c), veh/h	436	1072	1111	76	1404	692	126	187	171	153	402	984
V/C Ratio(X)	0.35	0.83	0.84	0.78	0.72	0.10	0.49	0.44	0.48	0.73	0.35	0.13
Avail Cap(c_a), veh/h	436	1072	1111	79	1608	782	150	341	312	153	684	1195
HCM Platoon Ratio	2.00	2.00	2.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.93	0.93	0.93	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.8	0.0	0.0	56.1	23.4	5.6	56.7	50.3	50.6	56.7	49.1	13.3
Incr Delay (d2), s/veh	0.5	7.4	7.6	35.2	3.0	0.3	3.0	1.6	2.1	16.6	0.5	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	2.2	2.4	2.5	10.3	0.5	1.0	2.4	2.4	2.0	2.0	0.8	
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.3	7.4	7.6	91.3	26.4	5.9	59.7	51.9	52.7	73.3	49.7	13.3
LnGrp LOS	C	A	A	F	C	A	E	D	D	E	D	B
Approach Vol, veh/h	1973				1143		226		377			
Approach Delay, s/veh	8.9				28.5		54.3		44.6			
Approach LOS	A				C		D		D			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	1.2	79.2	10.0	19.7	36.1	54.2	10.9	18.7				
Change Period (Y+Rc), s	6.1	6.8	5.6	6.1	6.8	* 6.8	5.6	6.1				
Max Green Setting (Gmax), s	61.8	5.2	23.1	12.8	* 54	5.3	23.0					
Max Q Clear Time (g_c+I), s	2.0	4.1	6.4	8.4	28.1	5.8	7.7					
Green Ext Time (p_c), s	0.0	55.9	0.0	1.2	0.1	19.3	0.0	0.7				

Intersection Summary

HCM 6th Ctrl Delay	21.3
HCM 6th LOS	C

Notes

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

OnPoint - Oceanside
6: Copperwood Wy & Mission Ave

Horizon Year with Project
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	7	1651	103	62	914	7	109	2	122	6	1	9
Future Volume (veh/h)	7	1651	103	62	914	7	109	2	122	6	1	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.99	1.00	0.99	1.00	0.99	1.00	0.98	1.00	0.93		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	1795	112	67	993	8	118	2	133	7	1	10
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	10	2186	135	85	2476	20	215	4	189	12	2	17
Arrive On Green	0.01	1.00	1.00	0.10	1.00	1.00	0.12	0.12	0.12	0.02	0.02	0.02
Sat Flow, veh/h	1781	3398	210	1781	3613	29	1753	30	1546	622	89	888
Grp Volume(v), veh/h	8	930	977	67	488	513	120	0	133	18	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1831	1781	1777	1865	1783	0	1546	1598	0	0
Q Serve(g_s), s	0.5	0.0	0.0	4.4	0.0	0.0	7.6	0.0	9.9	1.3	0.0	0.0
Cycle Q Clear(g_c), s	0.5	0.0	0.0	4.4	0.0	0.0	7.6	0.0	9.9	1.3	0.0	0.0
Prop In Lane	1.00	0.11	1.00	0.02	0.98		1.00	0.39		0.56		
Lane Grp Cap(c), veh/h	10	1143	1178	85	1218	1278	218	0	189	30	0	0
V/C Ratio(X)	0.77	0.81	0.83	0.79	0.40	0.40	0.55	0.00	0.70	0.60	0.00	0.00
Avail Cap(c_a), veh/h	49	1143	1178	86	1218	1278	374	0	325	68	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.41	0.41	0.41	0.94	0.94	0.94	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	59.2	0.0	0.0	53.7	0.0	0.0	49.5	0.0	50.5	58.4	0.0	0.0
Incr Delay (d2), s/veh	37.2	2.7	2.9	32.6	0.9	0.9	2.1	0.0	4.7	17.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.9	1.0	2.7	0.3	0.3	3.5	0.0	4.1	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	96.5	2.7	2.9	86.3	0.9	0.9	51.7	0.0	55.2	76.0	0.0	0.0
LnGrp LOS	F	A	A	F	A	A	D	A	E	E	A	A
Approach Vol, veh/h	1915			1068			253			18		
Approach Delay, s/veh	3.2			6.3			53.5			76.0		
Approach LOS	A			A			D			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	30.8	83.0		6.9	5.8	88.0		19.3				
Change Period (Y+Rc), s	5.1	5.8		4.6	5.1	5.8		4.6				
Max Green Setting (Gmax), s	63.8			5.1	3.3	66.3		25.2				
Max Q Clear Time (g_c+I), s	2.0			3.3	2.5	2.0		11.9				
Green Ext Time (p_c), s	0.0	58.7		0.0	0.0	32.1		0.9				
Intersection Summary												
HCM 6th Ctrl Delay				8.5								
HCM 6th LOS				A								

OnPoint - Oceanside
7: Frontier Dr & Mission Ave

Horizon Year with Project
Timing Plan: PM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↱	↰	↱	↰	↱
Traffic Volume (veh/h)	1558	60	45	959	43	41
Future Volume (veh/h)	1558	60	45	959	43	41
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99	1.00		1.00	0.97	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	1693	65	49	1042	47	45
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	2597	99	63	2922	76	73
Arrive On Green	1.00	1.00	0.04	0.82	0.09	0.09
Sat Flow, veh/h	3582	133	1781	3647	835	800
Grp Volume(v), veh/h	859	899	49	1042	93	0
Grp Sat Flow(s),veh/h/ln	1777	1845	1781	1777	1653	0
Q Serve(g_s), s	0.0	0.0	3.3	8.8	6.5	0.0
Cycle Q Clear(g_c), s	0.0	0.0	3.3	8.8	6.5	0.0
Prop In Lane	0.07	1.00		0.51	0.48	
Lane Grp Cap(c), veh/h	1323	1374	63	2922	150	0
V/C Ratio(X)	0.65	0.65	0.78	0.36	0.62	0.00
Avail Cap(c_a), veh/h	1323	1374	117	2922	347	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.47	0.47	0.84	0.84	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	57.4	2.7	52.5	0.0
Incr Delay (d2), s/veh	1.2	1.2	6.3	0.3	4.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.4	1.6	2.4	2.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	1.2	1.2	63.7	3.0	56.6	0.0
LnGrp LOS	A	A	E	A	E	A
Approach Vol, veh/h	1758			1091	93	
Approach Delay, s/veh	1.2			5.7	56.6	
Approach LOS	A			A	E	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	9.4	95.1			104.5	15.5
Change Period (Y+Rc), s	5.1	5.8			5.8	4.6
Max Green Setting (Gmax), s	71.4				84.4	25.2
Max Q Clear Time (g_c+I), s	2.0				10.8	8.5
Green Ext Time (p_c), s	0.0	63.0			37.5	0.2
Intersection Summary						
HCM 6th Ctrl Delay				4.6		
HCM 6th LOS				A		
Notes						
User approved volume balancing among the lanes for turning movement.						

OnPoint - Oceanside
8: Mission Ave & Fireside St

Horizon Year with Project
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱					↰	↱	↰
Traffic Volume (veh/h)	248	1319	0	0	843	126	0	0	0	63	0	123
Future Volume (veh/h)	248	1319	0	0	843	126	0	0	0	63	0	123
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00					1.00	1.00	1.00
Work Zone On Approach	No			No						No		
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870				1870	0	1870
Adj Flow Rate, veh/h	270	1434	0	0	916	137				68	0	134
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	2	2	2				2	0	2
Cap, veh/h	299	2878	0	1	1857	278				184	0	164
Arrive On Green	0.17	0.81	0.00	0.00	0.60	0.60				0.10	0.00	0.10
Sat Flow, veh/h	1781	3647	0	1781	3096	463				1781	0	1585
Grp Volume(v), veh/h	270	1434	0	0	526	527				68	0	134
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1782				1781	0	1585
Q Serve(g_s), s	17.8	15.4	0.0	0.0	20.2	20.2				4.3	0.0	9.9
Cycle Q Clear(g_c), s	17.8	15.4	0.0	0.0	20.2	20.2				4.3	0.0	9.9
Prop In Lane	1.00		0.00	1.00		0.26				1.00		1.00
Lane Grp Cap(c), veh/h	299	2878	0	1	1066	1069				184	0	164
V/C Ratio(X)	0.90	0.50	0.00	0.00	0.49	0.49				0.37	0.00	0.82
Avail Cap(c_a), veh/h	444	2878	0	74	1066	1069				377	0	336
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.67	0.67	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	49.0	3.6	0.0	0.0	13.7	13.7				50.2	0.0	52.7
Incr Delay (d2), s/veh	8.8	0.4	0.0	0.0	1.6	1.6				1.2	0.0	9.5
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	16.6	4.3	0.0	0.0	8.3	8.3				2.0	0.0	8.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.8	4.0	0.0	0.0	15.3	15.3				51.4	0.0	62.2
LnGrp LOS	E	A	A	A	B	B				D	A	E
Approach Vol, veh/h	1704				1053					202		
Approach Delay, s/veh	12.6				15.3					58.6		
Approach LOS	B				B					E		

Timer - Assigned Phs						
Phs Duration (G+Y+Rc), s	0.0	103.0		17.0	25.2	77.8
Change Period (Y+Rc), s	5.1	5.8		4.6	5.1	5.8
Max Green Setting (Gmax), s	74.1			25.4	29.9	49.2
Max Q Clear Time (g_c+I), s	17.4			11.9	19.8	22.2
Green Ext Time (p_c), s	0.0	45.4		0.5	0.3	19.5

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

OnPoint - Oceanside
9: El Camino Real & Mission Ave

Horizon Year with Project
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱		↰	↱	↰
Traffic Volume (veh/h)	381	938	157	209	458	153	248	700	423	242	421	303
Future Volume (veh/h)	381	938	157	209	458	153	248	700	423	242	421	303
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00			0.99	1.00	0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	414	1020	0	227	498	166	270	761	460	263	458	329
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	372	1092		246	708	234	381	801	334	431	861	550
Arrive On Green	0.11	0.31	0.00	0.07	0.27	0.27	0.21	0.21	0.21	0.24	0.24	0.24
Sat Flow, veh/h	3456	3554	1585	3456	2614	866	1781	3741	1563	1781	3554	1565
Grp Volume(v), veh/h	414	1020	0	227	338	326	270	761	460	263	458	329
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1703	1781	1870	1563	1781	1777	1565
Q Serve(g_s), s	17.7	45.9	0.0	10.7	28.1	28.4	23.1	33.0	35.2	21.6	18.4	28.5
Cycle Q Clear(g_c), s	17.7	45.9	0.0	10.7	28.1	28.4	23.1	33.0	35.2	21.6	18.4	28.5
Prop In Lane	1.00		1.00	1.00		0.51	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	372	1092		246	481	461	381	801	334	431	861	550
V/C Ratio(X)	1.11	0.93		0.92	0.70	0.71	0.71	0.95	1.38	0.61	0.53	0.60
Avail Cap(c_a), veh/h	372	1100		246	485	465	381	801	334	596	1188	694
HCM Platoon Ratio	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	73.4	55.4	0.0	75.9	54.0	54.1	59.9	63.8	64.6	55.4	54.2	44.0
Incr Delay (d2), s/veh	80.9	15.4	0.0	37.3	8.3	8.9	6.0	20.7	186.7	1.4	0.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.1	22.9	0.0	6.1	13.8	13.4	11.1	18.1	31.4	10.0	8.4	11.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	154.3	70.7	0.0	113.3	62.3	63.0	65.8	84.5	251.4	56.8	54.7	45.1
LnGrp LOS	F	E		F	E	E	E	F	F	E	D	D
Approach Vol, veh/h	1434		A		891			1491			1050	
Approach Delay, s/veh	94.9				75.5			132.6			52.2	
Approach LOS	F				E			F			D	

Timer - Assigned Phs						
Phs Duration (G+Y+Rc), s	57.3		46.1	25.0	51.3	42.0
Change Period (Y+Rc), s	6.8		6.3	7.3	6.8	6.8
Max Green Setting (Gmax), s	50.9		55.0	17.7	44.9	35.2
Max Q Clear Time (g_c+I), s	47.9		30.5	19.7	30.4	37.2
Green Ext Time (p_c), s	0.0	2.7	5.4	0.0	8.3	0.0

Intersection Summary	
HCM 6th Ctrl Delay	93.7
HCM 6th LOS	F

Notes
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

OnPoint - Oceanside
10: Douglas Dr & Mission Ave

Horizon Year with Project
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	149	1616	113	120	636	128	138	528	105	102	587	190
Future Volume (veh/h)	149	1616	113	120	636	128	138	528	105	102	587	190
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.99	1.00	0.99	1.00	0.99	1.00	0.99	1.00	0.99	1.00	0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	162	1757	123	130	691	139	150	574	114	111	638	207
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	229	1258	557	94	1002	201	94	870	172	131	831	269
Arrive On Green	0.07	0.35	0.35	0.05	0.34	0.34	0.05	0.29	0.29	0.07	0.32	0.32
Sat Flow, veh/h	3456	3554	1572	1781	2943	592	1781	2951	584	1781	2631	853
Grp Volume(v), veh/h	162	1757	123	130	417	413	150	345	343	111	431	414
Grp Sat Flow(s),veh/h/ln	1728	1777	1572	1781	1777	1758	1781	1777	1758	1781	1777	1707
Q Serve(g_s), s	4.4	33.7	5.2	5.0	19.2	19.3	5.0	16.2	16.3	5.9	20.8	20.9
Cycle Q Clear(g_c), s	4.4	33.7	5.2	5.0	19.2	19.3	5.0	16.2	16.3	5.9	20.8	20.9
Prop In Lane	1.00	1.00	1.00	1.00	0.34	1.00	1.00	0.33	1.00	1.00	0.50	1.00
Lane Grp Cap(c), veh/h	229	1258	557	94	605	598	94	524	518	131	561	539
V/C Ratio(X)	0.71	1.40	0.22	1.39	0.69	0.69	1.60	0.66	0.66	0.85	0.77	0.77
Avail Cap(c_a), veh/h	251	1258	557	94	605	598	94	616	610	131	654	628
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.5	30.7	21.5	45.1	27.0	27.1	45.1	29.4	29.4	43.6	29.4	29.4
Incr Delay (d2), s/veh	8.0	183.2	0.4	227.8	4.3	4.3	315.2	2.5	2.6	37.5	5.3	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	45.8	2.0	8.1	8.6	8.6	10.4	7.1	7.1	3.9	9.5	9.1	9.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.5	213.9	22.0	272.9	31.3	31.4	360.3	31.9	32.0	81.0	34.7	35.0
LnGrp LOS	D	F	C	F	C	C	F	C	C	F	C	C
Approach Vol, veh/h	2042			960			838			956		
Approach Delay, s/veh	189.4			64.1			90.7			40.2		
Approach LOS	F			E			F			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	39.5	10.1	35.5	11.4	38.2	12.1	33.5					
Change Period (Y+Rc), s	5.1	5.8	5.1	5.4	5.1	5.8	5.1					
Max Green Setting (Gmax), s	33.7	5.0	35.0	6.9	31.8	7.0	33.0					
Max Q Clear Time (g_c+I),s	35.7	7.0	22.9	6.4	21.3	7.9	18.3					
Green Ext Time (p_c), s	0.0	0.0	0.0	5.7	0.0	6.0	0.0	5.1				
Intersection Summary												
HCM 6th Ctrl Delay			117.3									
HCM 6th LOS			F									

OnPoint - Oceanside
11: Roymar Rd & Via de la Valle

Horizon Year with Project
Timing Plan: PM Peak

Intersection												
Int Delay, s/veh	5.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Vol, veh/h	0	0	0	96	0	43	0	30	49	7	39	0
Future Vol, veh/h	0	0	0	96	0	43	0	30	49	7	39	0
Conflicting Peds, #/hr	0	0	0	10	0	10	0	0	10	10	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	104	0	47	0	33	53	8	42	0
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	151	154	52	138	128	80	42	0	0	96	0	0
Stage 1	58	58	-	70	70	-	-	-	-	-	-	-
Stage 2	93	96	-	68	58	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	816	738	1016	833	763	980	1567	-	-	1498	-	-
Stage 1	954	847	-	940	837	-	-	-	-	-	-	-
Stage 2	914	815	-	942	847	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	765	726	1006	814	751	961	1567	-	-	1484	-	-
Mov Cap-2 Maneuver	765	726	-	814	751	-	-	-	-	-	-	-
Stage 1	954	842	-	931	829	-	-	-	-	-	-	-
Stage 2	861	807	-	927	842	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			10.1			0			1.1		
HCM LOS	A			B								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1567	-	-	-	854	1484	-	-				
HCM Lane V/C Ratio	-	-	-	-	0.177	0.005	-	-				
HCM Control Delay (s)	0	-	-	0	10.1	7.4	0	-				
HCM Lane LOS	A	-	-	A	B	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	-	0.6	0	-	-				

OnPoint - Oceanside
12: Mission Ave & Project Dwy 1

Horizon Year with Project
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕			↕
Traffic Vol, veh/h	0	1816	1103	49	0	74
Future Vol, veh/h	0	1816	1103	49	0	74
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1974	1199	53	0	80

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	- 0 - 626
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	-	- - 0 427
Stage 1	0	-	- - 0 -
Stage 2	0	-	- - 0 -
Platoon blocked, %	-	-	- - -
Mov Cap-1 Maneuver	-	-	- - 427
Mov Cap-2 Maneuver	-	-	- - -
Stage 1	-	-	- - -
Stage 2	-	-	- - -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	15.4
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	427
HCM Lane V/C Ratio	-	-	-	0.188
HCM Control Delay (s)	-	-	-	15.4
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.7

OnPoint - Oceanside
13: Foussat Rd & Project Dwy 2

Horizon Year with Project
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↕		↕↕↕	↕↕	
Traffic Vol, veh/h	0	0	0	352	347	121
Future Vol, veh/h	0	0	0	352	347	121
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	383	377	132

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	- 255	- 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	0 744	0 - -	- - -
Stage 1	0 - 0	- - -	- - -
Stage 2	0 - 0	- - -	- - -
Platoon blocked, %	- - -	- - -	- - -
Mov Cap-1 Maneuver	- 744	- - -	- - -
Mov Cap-2 Maneuver	- - -	- - -	- - -
Stage 1	- - -	- - -	- - -
Stage 2	- - -	- - -	- - -

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

APPENDIX H

MITIGATED CONDITIONS SYNCHRO PEAK-HOUR INTERSECTION ANALYSIS SHEETS

OnPoint - Oceanside
1: Airport Rd & SR 76

Horizon Year with Project Mitigated
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↗	↘	↰	↗	↘	↰	↗	↘	↰	↗	↘
Traffic Volume (veh/h)	26	1792	81	59	2719	36	130	27	116	49	31	13
Future Volume (veh/h)	26	1792	81	59	2719	36	130	27	116	49	31	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	1867	84	61	2832	38	135	28	121	51	32	14
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	169	3270	1007	77	2948	907	151	43	184	84	194	159
Arrive On Green	0.10	0.64	0.64	0.04	0.58	0.58	0.09	0.14	0.14	0.05	0.10	0.10
Sat Flow, veh/h	1781	5106	1573	1781	5106	1571	1781	301	1302	1781	1870	1539
Grp Volume(v), veh/h	27	1867	84	61	2832	38	135	0	149	51	32	14
Grp Sat Flow(s),veh/h/ln	1781	1702	1573	1781	1702	1571	1781	0	1603	1781	1870	1539
Q Serve(g_s), s	2.8	41.4	4.1	6.8	105.2	1.5	15.0	0.0	17.6	5.6	3.1	1.3
Cycle Q Clear(g_c), s	2.8	41.4	4.1	6.8	105.2	1.5	15.0	0.0	17.6	5.6	3.1	1.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.81	1.00		1.00
Lane Grp Cap(c), veh/h	169	3270	1007	77	2948	907	151	0	227	84	194	159
V/C Ratio(X)	0.16	0.57	0.08	0.79	0.96	0.04	0.89	0.00	0.66	0.61	0.17	0.09
Avail Cap(c_a), veh/h	169	3270	1007	88	2949	907	157	0	313	89	294	242
HCM Platoon Ratio	1.00	1.00	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	0.95	0.00	0.95	1.00	1.00	1.00
Uniform Delay (d), s/veh	83.2	20.4	13.7	94.7	40.1	9.7	90.6	0.0	81.3	93.5	81.8	53.9
Incr Delay (d2), s/veh	0.2	0.7	0.2	28.7	9.6	0.1	38.5	0.0	1.2	6.9	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	17.0	1.6	3.8	46.3	0.8	8.6	0.0	7.4	2.8	1.5	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.3	21.1	13.8	123.4	49.7	9.7	129.1	0.0	82.4	100.4	81.9	54.0
LnGrp LOS	F	C	B	F	D	A	F	A	F	F	F	D
Approach Vol, veh/h		1978			2931			284			97	
Approach Delay, s/veh		21.6			50.7			104.6			87.6	
Approach LOS		C			D			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.4	136.1	22.7	26.8	27.0	123.5	15.1	34.4				
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.1	8.0	* 8	* 5.7	6.1				
Max Green Setting (Gmax), s	* 9.9	115.6	* 18	31.4	10.0	* 12E2	* 10	39.0				
Max Q Clear Time (g_c+I1), s	8.8	43.4	17.0	5.1	4.8	107.2	7.6	19.6				
Green Ext Time (p_c), s	0.0	62.3	0.0	0.1	0.0	8.2	0.0	0.5				
Intersection Summary												
HCM 6th Ctrl Delay			43.4									
HCM 6th LOS			D									
Notes												

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

OnPoint - Oceanside
2: Foussat Rd & SR 76

Horizon Year with Project Mitigated
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↗	↘	↰	↗	↘	↰	↗	↘	↰	↗	↘
Traffic Volume (veh/h)	64	1673	138	121	2630	34	93	43	114	52	32	90
Future Volume (veh/h)	64	1673	138	121	2630	34	93	43	114	52	32	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	1690	139	122	2657	34	94	43	115	53	32	91
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	491	3096	956	207	2617	808	223	739	225	213	503	387
Arrive On Green	0.14	0.61	0.61	0.06	0.51	0.51	0.06	0.14	0.14	0.06	0.14	0.14
Sat Flow, veh/h	3456	5106	1577	3456	5106	1576	3456	5106	1552	3456	3554	2731
Grp Volume(v), veh/h	65	1690	139	122	2657	34	94	43	115	53	32	91
Grp Sat Flow(s),veh/h/ln	1728	1702	1577	1728	1702	1576	1728	1702	1552	1728	1777	1365
Q Serve(g_s), s	3.3	39.0	7.6	6.9	102.5	1.6	5.2	1.5	13.7	2.9	1.6	4.5
Cycle Q Clear(g_c), s	3.3	39.0	7.6	6.9	102.5	1.6	5.2	1.5	13.7	2.9	1.6	4.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	491	3096	956	207	2617	808	223	739	225	213	503	387
V/C Ratio(X)	0.13	0.55	0.15	0.59	1.02	0.04	0.42	0.06	0.51	0.25	0.06	0.24
Avail Cap(c_a), veh/h	491	3096	956	207	2617	808	225	1174	357	225	817	628
HCM Platoon Ratio	1.00	1.00	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	75.0	23.2	17.0	91.6	48.7	13.1	89.9	73.8	79.0	89.4	74.3	43.1
Incr Delay (d2), s/veh	0.0	0.7	0.3	3.0	21.5	0.1	0.5	0.0	0.7	0.2	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	14.5	16.2	3.0	3.2	48.5	0.9	2.4	0.6	5.6	1.3	0.7	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.0	23.9	17.3	94.6	70.3	13.2	90.4	73.8	79.7	89.7	74.4	43.2
LnGrp LOS	E	C	B	F	F	B	F	E	E	F	E	D
Approach Vol, veh/h		1894			2813			252			176	
Approach Delay, s/veh		25.1			70.6			82.7			62.9	
Approach LOS		C			E			F			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.4	136.1	22.7	26.8	27.0	123.5	15.1	34.4				
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.1	8.0	* 8	* 5.7	6.1				
Max Green Setting (Gmax), s	* 9.9	115.6	* 18	31.4	10.0	* 12E2	* 10	39.0				
Max Q Clear Time (g_c+I1), s	8.8	43.4	17.0	5.1	4.8	107.2	7.6	19.6				
Green Ext Time (p_c), s	0.0	62.3	0.0	0.1	0.0	8.2	0.0	0.5				
Intersection Summary												
HCM 6th Ctrl Delay								54.2				
HCM 6th LOS								D				
Notes												

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

OnPoint - Oceanside

9: El Camino Real & Mission Ave

Horizon Year with Project Mitigated

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	153	425	120	266	771	39	150	215	155	143	737	418
Future Volume (veh/h)	153	425	120	266	771	39	150	215	155	143	737	418
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	0.99	1.00	1.00	0.99	1.00	0.99	1.00	0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	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	159	443	0	277	803	41	156	224	161	149	768	435
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	247	1013		327	1058	54	180	1138	503	175	1127	612
Arrive On Green	0.07	0.28	0.00	0.09	0.31	0.31	0.10	0.32	0.32	0.10	0.32	0.32
Sat Flow, veh/h	3456	3554	1585	3456	3438	176	1781	3554	1570	1781	3554	1570
Grp Volume(v), veh/h	159	443	0	277	415	429	156	224	161	149	768	435
Grp Sat Flow(s), veh/h/ln	1728	1777	1585	1728	1777	1837	1781	1777	1570	1781	1777	1570
Q Serve(g_s), s	6.2	14.2	0.0	11.0	29.4	29.4	12.0	6.4	10.8	11.5	26.2	32.7
Cycle Q Clear(g_c), s	6.2	14.2	0.0	11.0	29.4	29.4	12.0	6.4	10.8	11.5	26.2	32.7
Prop In Lane	1.00	1.00	1.00	1.00	0.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	247	1013		327	547	565	180	1138	503	175	1127	612
V/C Ratio(X)	0.64	0.44		0.85	0.76	0.76	0.87	0.20	0.32	0.85	0.68	0.71
Avail Cap(c_a), veh/h	320	1170		364	608	628	213	1229	543	294	1402	733
HCM Platoon Ratio	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.0	40.7	0.0	62.1	43.6	43.6	61.7	34.4	35.9	61.9	41.5	36.0
Incr Delay (d2), s/veh	2.8	1.4	0.0	15.7	9.5	9.2	26.1	0.1	0.4	11.5	1.0	2.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	6.9	6.5	0.0	5.6	14.4	14.8	6.8	2.8	4.3	5.8	11.7	12.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	65.8	42.1	0.0	77.8	53.1	52.8	87.9	34.5	36.3	73.4	42.4	38.6
LnGrp LOS	E	D		E	D	D	F	C	D	E	D	D
Approach Vol, veh/h	602	A		1121			541			1352		
Approach Delay, s/veh	48.3			59.1			50.4			44.6		
Approach LOS	D			E			D			D		

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.5	46.5	21.4	51.0	17.3	49.7	21.0	51.4
Change Period (Y+Rc), s	7.3	6.8	7.3	* 6.8	7.3	6.8	7.3	6.8
Max Green Setting (Gmax), s	45.9	16.7	* 55	12.9	47.7	23.0	48.2	
Max Q Clear Time (g_c+I), s	16.2	14.0	34.7	8.2	31.4	13.5	12.8	
Green Ext Time (p_c), s	0.2	8.9	0.1	7.2	0.2	11.0	0.2	2.1

Intersection Summary

HCM 6th Ctrl Delay 50.6

HCM 6th LOS D

Notes

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

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

KH

HCM 6th Signalized Intersection Summary

Synchro 10 Report

Page 3

OnPoint - Oceanside

1: Airport Rd & SR 76

Horizon Year with Project Mitigated

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	27	2826	71	99	1730	39	169	93	115	59	69	41
Future Volume (veh/h)	27	2826	71	99	1730	39	169	93	115	59	69	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.99	1.00	0.99	1.00	0.99	1.00	0.98	1.00	0.98	1.00	0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	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	29	3006	76	105	1840	41	180	99	122	63	73	44
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	3176	978	118	2929	901	197	107	132	74	138	112
Arrive On Green	0.10	0.62	0.62	0.07	0.57	0.57	0.11	0.14	0.14	0.04	0.07	0.07
Sat Flow, veh/h	1781	5106	1572	1781	5106	1571	1781	753	927	1781	1870	1520
Grp Volume(v), veh/h	29	3006	76	105	1840	41	180	0	221	63	73	44
Grp Sat Flow(s), veh/h/ln	1781	1702	1572	1781	1702	1571	1781	0	1680	1781	1870	1520
Q Serve(g_s), s	3.0	108.2	3.8	11.7	48.0	1.7	20.0	0.0	26.0	7.0	7.5	4.5
Cycle Q Clear(g_c), s	3.0	108.2	3.8	11.7	48.0	1.7	20.0	0.0	26.0	7.0	7.5	4.5
Prop In Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.55	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	184	3176	978	118	2929	901	197	0	239	74	138	112
V/C Ratio(X)	0.16	0.95	0.08	0.89	0.63	0.05	0.92	0.00	0.92	0.85	0.53	0.39
Avail Cap(c_a), veh/h	184	3176	978	118	3250	1000	227	0	251	74	138	112
HCM Platoon Ratio	1.00	1.00	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	0.94	0.00	0.94	1.00	1.00	1.00
Uniform Delay (d), s/veh	81.7	34.8	15.0	92.6	28.4	10.3	88.0	0.0	84.7	95.2	89.3	58.3
Incr Delay (d2), s/veh	0.1	7.6	0.2	48.3	1.0	0.1	31.5	0.0	33.5	55.7	2.0	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	1.4	46.4	1.5	7.1	20.2	0.9	11.0	0.0	13.6	4.4	3.8	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	81.9	42.4	15.2	140.9	29.5	10.4	119.5	0.0	118.2	150.9	91.3	59.1
LnGrp LOS	F	D	B	F	C	B	F	A	F	F	F	E
Approach Vol, veh/h	3111			1986			401			180		
Approach Delay, s/veh	42.1			35.0			118.8			104.3		
Approach LOS	D			C			F			F		

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	132.4	27.8	20.8	28.7	122.7	14.0	34.6
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.1	8.0	* 8	* 5.7	6.1
Max Green Setting (Gmax), s	* 13	123.0	* 26	12.7	9.0	* 1.3E2	* 8.3	29.9
Max Q Clear Time (g_c+I), s	13.7	110.2	22.0	9.5	5.0	50.0	9.0	28.0
Green Ext Time (p_c), s	0.0	12.8	0.1	0.1	0.0	64.7	0.0	0.2

Intersection Summary

HCM 6th Ctrl Delay 47.0

HCM 6th LOS D

Notes

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

KH

HCM 6th Signalized Intersection Summary

Synchro 10 Report

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OnPoint - Oceanside
2: Foussat Rd & SR 76

Horizon Year with Project Mitigated
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔	↔↔↔	↔↔↔	↔	↔↔↔	↔↔↔	↔	↔↔↔	↔↔↔	↔
Traffic Volume (veh/h)	186	2502	231	193	1674	86	133	63	157	58	103	127
Future Volume (veh/h)	186	2502	231	193	1674	86	133	63	157	58	103	127
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	0.99	1.00	0.98	1.00	0.98	1.00	0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	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	194	2606	241	201	1744	90	139	66	164	60	107	132
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	575	3173	980	234	2610	806	173	756	230	122	473	363
Arrive On Green	0.17	0.62	0.62	0.07	0.51	0.51	0.05	0.15	0.15	0.04	0.13	0.13
Sat Flow, veh/h	3456	5106	1577	3456	5106	1576	3456	5106	1553	3456	3554	2727
Grp Volume(v), veh/h	194	2606	241	201	1744	90	139	66	164	60	107	132
Grp Sat Flow(s),veh/h/ln	1728	1702	1577	1728	1702	1576	1728	1702	1553	1728	1777	1363
Q Serve(g_s), s	9.9	78.9	13.7	11.5	50.7	4.7	8.0	2.2	20.1	3.4	5.4	6.4
Cycle Q Clear(g_c), s	9.9	78.9	13.7	11.5	50.7	4.7	8.0	2.2	20.1	3.4	5.4	6.4
Prop In Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	575	3173	980	234	2610	806	173	756	230	122	473	363
V/C Ratio(X)	0.34	0.82	0.25	0.86	0.67	0.11	0.80	0.09	0.71	0.49	0.23	0.36
Avail Cap(c_a), veh/h	575	3173	980	264	2831	874	238	996	303	126	577	443
HCM Platoon Ratio	1.00	1.00	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	73.6	29.3	16.9	92.3	36.3	15.7	94.0	73.5	81.1	94.7	77.5	41.7
Incr Delay (d2), s/veh	0.1	2.5	0.6	19.8	1.4	0.3	9.0	0.0	3.0	1.1	0.1	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	33.0	5.3	5.9	21.8	2.3	3.8	1.0	8.3	1.6	2.5	2.2	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.7	31.8	17.5	112.0	37.7	16.0	103.0	73.5	84.1	95.9	77.5	41.9
LnGrp LOS	E	C	B	F	D	B	F	E	F	F	E	D
Approach Vol, veh/h	3041			2035			369			299		
Approach Delay, s/veh	33.3			44.1			89.3			65.5		
Approach LOS	C			D			F			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.3	132.3	15.7	32.7	41.3	110.2	12.7	35.7				
Change Period (Y+Rc), s	5.7	8.0	* 5.7	6.1	8.0	* 8	* 5.7	6.1				
Max Green Setting (Gmax), s	112.9	* 14	32.5	17.3	11E2	* 7.3	39.0					
Max Q Clear Time (g_c+1.5s), s	80.9	10.0	8.4	11.9	52.7	5.4	22.1					
Green Ext Time (p_c), s	0.0	31.7	0.1	0.5	0.1	49.5	0.0	0.3				
Intersection Summary												
HCM 6th Ctrl Delay				42.4								
HCM 6th LOS				D								
Notes												

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

OnPoint - Oceanside
9: El Camino Real & Mission Ave

Horizon Year with Project Mitigated
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔	↔↔↔	↔↔↔	↔	↔↔↔	↔↔↔	↔	↔↔↔	↔↔↔	↔
Traffic Volume (veh/h)	381	938	157	209	458	153	248	700	423	242	421	303
Future Volume (veh/h)	381	938	157	209	458	153	248	700	423	242	421	303
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	0.99	1.00	0.99	1.00	0.99	1.00	0.99	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	No	No	No	No	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	414	1020	0	227	498	166	270	761	460	263	458	329
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	450	1116		255	673	223	288	1038	458	283	1029	661
Arrive On Green	0.13	0.31	0.00	0.07	0.26	0.26	0.16	0.29	0.29	0.16	0.29	0.29
Sat Flow, veh/h	3456	3554	1585	3456	2614	866	1781	3554	1569	1781	3554	1569
Grp Volume(v), veh/h	414	1020	0	227	338	326	270	761	460	263	458	329
Grp Sat Flow(s),veh/h/ln	1777	1585	1728	1777	1702	1781	1777	1569	1781	1777	1569	1569
Q Serve(g_s), s	20.7	48.3	0.0	11.4	30.5	30.8	26.2	33.8	51.1	25.5	18.4	26.9
Cycle Q Clear(g_c), s	20.7	48.3	0.0	11.4	30.5	30.8	26.2	33.8	51.1	25.5	18.4	26.9
Prop In Lane	1.00	1.00	1.00	1.00	0.51	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	450	1116		255	458	439	288	1038	458	283	1029	661
V/C Ratio(X)	0.92	0.91		0.89	0.74	0.74	0.94	0.73	1.00	0.93	0.45	0.50
Avail Cap(c_a), veh/h	456	1131		255	462	443	292	1038	458	327	1117	699
HCM Platoon Ratio	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	75.2	57.7	0.0	80.3	59.5	59.7	72.5	55.8	61.9	72.6	50.7	37.3
Incr Delay (d2), s/veh	23.7	12.8	0.0	29.8	10.2	10.9	36.4	2.7	43.1	29.8	0.3	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	23.8	0.0	6.2	15.1	14.7	15.0	15.7	25.9	14.1	8.4	10.6	10.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	98.9	70.6	0.0	110.1	69.7	70.6	108.9	58.5	105.0	102.4	51.0	37.9
LnGrp LOS	F	E		F	E	E	F	E	F	F	D	D
Approach Vol, veh/h	1434	A		891			1491			1050		
Approach Delay, s/veh	78.8			80.3			82.0			59.8		
Approach LOS	E			F			F			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	20.2	61.8	35.6	57.5	30.1	51.9	35.1	57.9				
Change Period (Y+Rc), s	7.3	6.8	7.3	* 6.8	7.3	6.8	7.3	6.8				
Max Green Setting (Gmax), s	55.7	28.7	* 55	23.1	45.5	32.1	51.1					
Max Q Clear Time (g_c+1.5s), s	50.3	28.2	28.9	22.7	32.8	27.5	53.1					
Green Ext Time (p_c), s	0.0	4.6	0.0	4.5	0.1	7.5	0.3	0.0				
Intersection Summary												
HCM 6th Ctrl Delay				75.9								
HCM 6th LOS				E								
Notes												

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.