13811 VALLEY VIEW AVENUE PROJECT TRAFFIC IMPACT ANALYSIS

City of La Mirada

June 14, 2019

prepared by

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EXECUTIVE SUMMARY

The purpose of this Traffic Impact Analysis is to provide an assessment of traffic operations resulting from development of the proposed 13811 Valley View Avenue Project and to identify measures necessary to mitigate potentially significant traffic impacts, if any. This report analyzes traffic impacts for the anticipated project opening year in Year 2021.

Although this is a technical report, effort has been made to write the report clearly and concisely. A glossary is provided in Appendix A to assist the reader with terms related to transportation engineering.

PROJECT DESCRIPTION

The project site is located at 13811 Valley View Avenue in the City of La Mirada. The project site is located west of Valley View Avenue and north of De Alcala Drive. The project site is currently vacant. The proposed project consists of developing the project site with 56 dwelling units of low-rise multi-family housing. A right-in/right-out only access driveway is proposed on Valley View Avenue. The proposed project is anticipated to be constructed and fully operational by year 2021.

EXISTING OPERATIONS

The study intersections currently operate within acceptable Levels of Service (D or better) during the peak hours for Existing conditions, except for the following study intersections that are projected to operate at deficient Levels of Service (see Table 1):

- Valley View Avenue/Bora Drive - #4 (LOS F, AM/PM peak hours)
- Valley View Avenue/De Alcala Drive - #6 (LOS F, AM/PM peak hours)
- Valley View Avenue/Rosecrans Avenue - #7 (LOS E, PM peak hour)

PROJECT TRIPS

The proposed project is forecast to generate a total of approximately 410 daily vehicle trips, including 26 vehicle trips during the morning peak hour and 32 vehicle trips during the evening peak hour.

FORECAST OPERATIONS

Existing Plus Project Conditions: The study intersections are projected to operate within acceptable Levels of Service (D or better) during the peak hours for Existing Plus Project conditions, except for the following study intersections that are projected to continue to operate at deficient Levels of Service (see Table 4):

- Valley View Avenue/Bora Drive - #4 (LOS F, AM/PM peak hours)
- Valley View Avenue/De Alcala Drive - #6 (LOS F, AM/PM peak hours)
- Valley View Avenue/Rosecrans Avenue - #7 (LOS E, PM peak hour)

It should be noted that this is a degradation of Level of Service for the already deficient intersections during the Existing conditions. The deficiency is not solely caused by the proposed project.

Opening Year (2021) Without Project: The study intersections are projected to operate within acceptable Levels of Service (D or better) during the peak hours for Opening Year (2021) Without Project traffic conditions, except for the following study intersections that are projected to operate at deficient Levels of Service (see Table 5):

- Valley View Avenue/Bora Drive - #4 (LOS F, AM/PM peak hours)

- Valley View Avenue/De Alcala Drive - #6 (LOS F, AM/PM peak hours)
- Valley View Avenue/Rosecrans Avenue - #7 (LOS E, PM peak hour)

Opening Year (2021) With Project: The study intersections are projected to operate within acceptable Levels of Service (D or better) during the peak hours for Opening Year (2021) With Project traffic conditions, except for the following study intersections that are projected to operate at deficient Levels of Service (see Table 6):

- Valley View Avenue/Bora Drive - #4 (LOS F, AM/PM peak hours)
- Valley View Avenue/De Alcala Drive - #6 (LOS F, AM/PM peak hours)
- Valley View Avenue/Rosecrans Avenue - #7 (LOS E, PM peak hour)

It should be noted that this is a degradation of Level of Service for the already deficient intersections during the Existing conditions. The deficiency is not solely caused by the proposed project.

MITIGATION MEASURES

The following off-site mitigation measures are recommended to address the Level of Service deficiency for Existing Plus Project conditions and Opening Year With Project conditions:

- Valley View Avenue/Bora Drive - #4
  - Install a right-turn only sign to restrict eastbound left turn during the AM and PM peak hours

- Valley View Avenue/De Alcala Drive - #6
  - Install right-turn only signs to restrict eastbound and westbound left turns during the AM and PM peak hours

1. INTRODUCTION

This section describes the purpose of this traffic impact analysis, project location, proposed development, and study area. Figure 1 shows the project location map and Figure 2 illustrates the project site plan.

PURPOSE AND OBJECTIVES

The purpose of this traffic impact analysis is to provide an assessment of traffic operations resulting from development of the proposed 13811 Valley View Avenue Project and to identify measures necessary to mitigate potentially significant traffic impacts. This report analyzes traffic impacts for the anticipated project opening year in 2021.

Although this is a technical report, effort has been made to write the report clearly and concisely. A glossary is provided in Appendix A to assist the reader with terms related to transportation engineering.

PROJECT DESCRIPTION

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STUDY AREA

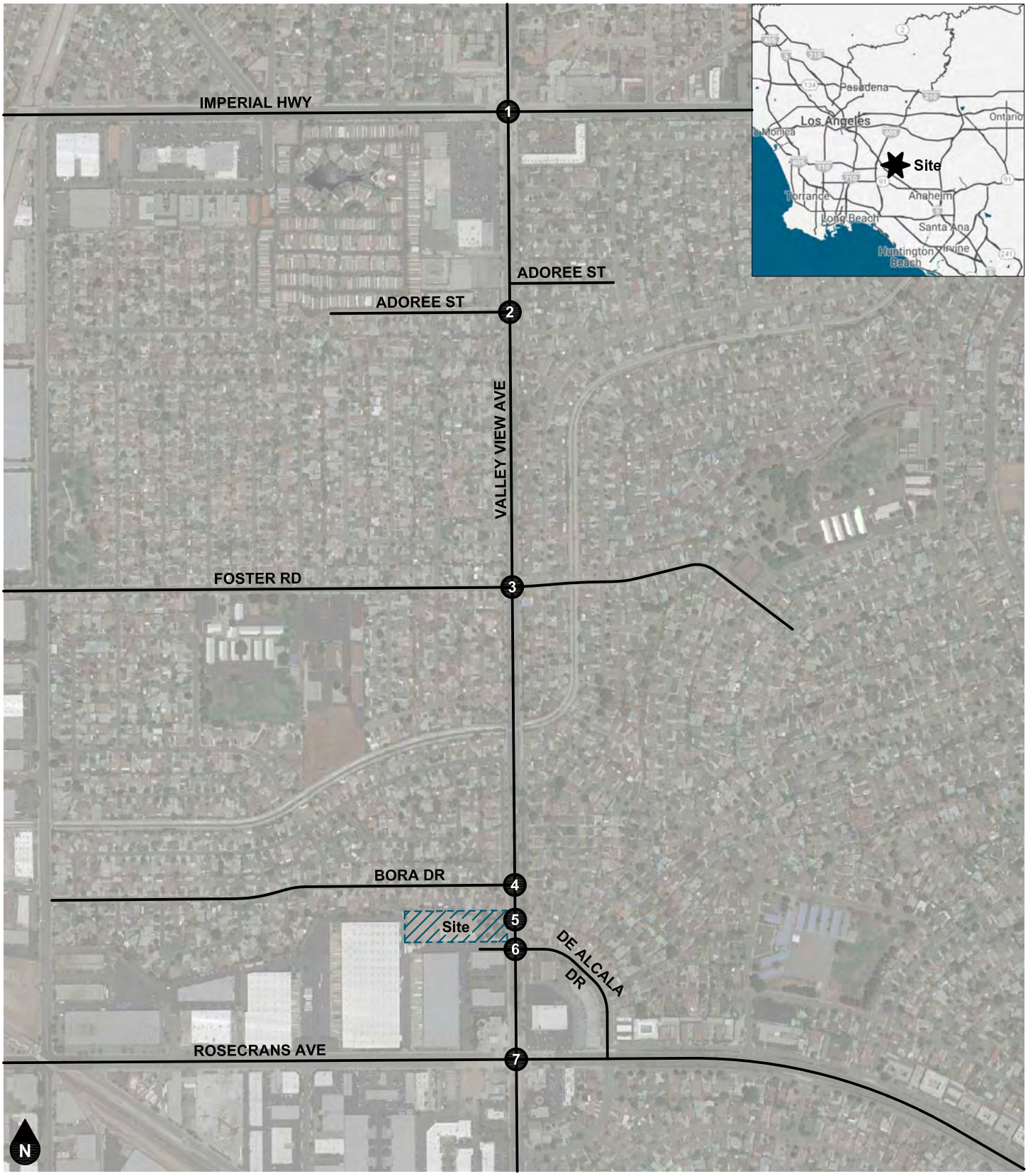
Based on the study intersections identified in the scoping agreement (Appendix B), the study area consists of the following study intersections within the City of La Mirada jurisdiction:

	Study Intersections	Jurisdiction
1.	Valley View Avenue (NS) at Imperial Highway (EW)	La Mirada
2.	Valley View Avenue (NS) at Adoree Street South (EW)	La Mirada
3.	Valley View Avenue (NS) at Foster Road (EW)	La Mirada
4.	Valley View Avenue (NS) at Bora Drive (EW)	La Mirada
5.	Valley View Avenue (NS) at Project Driveway (EW)	La Mirada
6.	Valley View Avenue (NS) at De Alcala Drive (EW)	La Mirada
7.	Valley View Avenue (NS) at Rosecrans Avenue (EW)	La Mirada

ANALYSIS SCENARIOS

The following scenarios are analyzed during typical weekday AM and PM peak hour conditions:

- Existing Conditions
- Existing Plus Project Conditions
- Opening Year (2021) Without Project Conditions
- Opening Year (2021) With Project Conditions



Legend

(#) Study Intersection

Figure 1
Project Location Map

Figure 2
Site Plan

2. METHODOLOGY

This section discusses the analysis methodologies used to assess transportation facility performance as adopted by the respective jurisdictional agencies.

INTERSECTION CAPACITY UTILIZATION METHODOLOGY

Analysis of signalized intersections within the City of La Mirada is based on the Intersection Capacity Utilization (ICU) methodology. The ICU methodology compares the traffic volume using the intersection to the capacity of the intersection. The resulting volume-to-capacity ratio represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity.

The volume-to-capacity ratio is then correlated to a performance measure known as Level of Service based on the following thresholds:

Level of Service	Volume/Capacity Ratio
A	≤ 0.600
B	0.601 to 0.700
C	0.701 to 0.800
D	0.801 to 0.900
E	0.901 to 1.000
F	> 1.000

Source: Transportation Research Board, Interim Materials on Highway Capacity, Transportation Research Circular No. 212, January 1980.

Level of Service is used to qualitatively describe the performance of a roadway facility, ranging from Level of Service A (free-flow conditions) to Level of Service F (extreme congestion and system failure). ICU analysis was performed using the Vistro (Version 6.00-00) software.

Based on City of La Mirada/County of Los Angeles guidelines[1], the ICU analysis utilizes the following parameters: 1,600 vehicles per hour per lane for through and turn lanes, 2,880 vehicles per hour for dual left-turn lanes, and a total clearance adjustment of 10 percent (i.e., 0.10 added to critical Volume/Capacity).

INTERSECTION DELAY METHODOLOGY

The technique used to assess the performance of unsignalized intersections is known as the intersection delay methodology based on the procedures contained in the Highway Capacity Manual (Transportation Research Board, 6th Edition). The methodology considers the traffic volume and distribution of movements, traffic composition, geometric characteristics, and signalization details to calculate the average control delay per vehicle and corresponding Level of Service. Control delay is defined as the portion of delay attributed to the intersection traffic control (such as a traffic signal or stop sign) and includes initial deceleration, queue move-up time, stopped delay, and final acceleration delay. The intersection control delay is then correlated to Level of Service based on the following thresholds:

[1] County of Los Angeles Traffic Impact Analysis (TIA) Report Guidelines; December 2013.

Level of Service	Intersection Control Delay (Seconds / Vehicle)
	Unsignalized Intersection
A	≤ 10.0
B	> 10.0 to ≤ 15.0
C	> 15.0 to ≤ 25.0
D	> 25.0 to ≤ 35.0
E	> 35.0 to ≤ 50.0
F	> 50.0

Source: Transportation Research Board, Highway Capacity Manual (6th Edition).

Level of Service is used to qualitatively describe the performance of a roadway facility, ranging from Level of Service A (free-flow conditions) to Level of Service F (extreme congestion and system failure). At intersections with traffic signal or all way stop control, Level of Service is determined by the average control delay for the overall intersection. At intersections with cross street stop control (i.e., one- or two-way stop control), Level of Service is determined by the average control delay for the worst individual movement (or movements sharing a single lane). Intersection delay analysis was performed using the Vistro (Version 6.00-00) software with default values recommended in the Highway Capacity Manual.

PERFORMANCE STANDARDS

City of La Mirada / County of Los Angeles. Both the City of La Mirada and County of Los Angeles have established Level of Service D as the minimum acceptable Level of Service.

California Department of Transportation. As stated in the Guide for the Preparation of Traffic Impact Studies (State of California, 2002), "California Department of Transportation endeavors to maintain a target LOS [Level of Service] at the transition between LOS "C" and LOS "D" on State highway facilities". The California Department of Transportation acknowledges this may not always be feasible and recommends consultation with the California Department of Transportation to determine the appropriate target Level of Service. For consistency with local requirements, this analysis defines Level of Service D as the minimum acceptable Level of Service for State Highway facilities.

THRESHOLDS OF SIGNIFICANCE

For signalized study intersections, City of La Mirada and County of Los Angeles jurisdiction use the following table to determine significant impacts by project and identify feasible mitigation measures which would mitigate the project and/or other related projects' significant impacts to a level of insignificance

Pre-Project Conditions		Project Increase in V/C
LOS	V/C	
C	0.71 to 0.80	0.04 or more
D	0.81 to 0.90	0.02 or more
E/F	0.91 or more	0.01 or more

The City of La Mirada General Plan requires that LOS D or better be maintained on Arterial Streets with certain exceptions. As such, intersections operating at LOS E or F will be considered deficient. A significant

impact occurs at a signalized intersection if the addition of Project trips to an intersection that is currently operating at a deficient LOS (i.e., LOS E or F) causes the V/C to increase by 0.01 or more.

For unsignalized intersection, based on review of the Los Angeles County Traffic Impact Analysis guidelines and the City's Circulation Element, there are no specific significance criteria for the performance of unsignalized intersections. Therefore, for purposes of determining project-specific impacts of the proposed project at unsignalized intersections, the following significance criteria is provided:

- The project would create a significant impact at an unsignalized intersection if the addition of project-traffic would cause the intersection to operate from LOS D, or better in the baseline (pre-project) condition, to LOS E or F in the plus-project condition. A traffic signal warrant analysis shall be conducted to determine whether a traffic signal is warranted. If a traffic signal is warranted, the City may require the project applicant to pay its fair-share of fees to an applicable program (e.g., DIF, CIP, etc.) for the signalization of the intersection, when warranted.

- If an unsignalized intersection is operating at LOS E or F in the baseline (pre-project) condition, the project would create a significant impact at that intersection if it contributes 10 percent, or more, to the total traffic volume of the impacted peak hour(s). A traffic signal warrant analysis shall be conducted to determine whether a traffic signal is warranted. If a traffic signal is warranted, the City may require the project applicant to pay its fair-share of fees to an applicable program (e.g., DIF, CIP, etc.) for the signalization of the intersection, when warranted.

3. EXISTING CONDITIONS

EXISTING ROADWAY SYSTEM

Figure 3 identifies the lane geometry and intersection traffic controls for Existing conditions based on a field survey of the study area. Regional access to the project area is provided by the Interstate 210 Freeway approximately four miles north of the project site and Interstate 10 approximately two miles to the south. The primary roadway providing local circulation is Valley View Avenue.

Valley View Avenue is a 4-lane divided roadway. Valley View Avenue is classified as a Major Arterial in the City of La Mirada General Plan. On-street parking is generally prohibited on both sides of Valley View Avenue. Bicycle lanes are provided on both sides of Valley View Avenue. Sidewalks are provided on both sides of the roadway.

PEDESTRIAN FACILITIES

Existing pedestrian facilities in the project vicinity are shown on Figure 4. As shown on Figure 4, pedestrian sidewalks are currently provided along the roadways adjacent to the project site.

BICYCLE ROUTES

There are on-street bicycle lanes on both sides of Valley View Avenue. The City of La Mirada Bikeway Master Plan is depicted on Figure 5.

TRANSIT FACILITIES

Figure 6 shows the existing transit routes available in the project vicinity.

TRUCK ROUTES

Figure 7 shows the designated truck routes as identified in the City of La Mirada.

GENERAL PLAN CONTEXT

Figure 7 shows the City of La Mirada General Plan Circulation Element roadway classifications map. This figure shows the nature and extent of arterial and collector highways that are needed to adequately serve the ultimate development depicted by the Land Use Element of the General Plan. The City of La Mirada standard roadway cross-sections are illustrated on Figure 8.

EXISTING TRAFFIC VOLUMES

Figure 9 shows the Existing average daily traffic volumes. The Existing average daily traffic volumes have been factored from peak hour intersection turning movement volumes using the following formula for each intersection leg:

Evening Peak Hour (Approach Volume + Exit Volume) x 12[2] = Leg Volume.

The peak hour to daily volume factor was based on typical roadway conditions.

[2] Source: Approximate average evening peak hour K factor based on typical roadway conditions.

Existing peak hour traffic conditions are based upon morning peak period and evening peak period intersection turning movement counts obtained in La Mirada during typical weekday conditions. The morning peak period was counted between 7:00 AM and 9:00 AM and the evening peak period was counted between 4:00 PM and 6:00 PM. The actual peak hour within the peak period is the four consecutive 15 minute periods with the highest total volume when all movements are added together. Thus, the weekday evening peak hour at one intersection may be 4:45 PM to 5:45 PM if those four consecutive 15 minute periods have the highest combined volume. Intersection turning movement count worksheets are provided in Appendix C.

Figure 10 and Figure 11 show the Existing morning peak hour and evening peak hour intersection turning movement volumes.

EXISTING LEVEL OF SERVICE

The ICU/delay and Levels of Service for Existing conditions are shown in Table 1. Detailed intersection Level of Service worksheets are provided in Appendix D.

As shown in Table 1, the study intersections currently operate within acceptable Levels of Service (D or better) during the peak hours for Existing conditions, except for the following study intersections that are projected to operate at deficient Levels of Service:

- Valley View Avenue/Bora Drive - #4 (LOS F, AM/PM peak hours)
- Valley View Avenue/De Alcala Drive - #6 (LOS F, AM/PM peak hours)
- Valley View Avenue/Rosecrans Avenue - #7 (LOS E, PM peak hour)

Table 1
Existing Intersection Levels of Service

ID	Study Intersection	Traffic Control[1]	AM Peak Hour V/C[2] or [Delay][3]	AM Peak Hour LOS[4]	PM Peak Hour V/C[2] or [Delay][3]	PM Peak Hour LOS[4]
1.	Valley View Ave at Imperial Hwy	TS	0.833	D	0.808	D
2.	Valley View Ave at Adoree St S	TS	0.521	A	0.550	A
3.	Valley View Ave at Foster Rd	TS	0.789	C	0.627	B
4.	Valley View Ave at Bora Dr	CSS	[137.0]	F	[74.0]	F
6.	Valley View Ave at De Alcala Dr	CSS	[146.1]	F	[149.1]	F
7.	Valley View Ave at Rosecrans Ave	TS	0.798	C	0.922	E

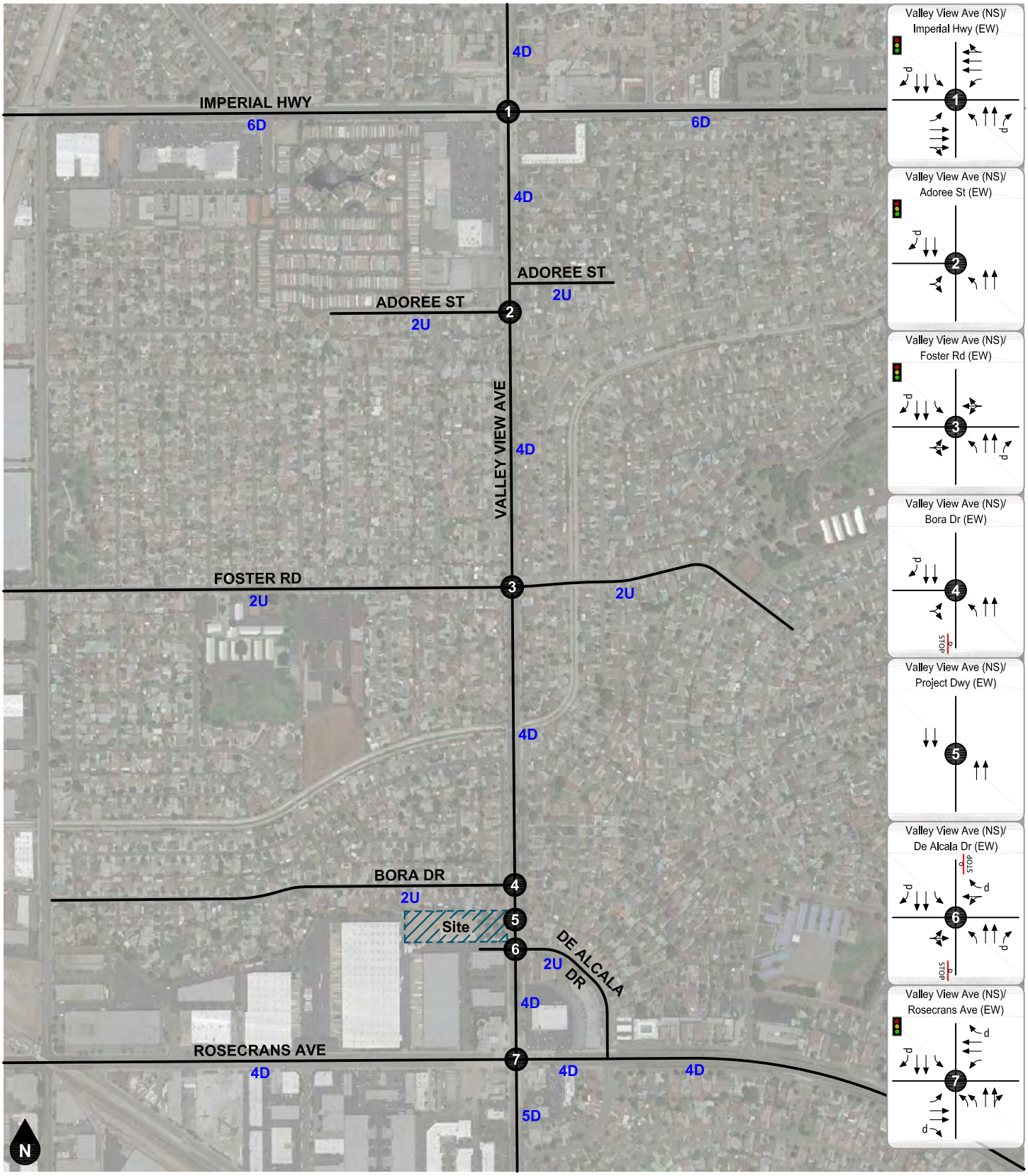
Notes:

(1) TS = Traffic Signal; CSS = Cross Street Stop

(2) V/C = Volume/Capacity

(3) Delay is shown in [seconds/vehicle]. Delay is reported for unsignalized study intersections. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).

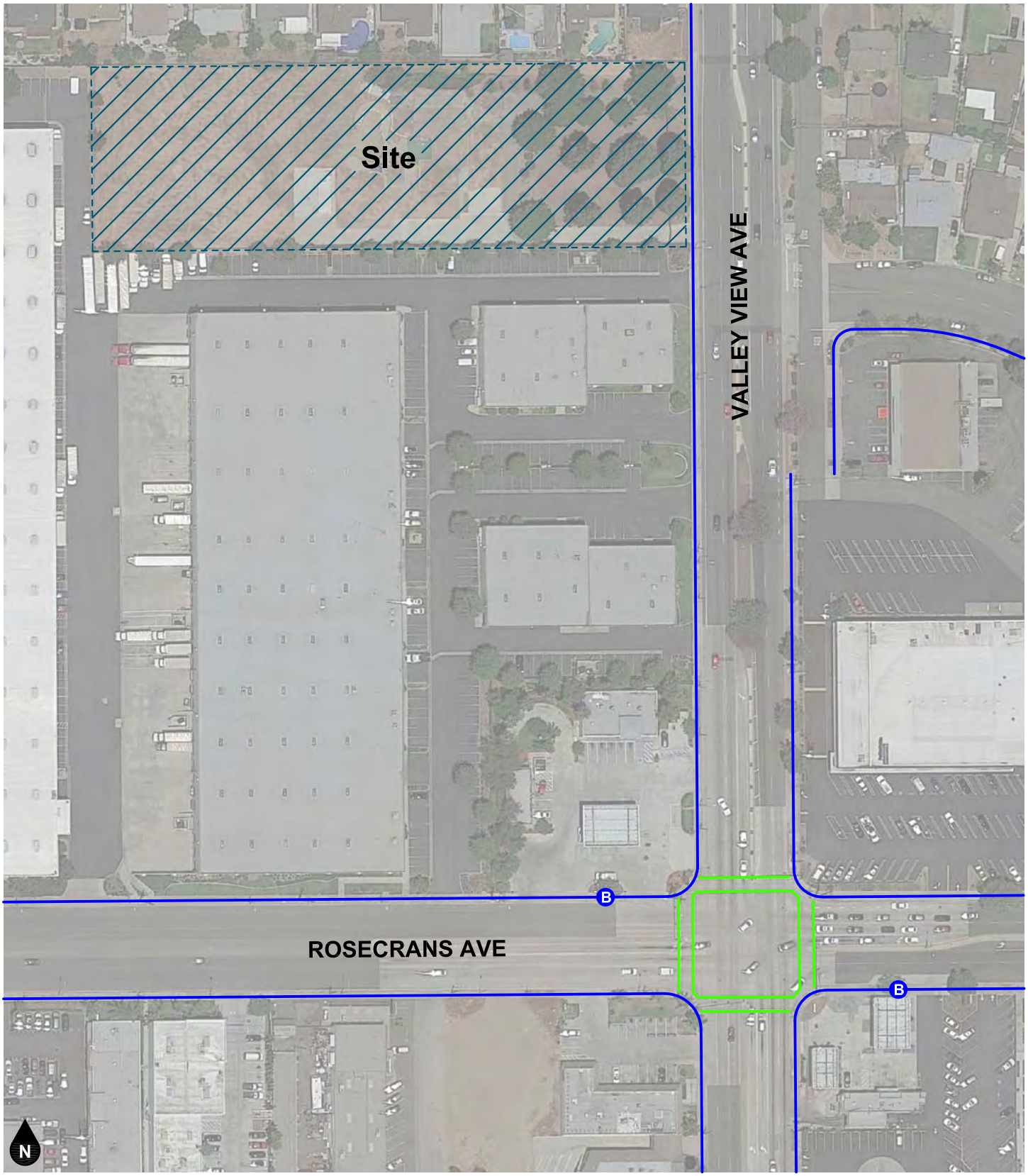
(4) LOS = Level of Service



Legend

- Traffic Signal
- STOP Stop Sign
- #D #-Lane Divided Roadway
- #U #-Lane Undivided Roadway
- Existing Lane
- d De Facto Right Turn Lane

Figure 3
Existing Lane Geometry and Intersection Traffic Controls



Legend
- Sidewalk
- Cross Walk
- B Bus Stop

Figure 4
Existing Pedestrian Facilities

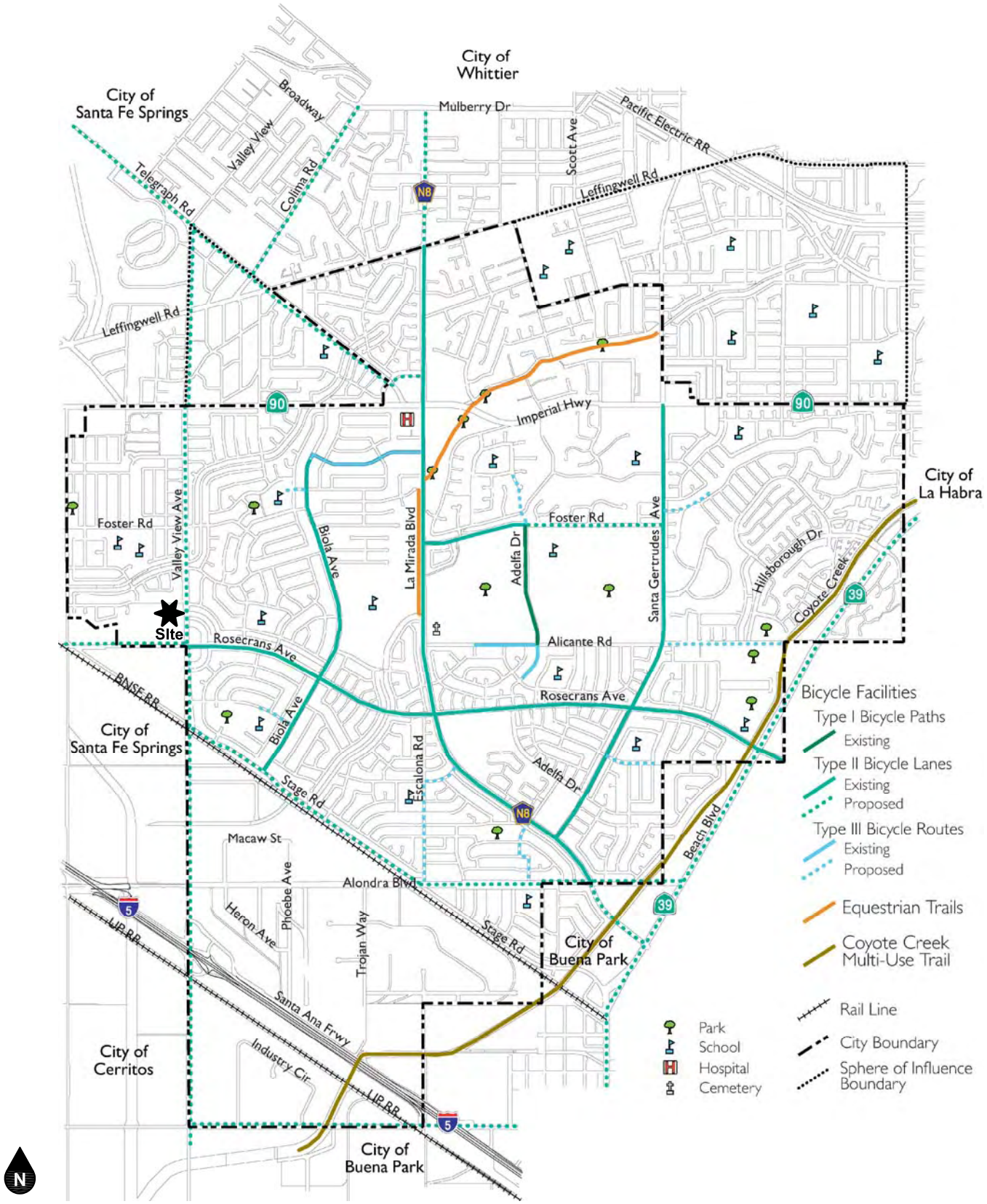
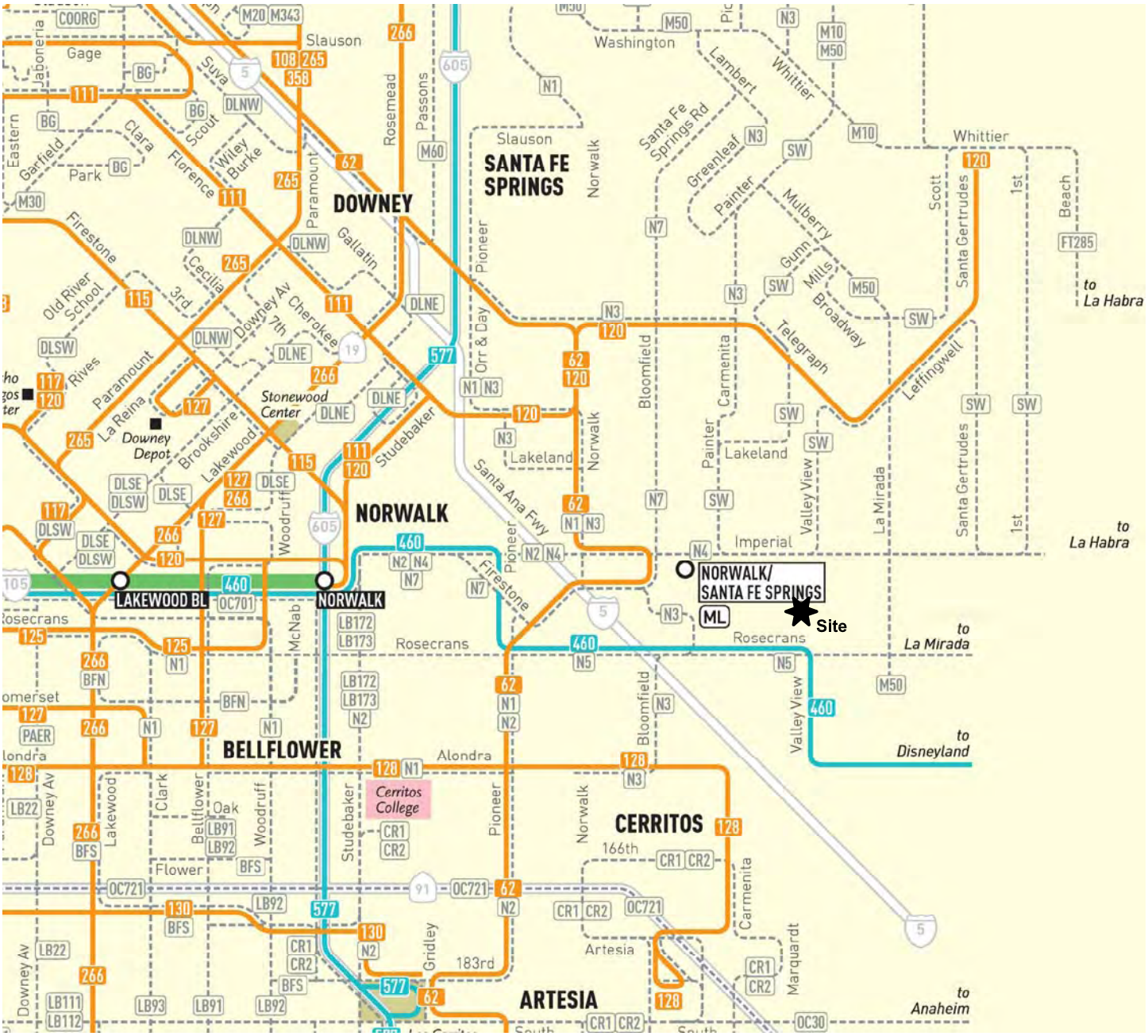


Figure 5
City of La Mirada Bikeway Master Plan

Source: City of La Mirada



Source: L.A. Metro

Figure 6
City of La Mirada Transit Routes

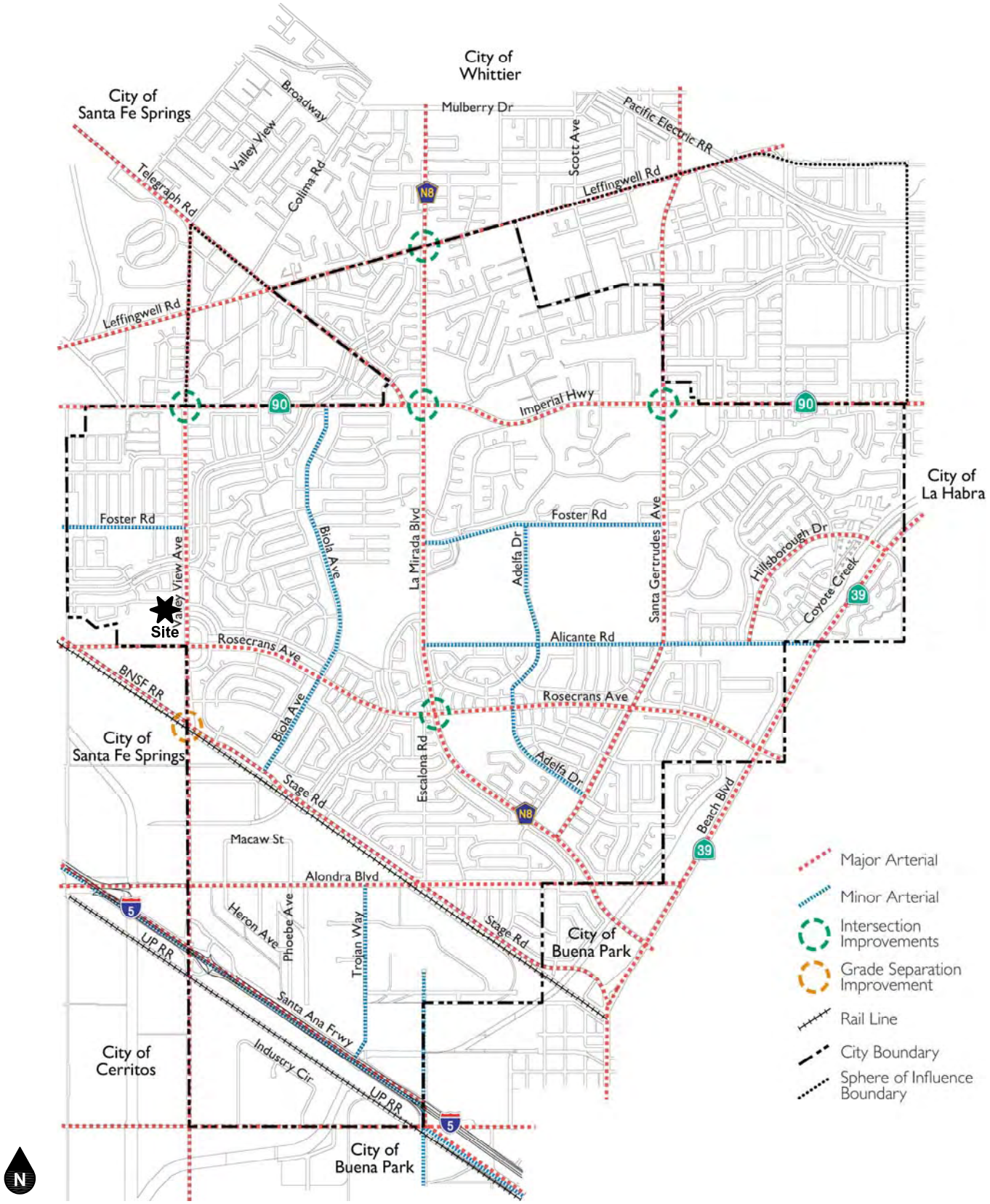


Figure 7
City of La Mirada General Plan Circulation Element

Source: City of La Mirada

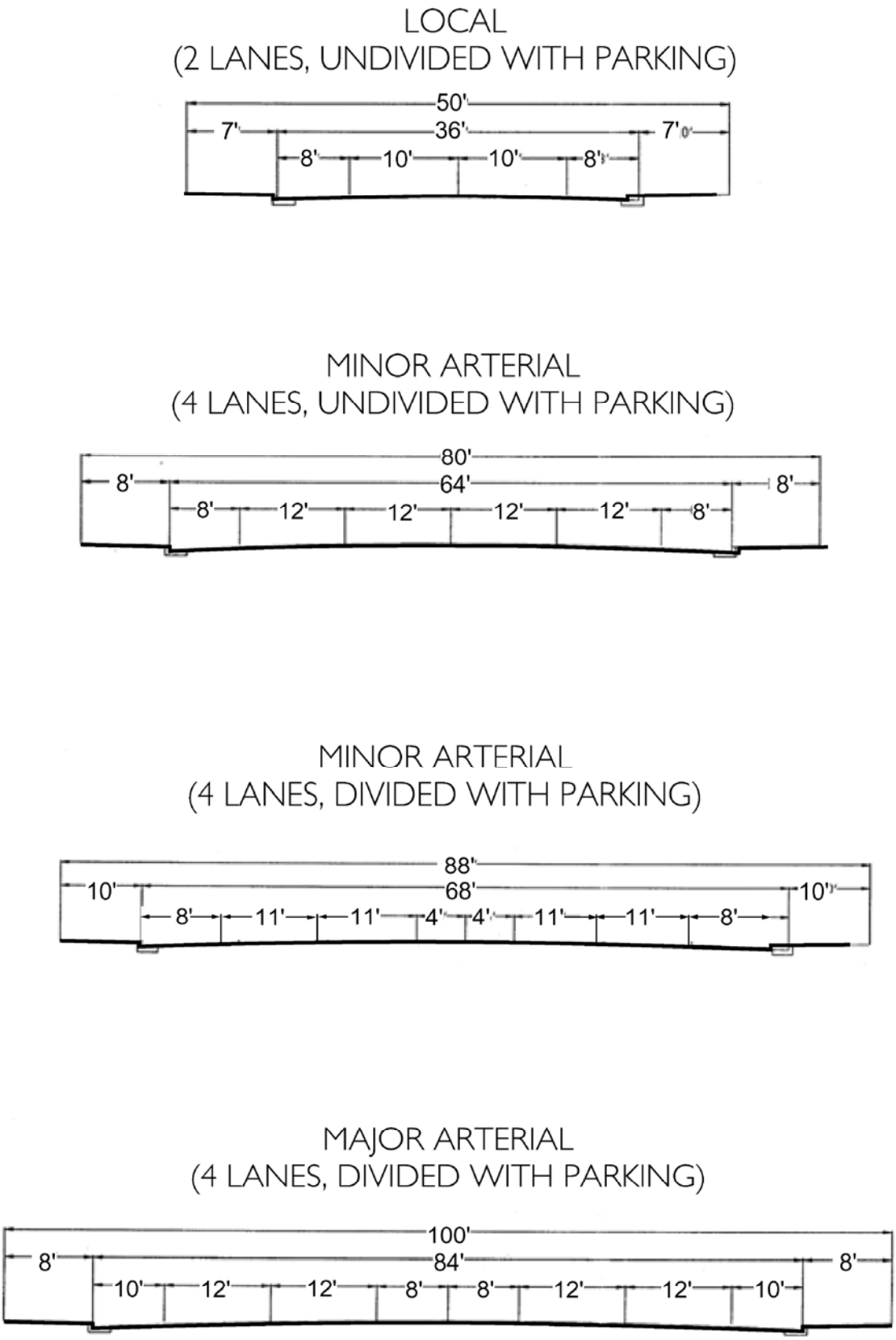
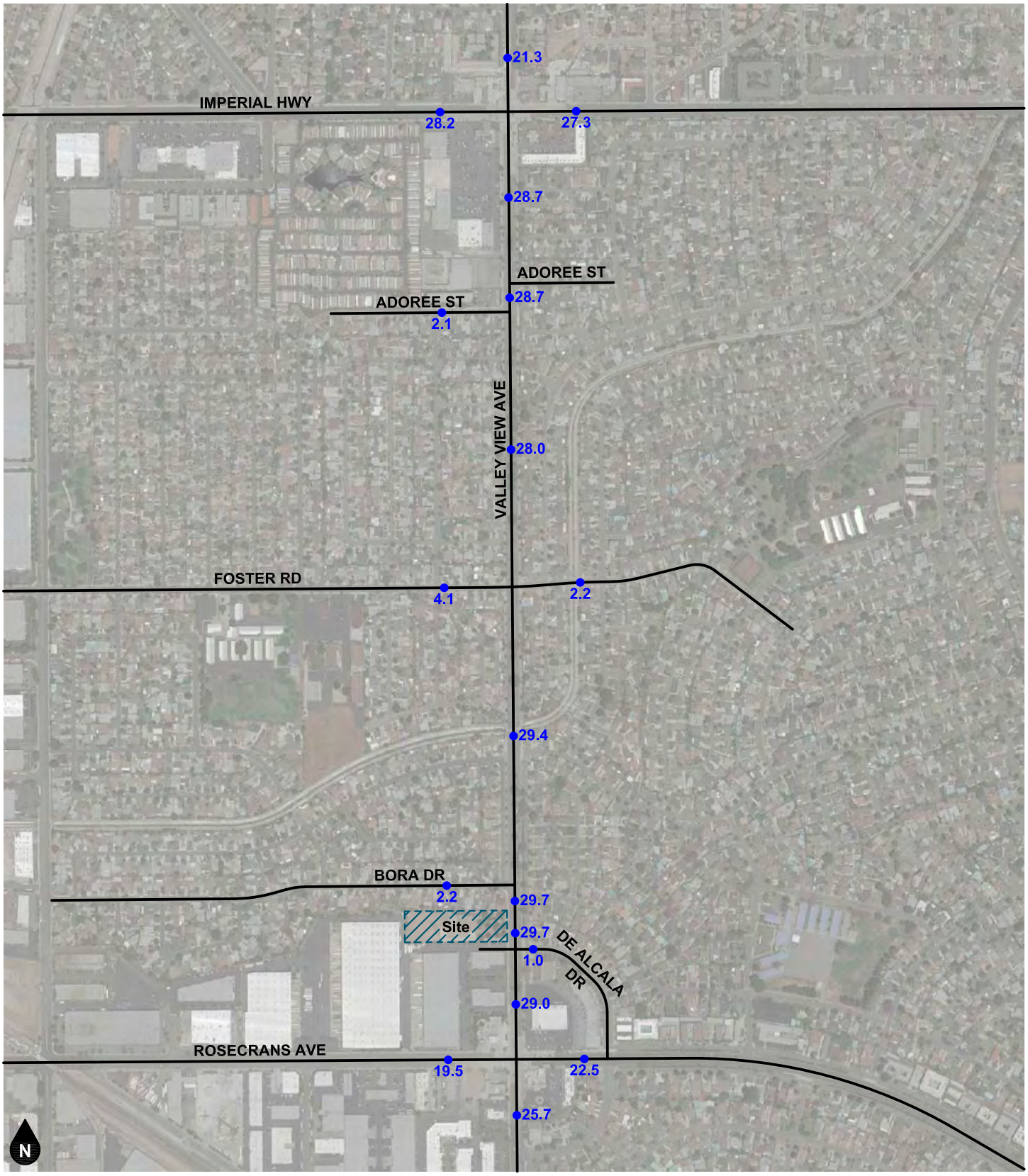


Figure 8
City of La Mirada General Plan Roadway Cross-Sections

Source: City of La Mirada



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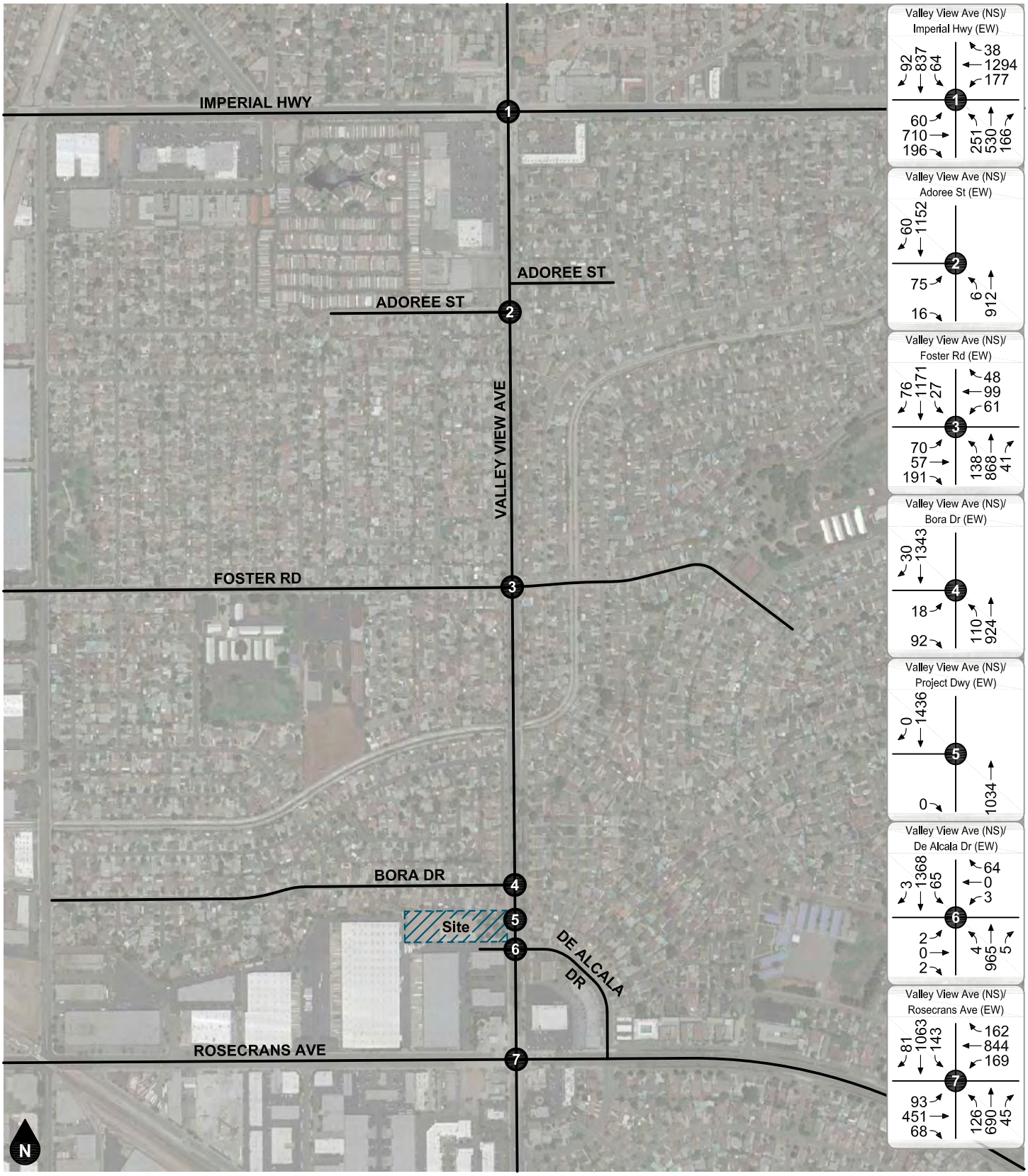
●## Vehicles Per Day (1,000's)

Figure 9
Existing Average Daily Traffic Volumes



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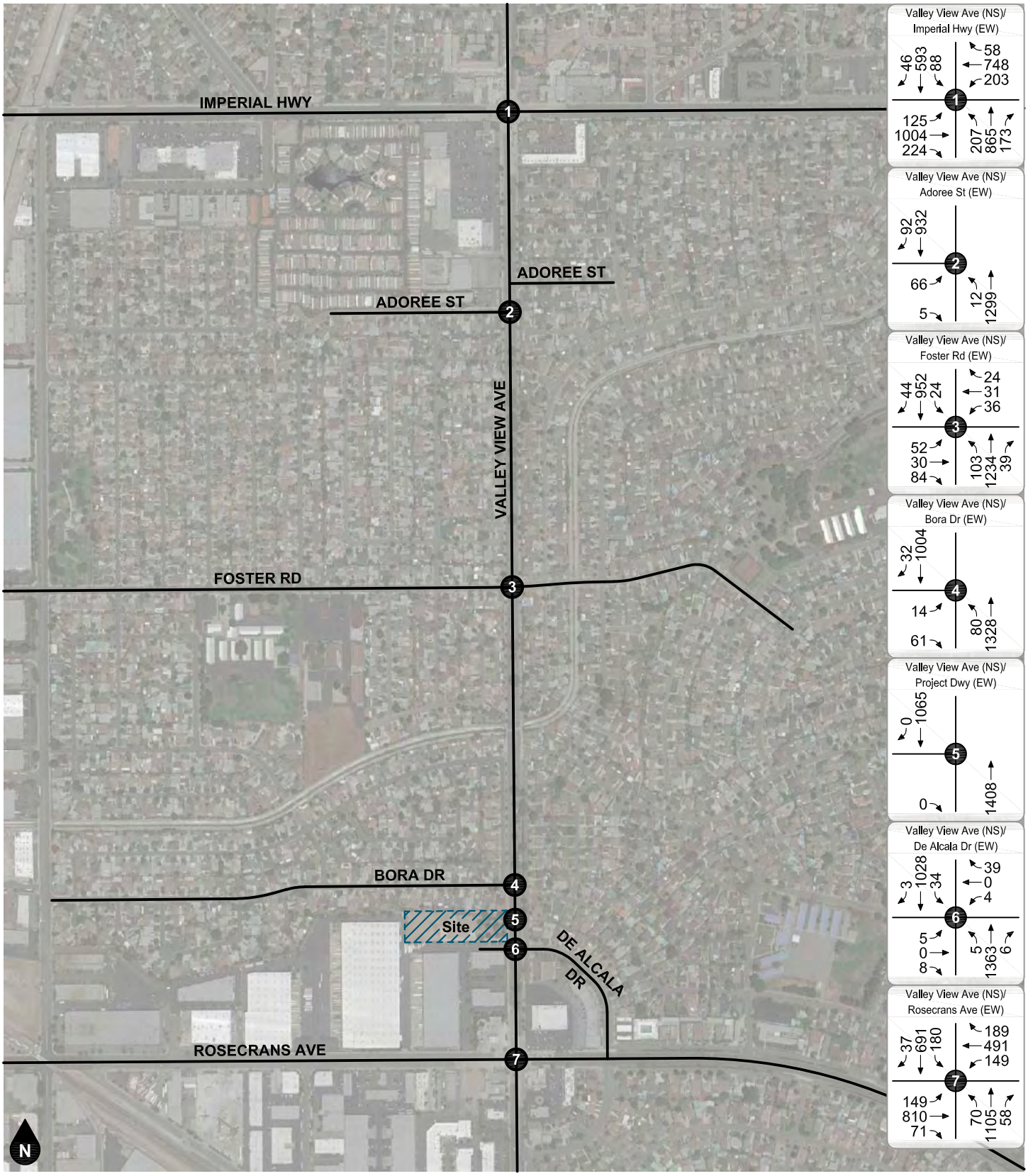
(#) Study Intersection

Figure 10
Existing AM Peak Hour Intersection Turning Movement Volumes



Legend

(#) Study Intersection

Figure 11
Existing PM Peak Hour Intersection Turning Movement Volumes

4. PROJECT TRIP FORECASTS

This section describes how project trip generation, trip distribution, and trip assignment forecasts were developed. The forecast project volumes are illustrated on figures contained in this section.

PROJECT TRIP GENERATION

Table 2 shows the project trip generation based upon standard rates obtained from the Institute of Transportation Engineers, Trip Generation Manual, 10th Edition, 2017. Trip generation rates were determined for daily trips, AM peak hour trips, and PM peak hour trips for the proposed land use. Trip generation rates for Land Use Code 220 – Multifamily Housing were used for the proposed project. The number of trips forecast to be generated by the proposed use is determined by multiplying the trip generation rates by the land use quantity.

As shown in Table 2, the proposed project is forecast to generate a total of approximately 410 daily vehicle trips, including 26 vehicle trips during the AM peak hour and 32 vehicle trips during the PM peak hour.

PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

Figure 12 and Figure 13 show the forecast outbound and inbound directional distribution patterns for the project generated trips. The project trip distribution patterns are based on review of existing volume data, surrounding land uses, designated truck routes, and the local and regional roadway facilities in the project vicinity.

Based on the identified project trip generation and distributions, project average daily traffic volumes have been calculated and shown on Figure 14. Project Morning and evening peak hour intersection turning movement volumes expected from the project are depicted on Figure 15 and Figure 16, respectively.

PROJECT DESIGN FEATURES

This analysis assumes the following improvements will be constructed by the project to provide project site access:

Project Driveway at Valley View Avenue

- Install an eastbound cross street stop-control.
- Construct the eastbound approach to consist of one right-turn lane.

Table 2
Project Trip Generation

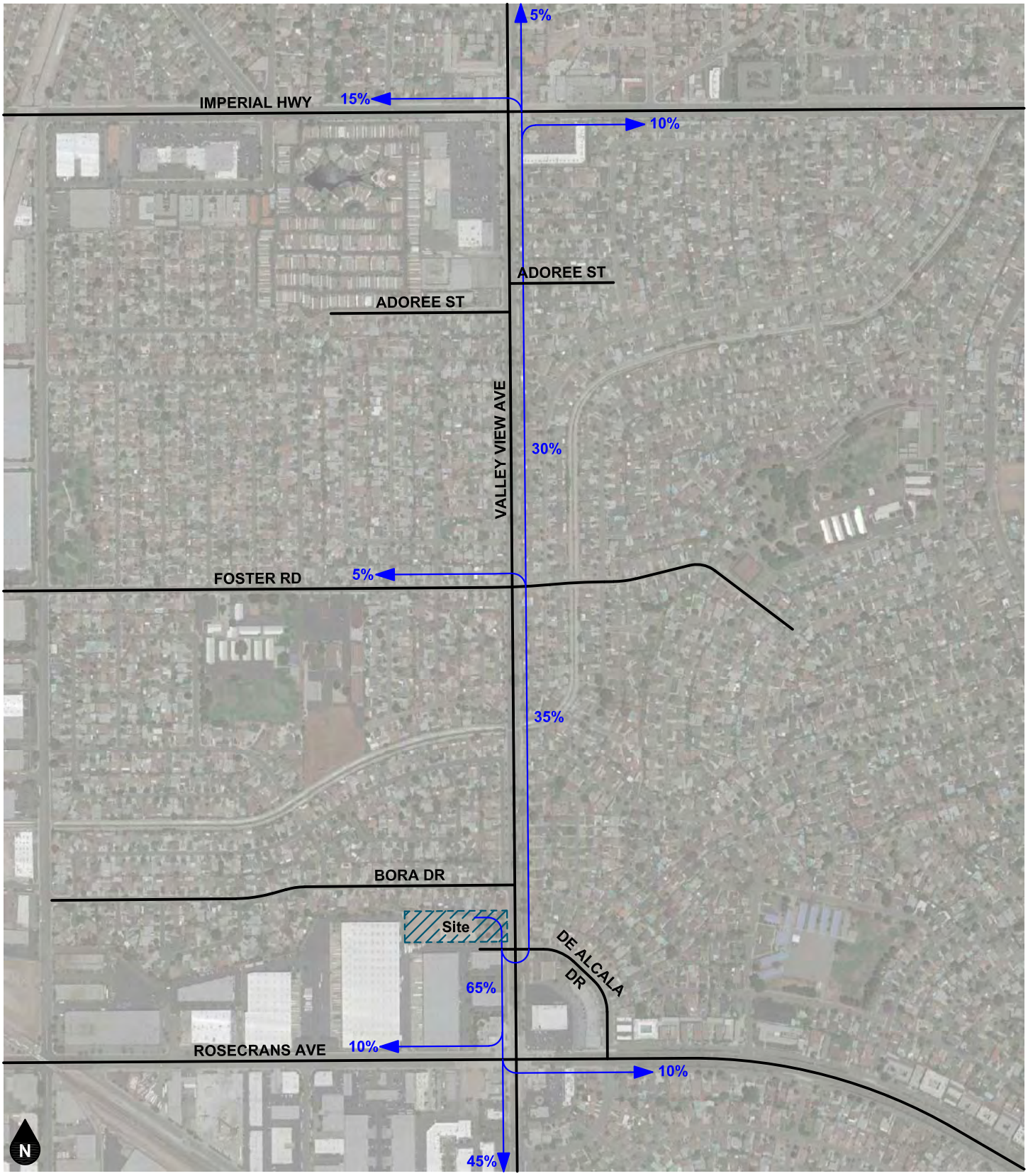
Trip Generation Rates									
			AM Peak Hour			PM Peak Hour			Daily
Land Use	Source[1]	Units[2]	% In	% Out	Rate	% In	% Out	Rate	Rate
Multifamily Housing (Low-Rise)	ITE 220	DU	23%	77%	0.46	63%	37%	0.56	7.32

Trips Generated									
			AM Peak Hour			PM Peak Hour			
Land Use	Quantity	Units[2]	In	Out	Total	In	Out	Total	Daily
Multifamily Housing (Low-Rise)	56	DU	6	20	26	20	12	32	410

Notes:

1) ITE = Institute of Transportation Engineers, Trip Generation Manual, 10th Edition, 2017; XXX= Land Use Code

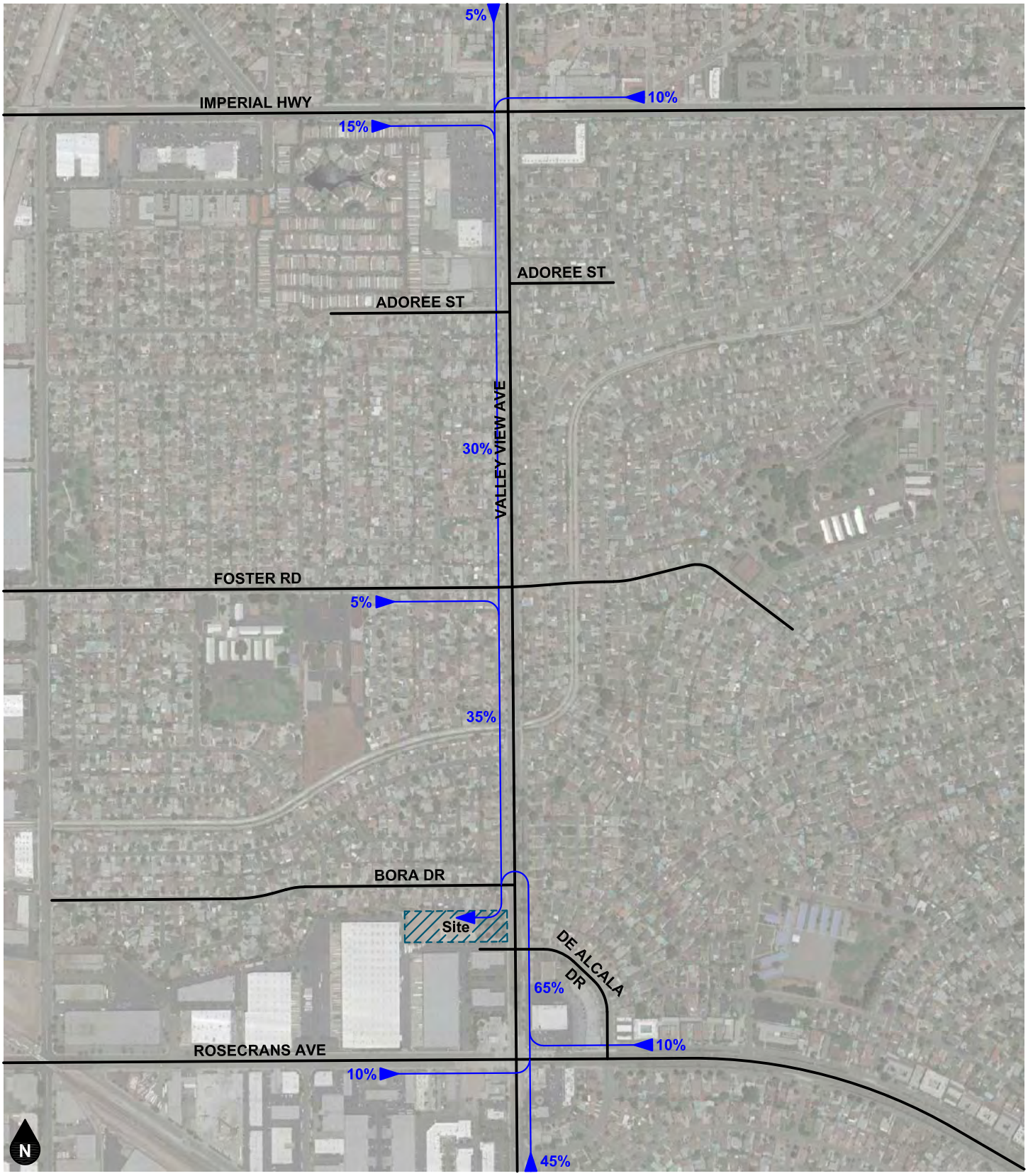
2) DU = Dwelling Units



Legend

10% Percent From Project

Figure 12
Project Outbound Trip Distribution



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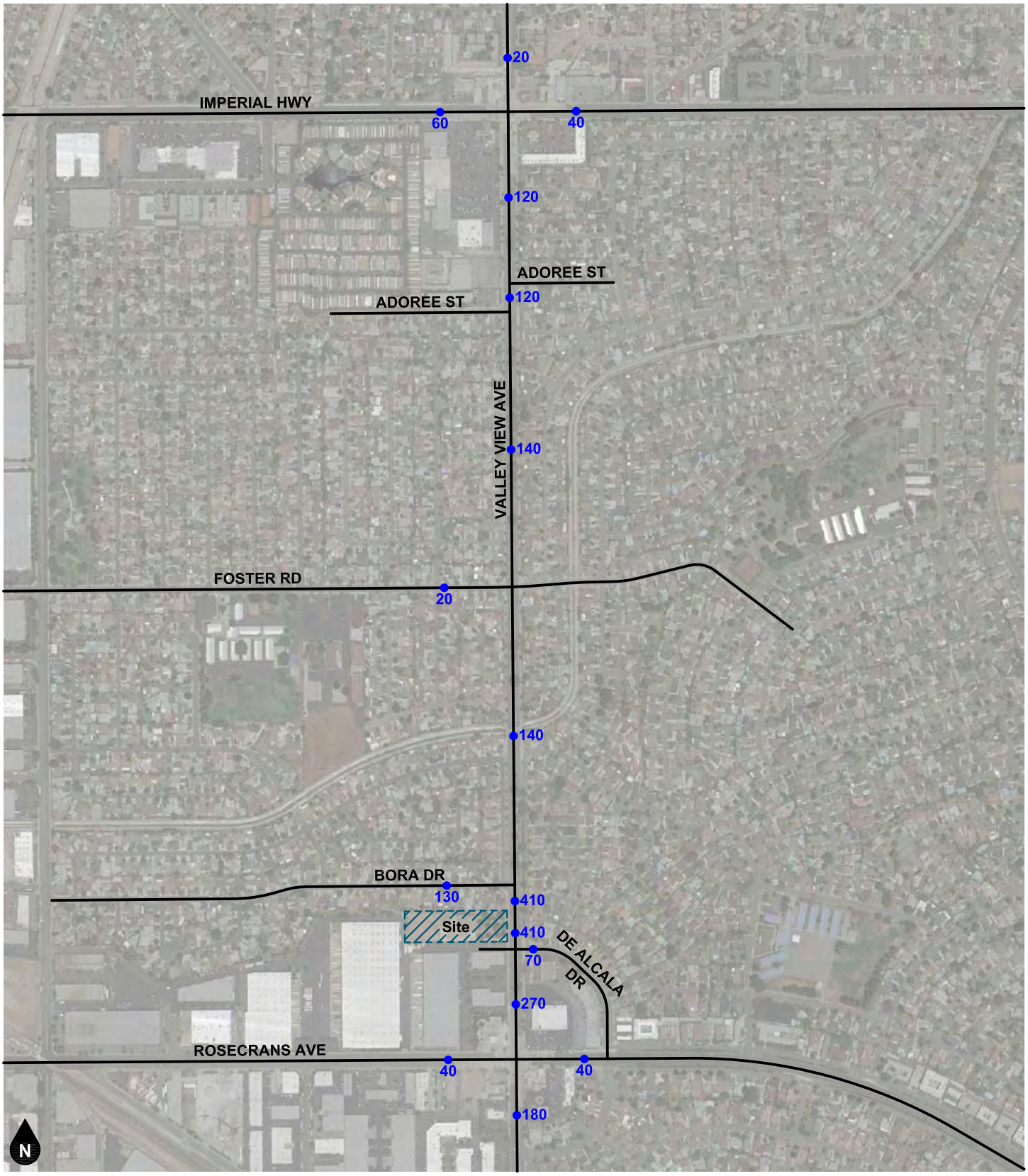
10% Percent To Project

Figure 13
Project Inbound Trip Distribution



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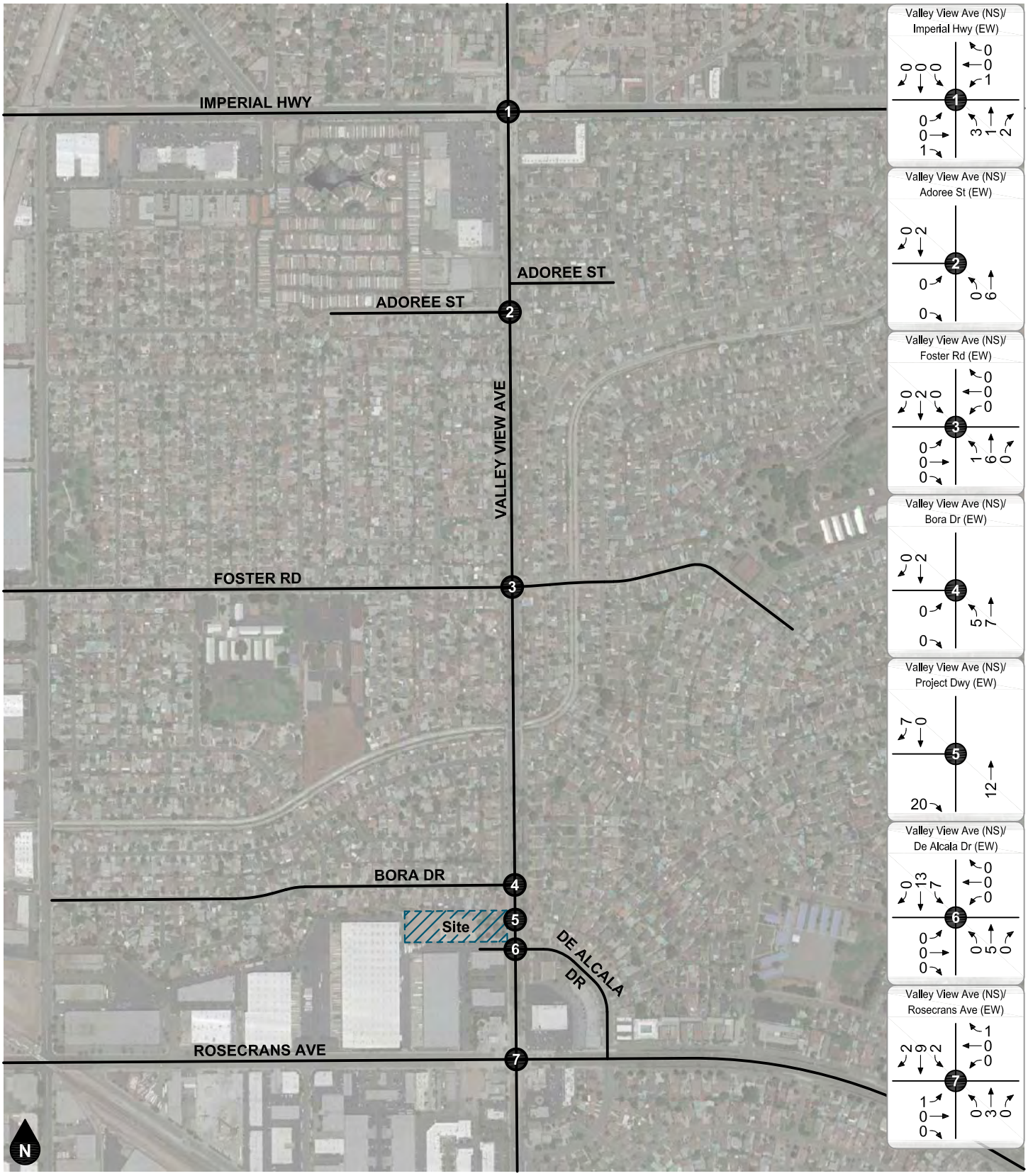
●## Vehicles Per Day

Figure 14
Project Average Daily Traffic Volumes



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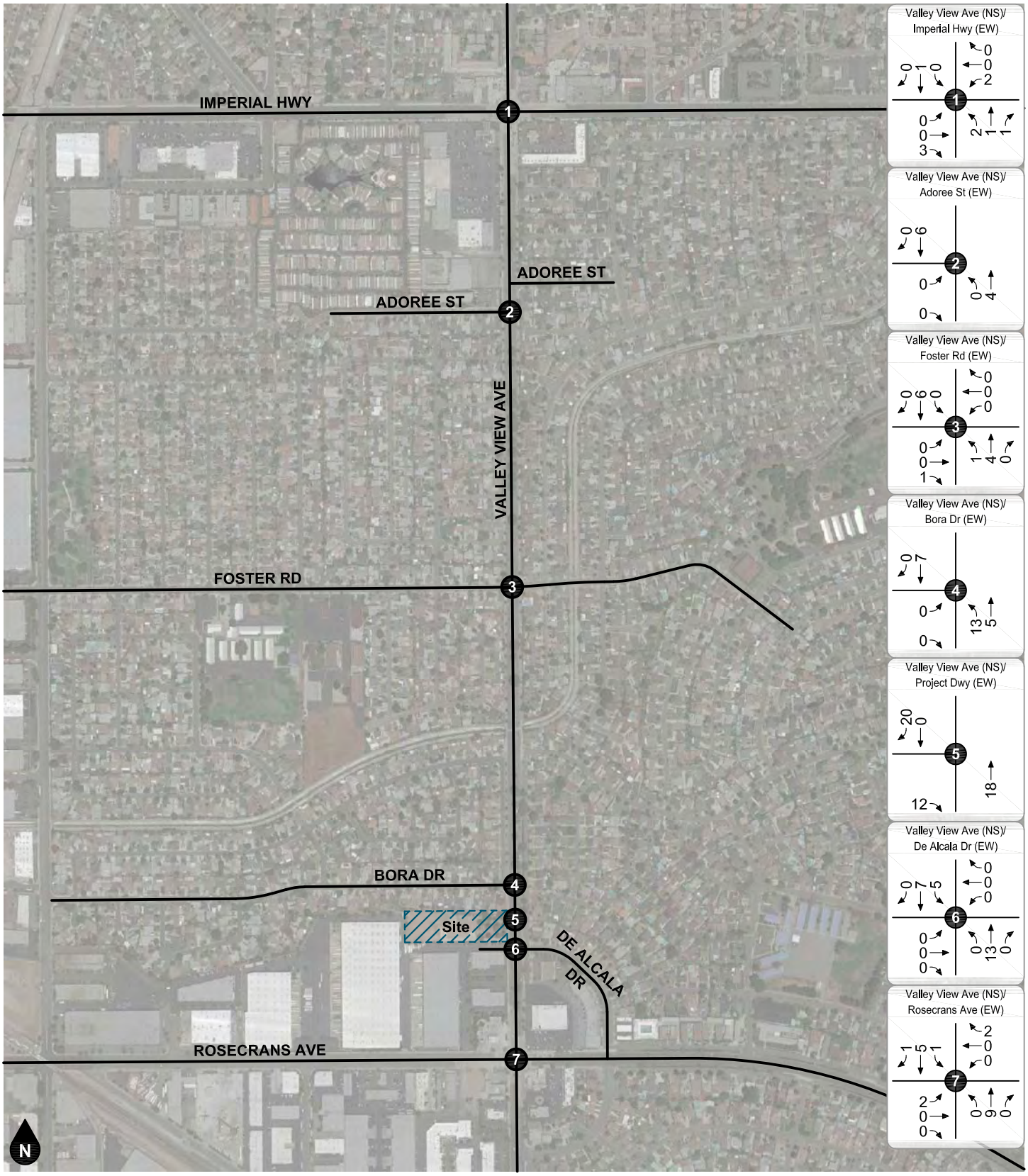
(#) Study Intersection

Figure 15
Project AM Peak Hour Intersection Turning Movement Volumes



Legend
(#) Study Intersection

Figure 16
Project PM Peak Hour Intersection Turning Movement Volumes

5. FUTURE VOLUME FORECASTS

This section describes how future volume forecasts for each analysis scenario were developed. Forecast study area volumes are illustrated on figures contained in this section.

CUMULATIVE TRIPS

Ambient Growth Rate

To account for ambient growth on roadways, existing traffic volumes were increased by a growth rate of one percent (1%) per year over two years for Opening Year (2021) conditions. This equates to a total growth factor of approximately two percent (2%) for Opening Year. The ambient growth rate was conservatively applied to all movements at the study intersections.

Other Development

To account for trips generated by future development, trips generated by pending or approved other development projects in the City of La Mirada were added to the study area. Table 3 shows the trip generation summary for other development projects. The previously discussed ambient growth is assumed to account for any additional trips generated by other development projects located outside the project vicinity and not specifically listed in this report.

Figure 17 shows the forecast average daily traffic volumes for the other development. Figure 18 and Figure 19 show the forecast AM and PM peak hour intersection turning movement volumes for trips generated by other developments.

ANALYSIS SCENARIO VOLUME FORECASTS

Existing Plus Project

Existing Plus Project volume forecasts were derived by adding the project generated trips to Existing volumes. Existing Plus Project average daily traffic volumes are shown on Figure 20. Existing Plus Project AM and PM peak hour intersection turning movement volumes are shown on Figure 21 and Figure 22.

Opening Year (2021) Without Project

To develop Opening Year (2021) Without Project volume forecasts, Existing volumes were combined with ambient growth and trips generated by other developments. Opening Year (2021) Without Project average daily traffic volumes are shown on Figure 23. Opening Year (2021) Without Project AM and PM hour intersection turning movement volumes are shown Figure 24 and Figure 25.

Opening Year (2021) With Project

Opening Year (2021) With Project volume forecasts were developed by adding project generated trips to the Opening Year (2021) Without Project forecast. Opening Year (2021) With Project average daily traffic volumes are shown on Figure 26. Opening Year (2021) With Project AM and PM peak hour intersection turning movement volumes are shown on Figure 27 and Figure 28.

Table 3
Other Development Trip Generation

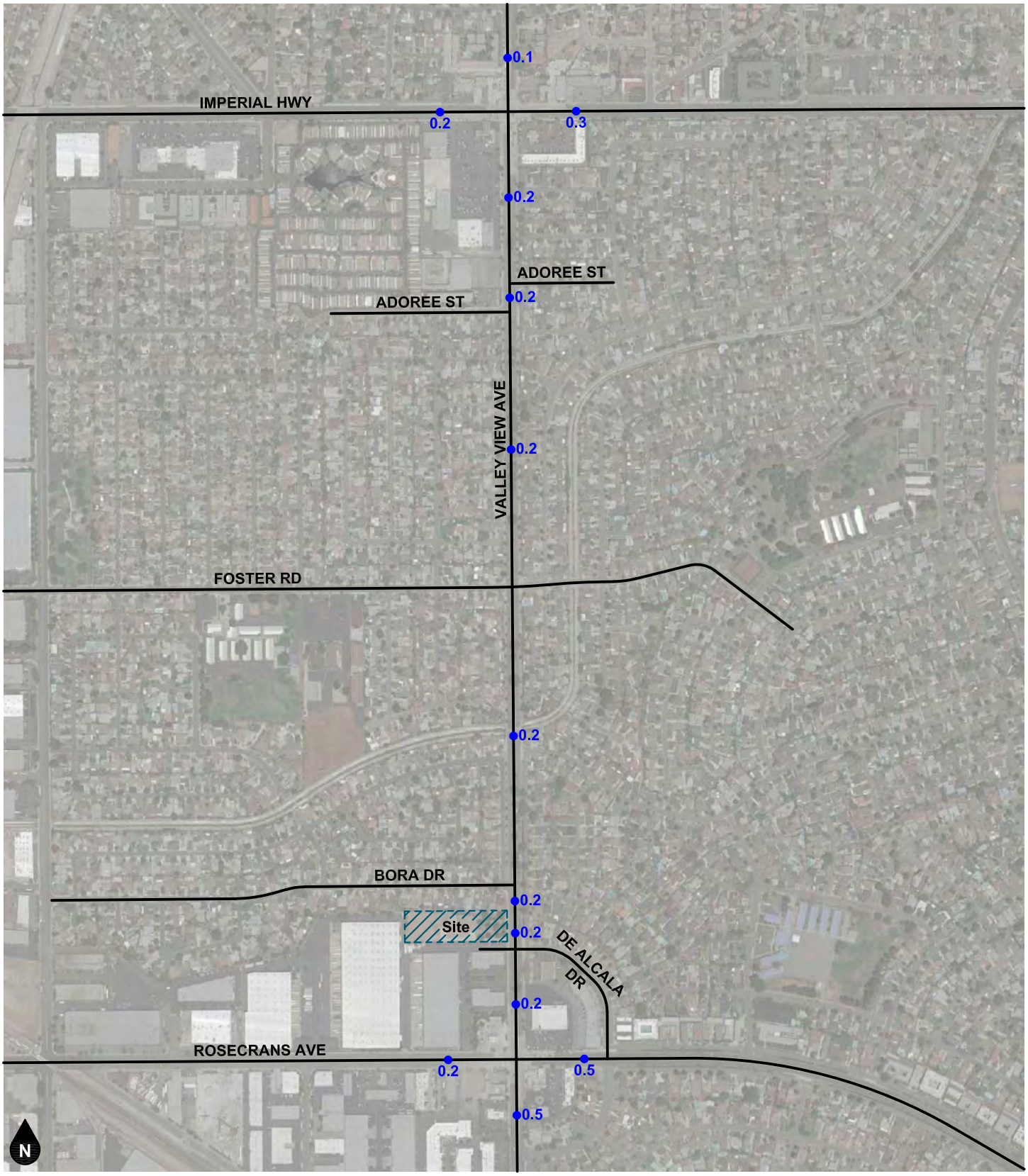
Trip Generation Rates									
			AM Peak Hour			PM Peak Hour			Daily
Land Use	Source[1]	Units[2]	% In	% Out	Rate	% In	% Out	Rate	Rate
Single-Family Detached Housing	ITE 210	DU	25%	75%	0.74	63%	37%	0.99	9.44
Multifamily Housing (Low-Rise)	ITE 220	DU	23%	77%	0.46	63%	37%	0.56	7.32
Movie Theater	ITE 222	DU	-	-	-	55%	45%	0.09	1.76

Trips Generated									
			AM Peak Hour			PM Peak Hour			
Land Use	Quantity	Units[2]	In	Out	Total	In	Out	Total	Daily
Single-Family Detached Housing	6	DU	1	3	4	4	2	6	57
Multifamily Housing (Low-Rise)	39	DU	4	14	18	14	8	22	285
Multifamily Housing (Low-Rise)	28	DU	3	10	13	10	6	16	205
Movie Theater	1000	Seats	-	-	-	50	41	91	1,760
Movie Theater	300	Seats	-	-	-	15	12	27	528
Total			8	27	35	93	69	162	2,835

Notes:

1) ITE = Institute of Transportation Engineers, Trip Generation Manual, 10th Edition, 2017; XXX= Land Use Code

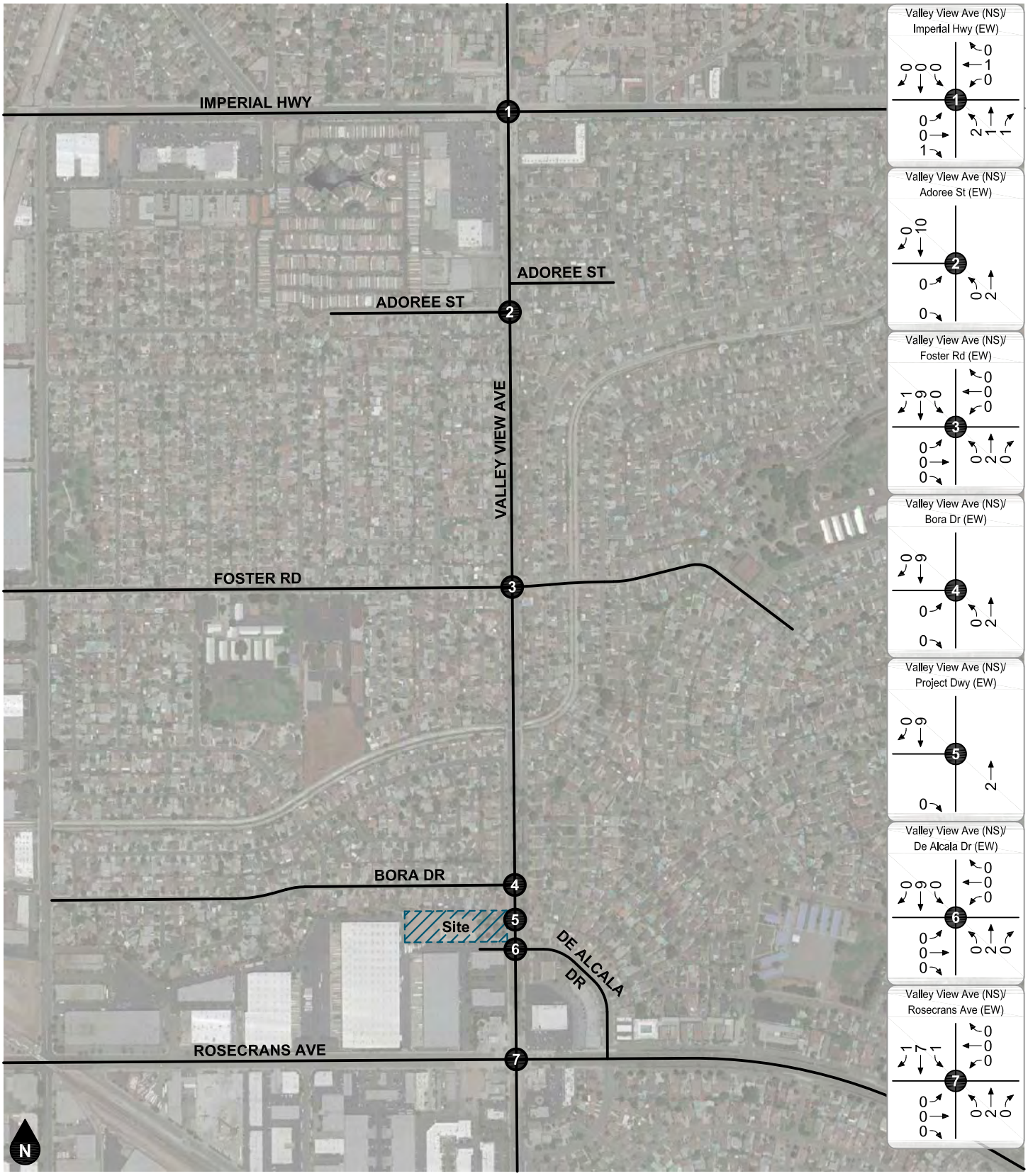
2) DU = Dwelling Units



Legend

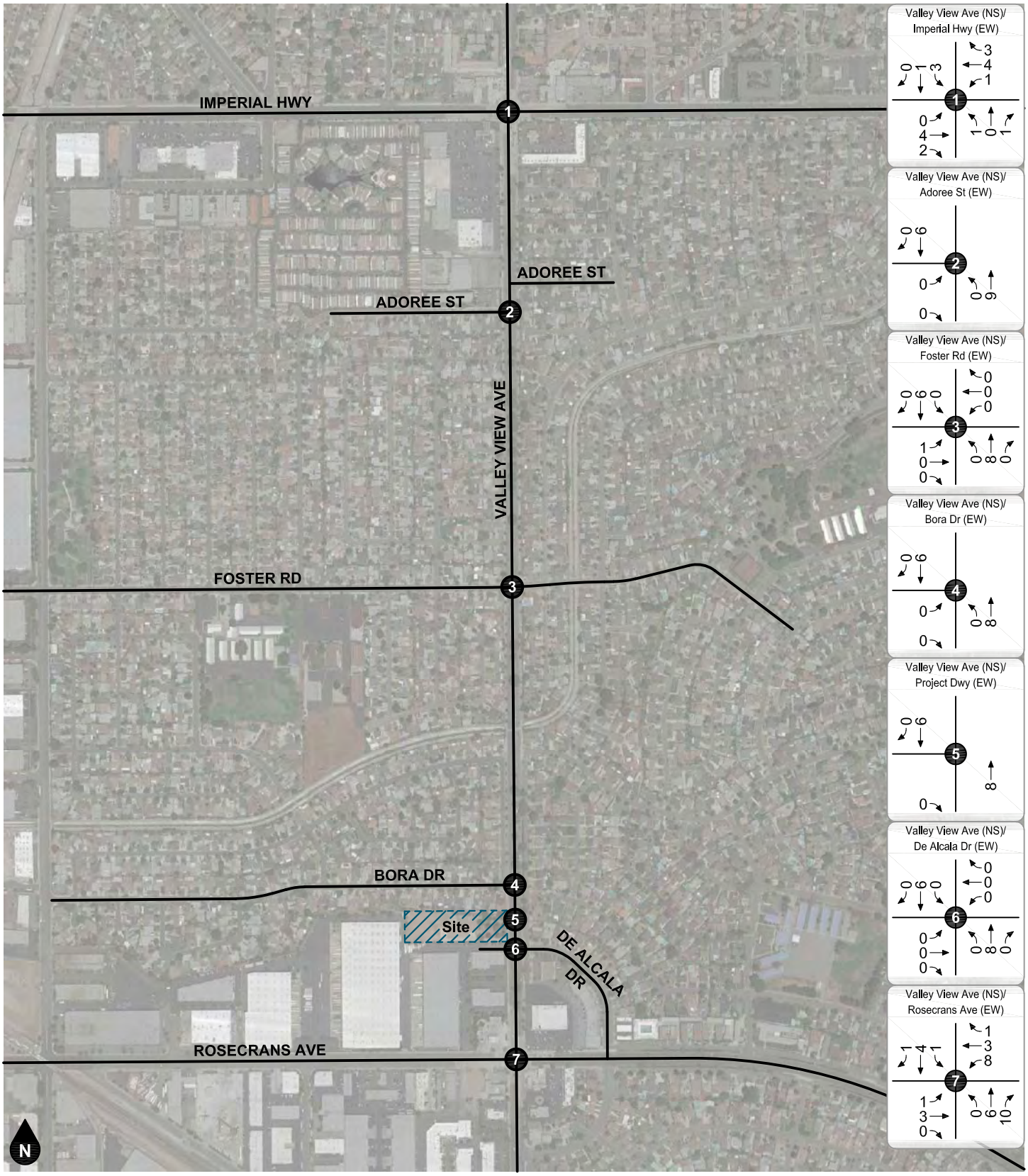
●## Vehicles Per Day (1,000's)

Figure 17
Other Development Average Daily Traffic Volumes



Legend
(#) Study Intersection

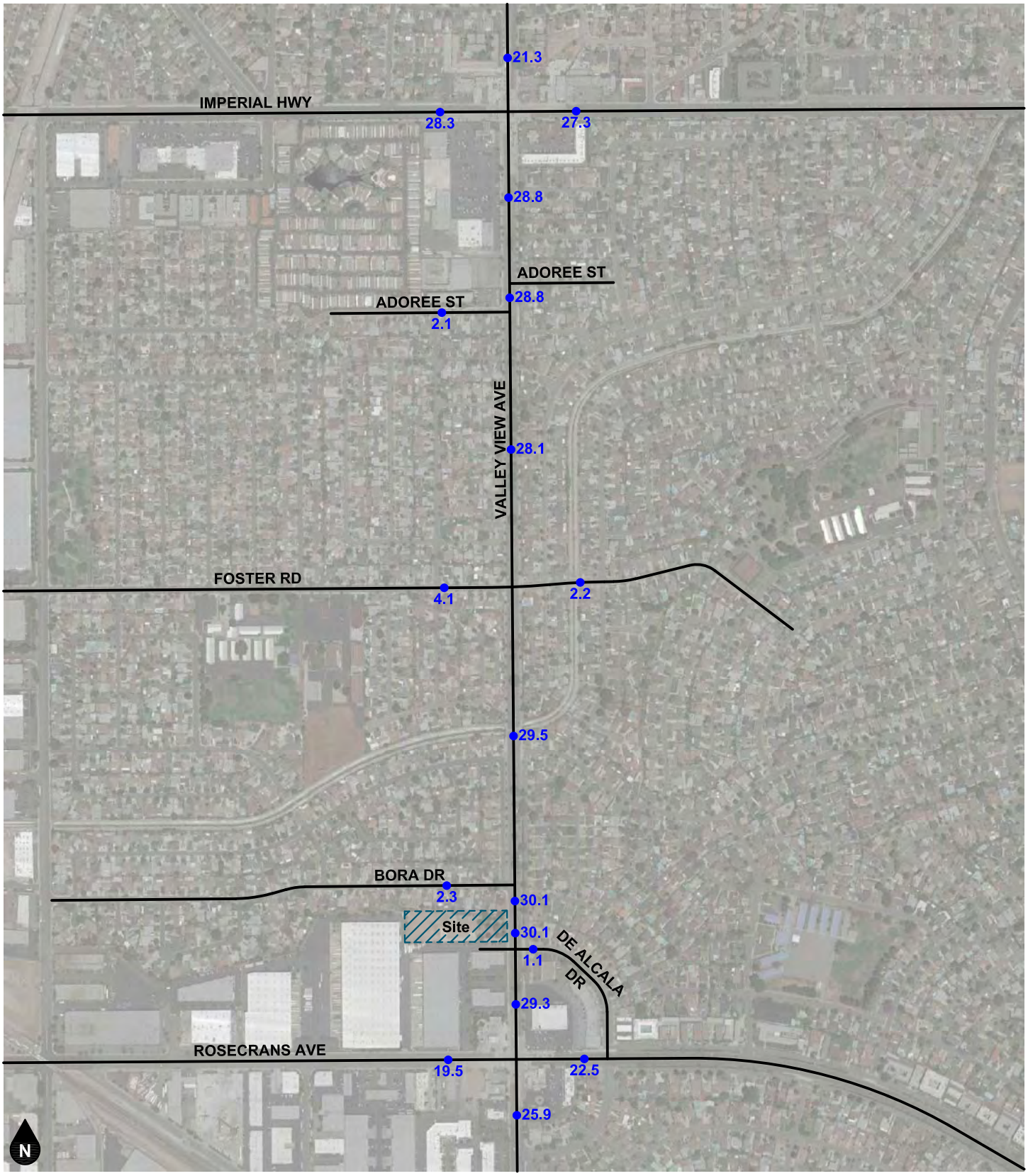
Figure 18
Other Development
AM Peak Hour Intersection Turning Movement Volumes



Legend

(#) Study Intersection

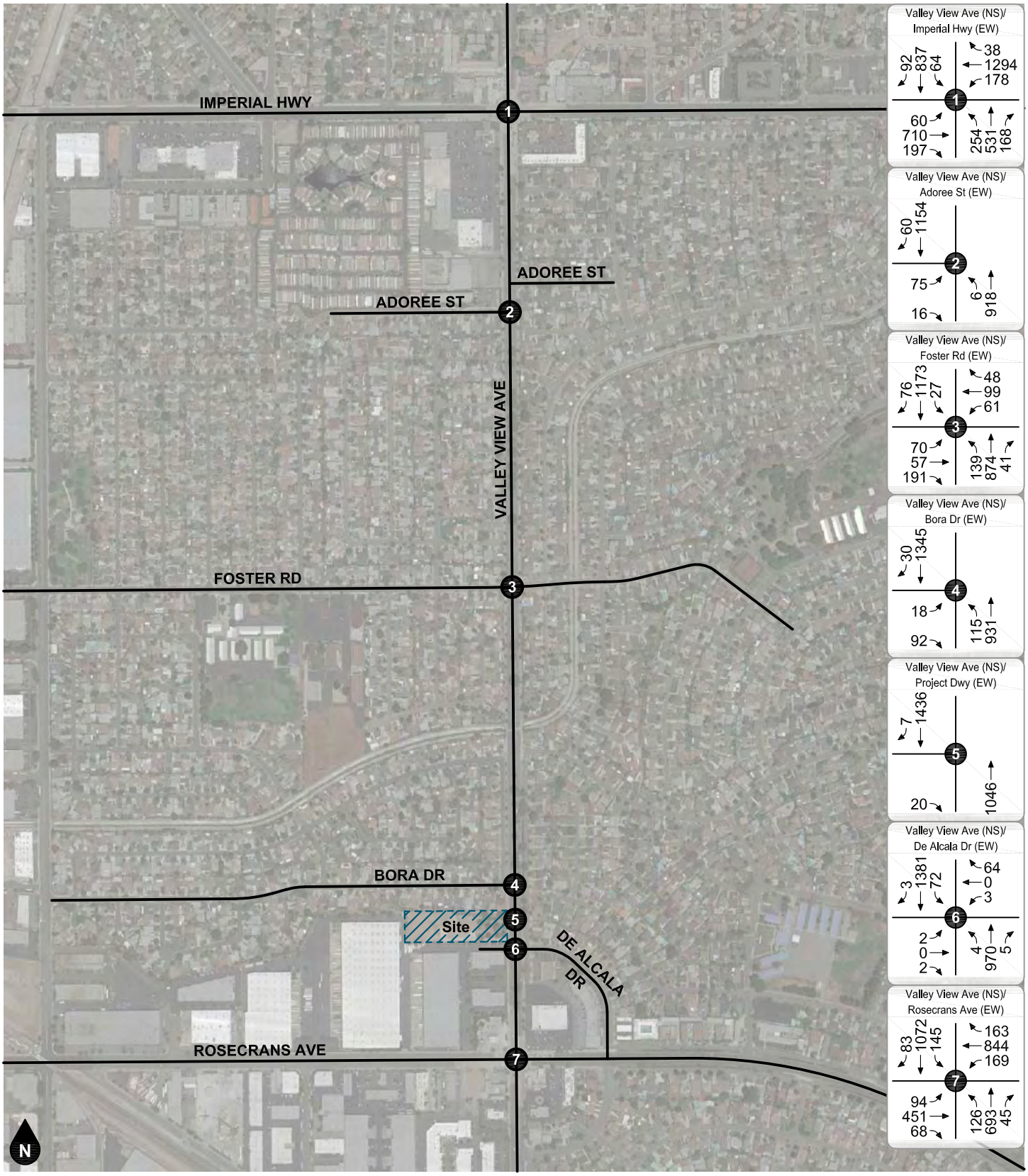
Figure 19
Other Development
PM Peak Hour Intersection Turning Movement Volumes



Legend

●## Vehicles Per Day (1,000's)

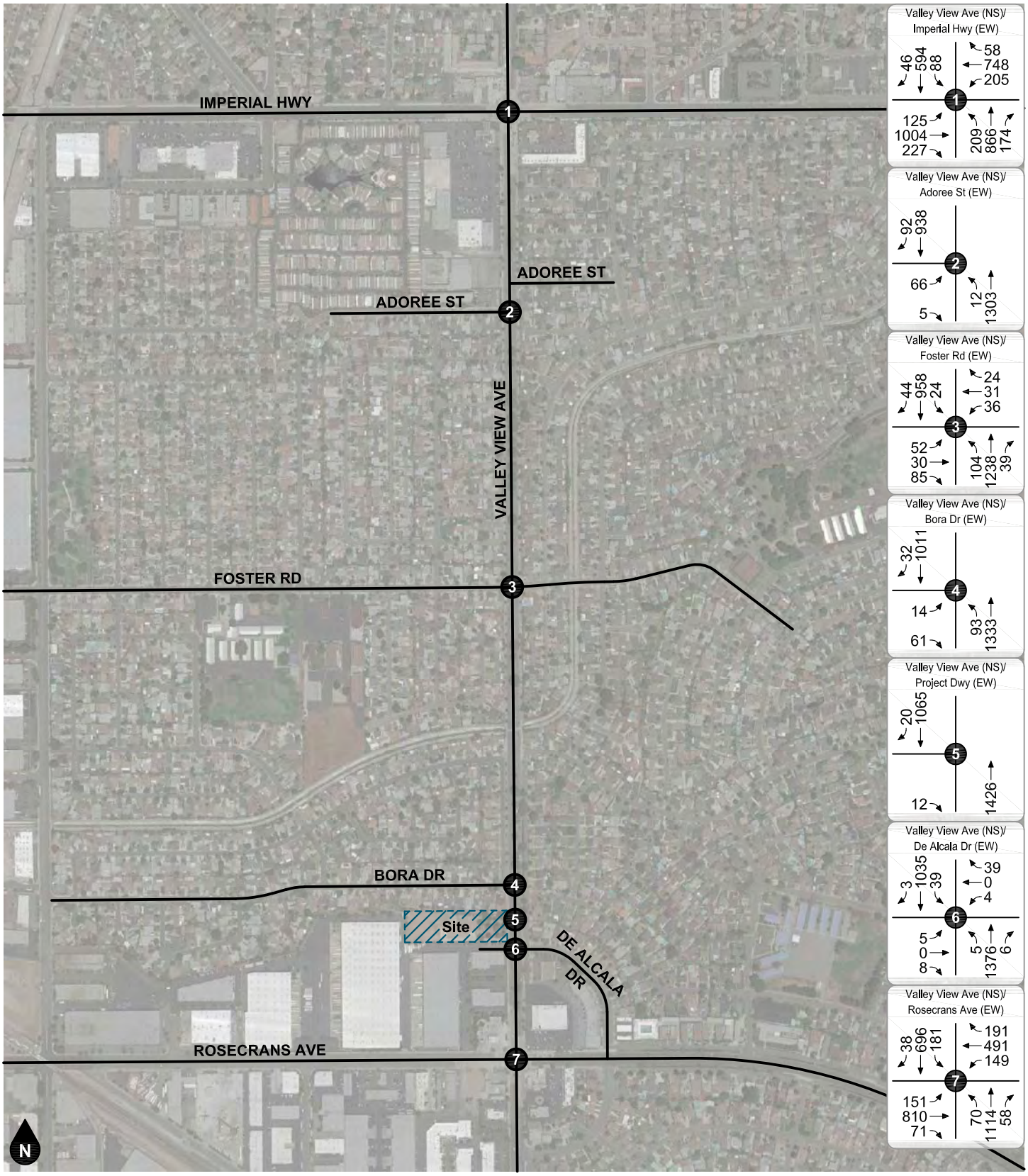
Figure 20
Existing Plus Project Average Daily Traffic Volumes



Legend

(#) Study Intersection

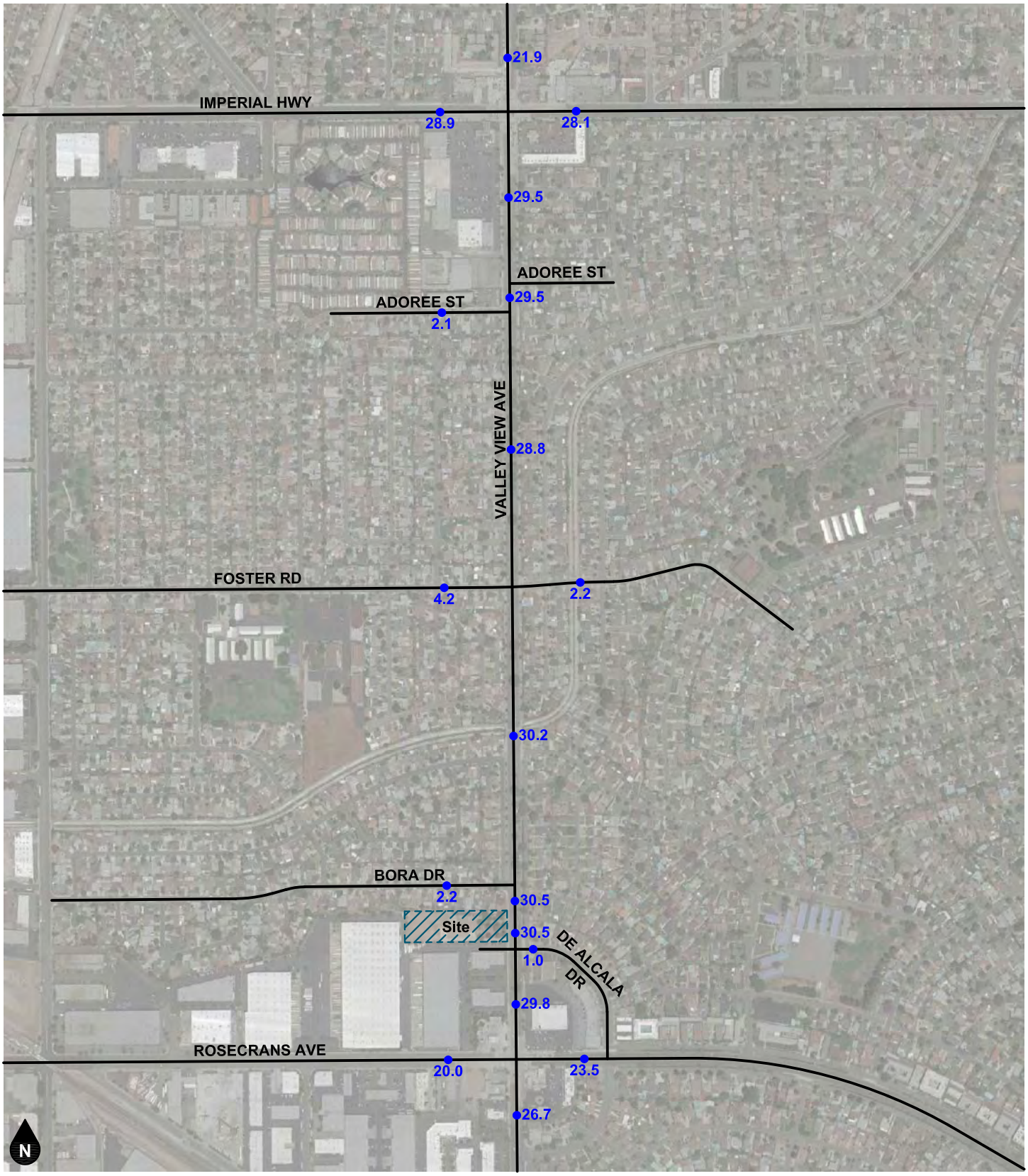
Figure 21
Existing Plus Project
AM Peak Hour Intersection Turning Movement Volumes



Legend

(#) Study Intersection

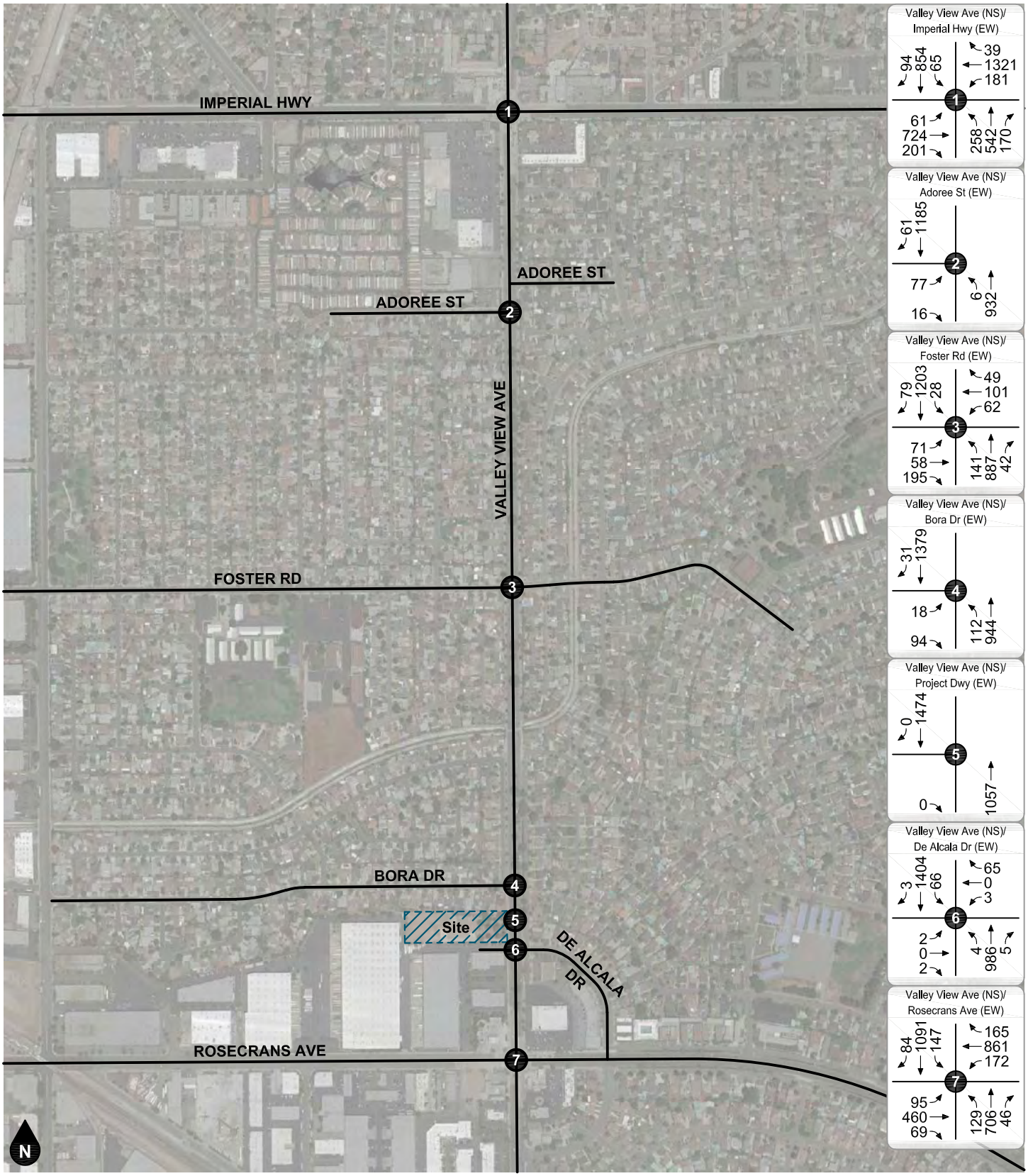
Figure 22
Existing Plus Project
PM Peak Hour Intersection Turning Movement Volumes



Legend

●## Vehicles Per Day (1,000's)

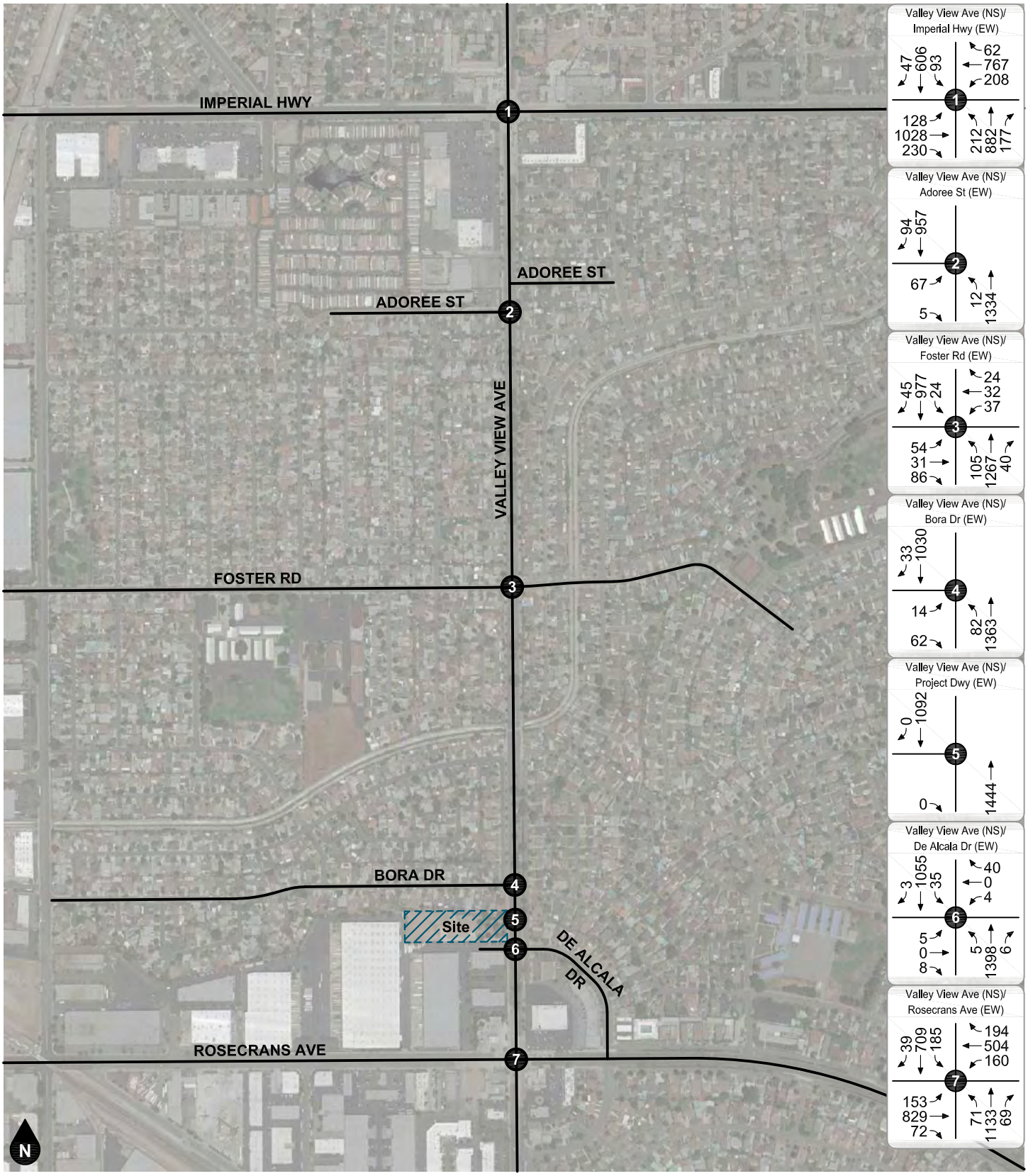
Figure 23
Opening Year (2021) Without Project Average Daily Traffic Volumes



Legend

(#) Study Intersection

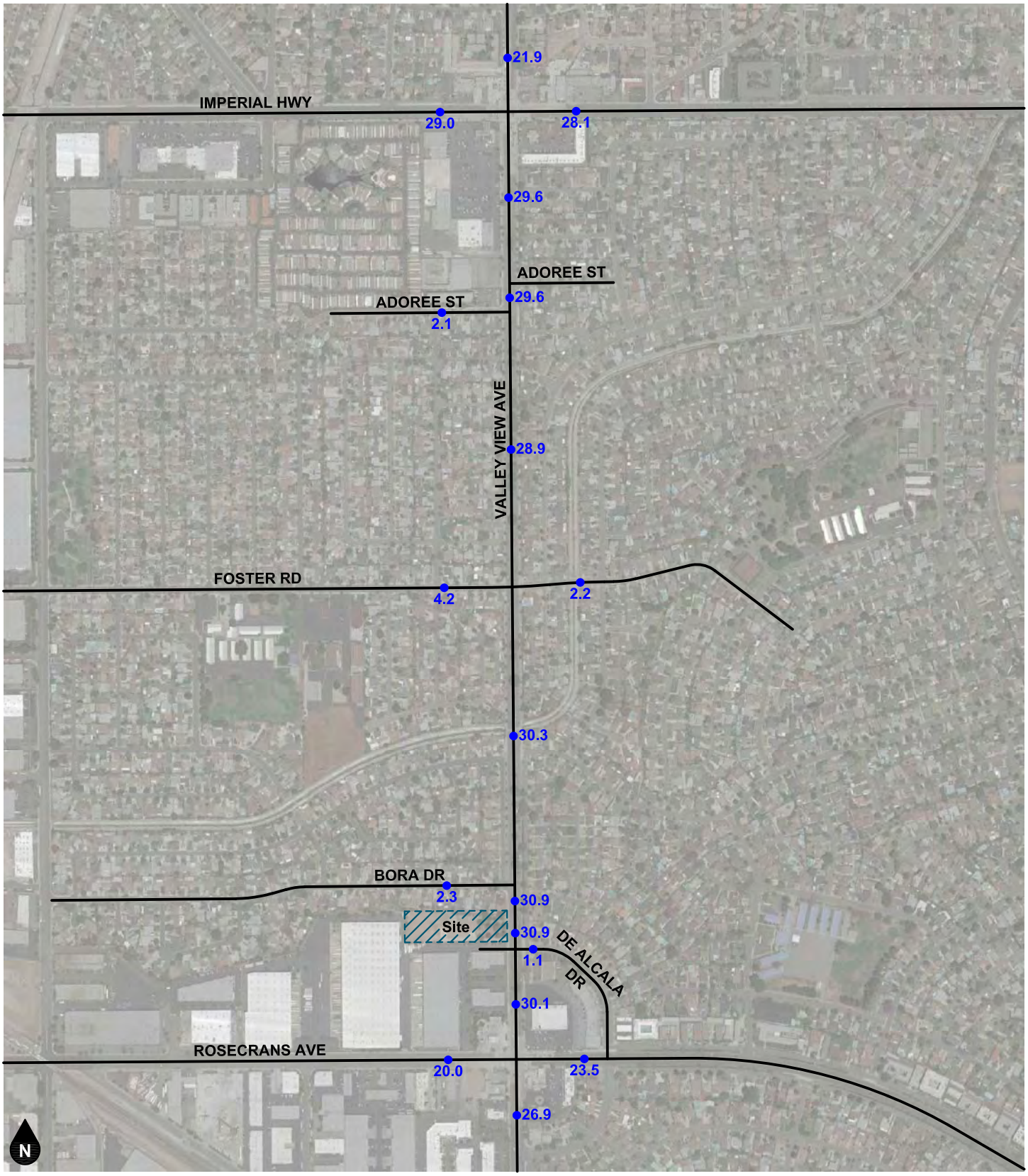
Figure 24
Opening Year (2021) Without Project
AM Peak Hour Intersection Turning Movement Volumes



Legend

(#) Study Intersection

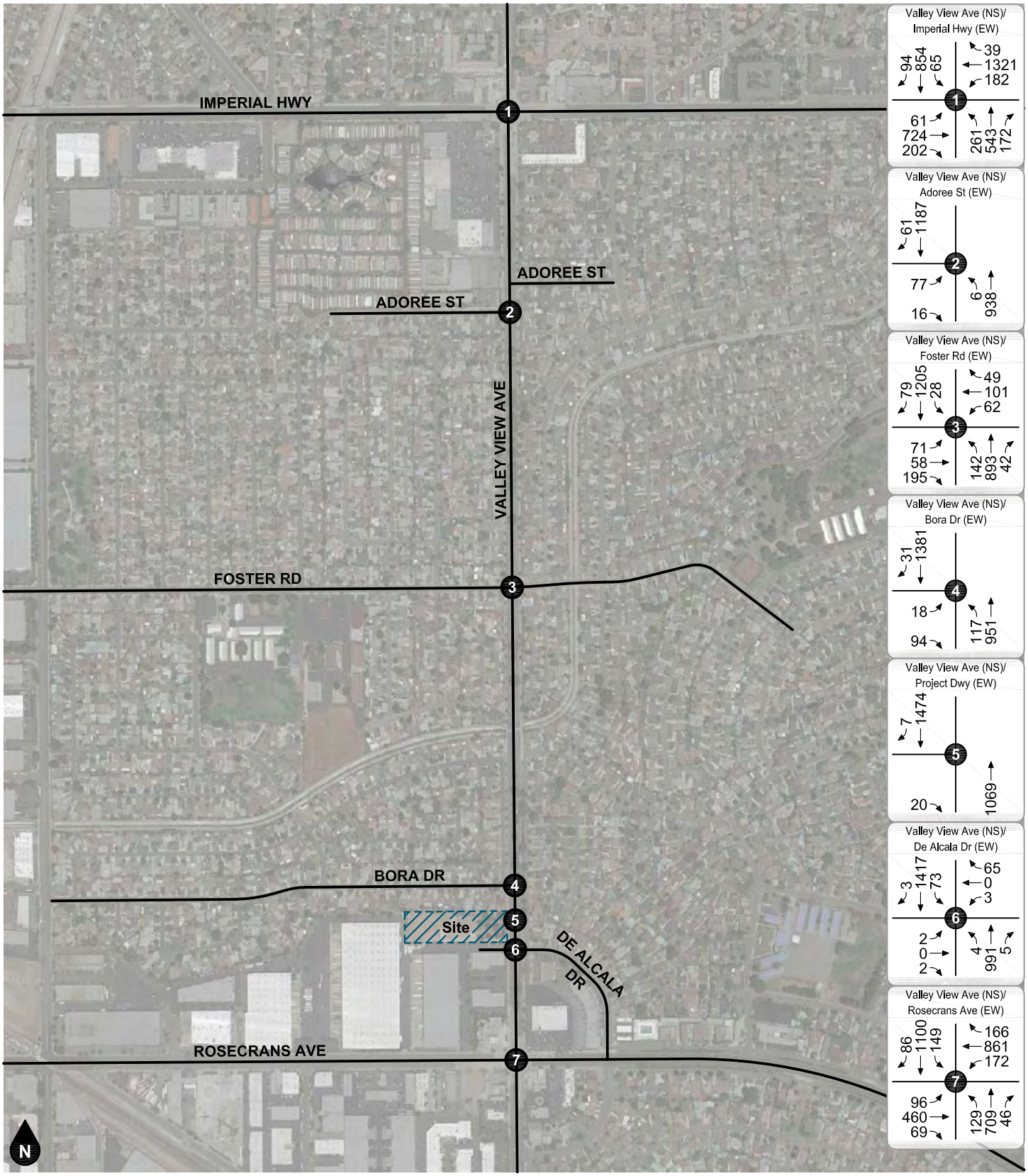
Figure 25
Opening Year (2021) Without Project
PM Peak Hour Intersection Turning Movement Volumes



Legend

●## Vehicles Per Day (1,000's)

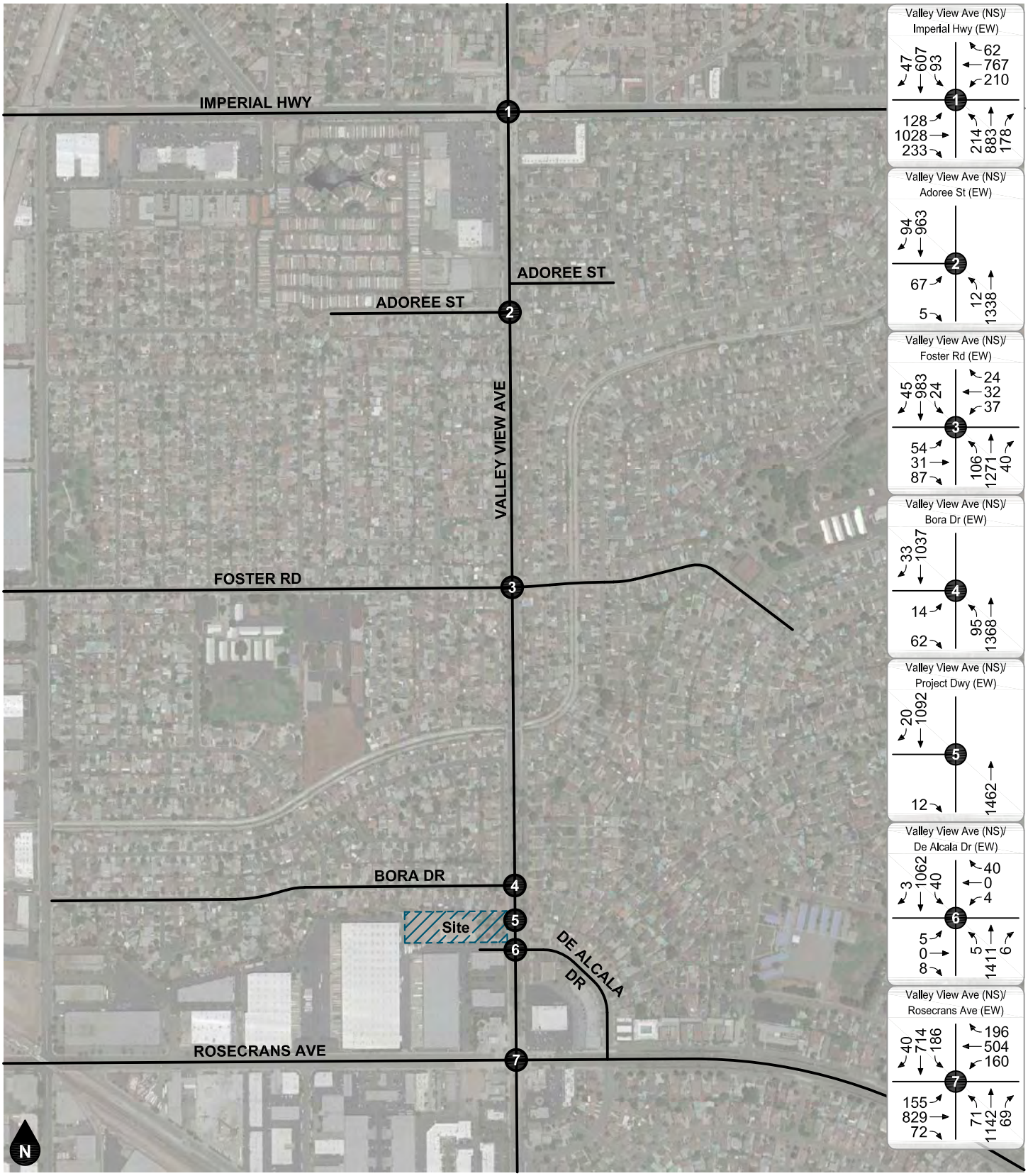
Figure 26
Opening Year (2021) With Project Average Daily Traffic Volumes



Legend

(#) Study Intersection

Figure 27
Opening Year (2021) With Project
AM Peak Hour Intersection Turning Movement Volumes



Legend

(#) Study Intersection

Figure 28
Opening Year (2021) With Project
PM Peak Hour Intersection Turning Movement Volumes

6. FUTURE OPERATIONAL ANALYSIS

Detailed intersection Level of Service calculation worksheets for each of the following analysis scenarios are provided in Appendix D.

EXISTING PLUS PROJECT

The ICU/delay and Levels of Service for Existing Plus Project conditions are shown in Table 4. As shown in Table 4, the study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Existing Plus Project traffic conditions, except for the following study intersections that are forecast to continue to operate at deficient Levels of Service (E or F):

- Valley View Avenue/Bora Drive - #4 (LOS F, AM/PM peak hours)
- Valley View Avenue/De Alcala Drive - #6 (LOS F, AM/PM peak hours)
- Valley View Avenue/Rosecrans Avenue - #7 (LOS E, PM peak hour)

It should be noted that this is a degradation of Level of Service for the already deficient intersections during the Existing conditions; the deficiency is not solely caused by the proposed project.

The project shall construct the following improvements to mitigate the deficient intersections for Existing Plus Project conditions:

- Valley View Avenue/Bora Drive - #4
  - Install a right-turn only sign to restrict eastbound left turn during the AM and PM peak hours

- Valley View Avenue/De Alcala Drive - #6
  - Install right-turn only signs to restrict eastbound and westbound left turns during the AM and PM peak hours

OPENING YEAR (2021) WITHOUT PROJECT

The ICU/delay and Levels of Service for Opening Year (2021) Without Project conditions are shown in Table 5. As shown in Table 5, the study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Opening Year (2021) Without Project conditions, except for the following study intersections that are projected to operate at deficient Levels of Service (E or F):

- Valley View Avenue/Bora Drive - #4 (LOS F, AM/PM peak hours)
- Valley View Avenue/De Alcala Drive - #6 (LOS F, AM/PM peak hours)
- Valley View Avenue/Rosecrans Avenue - #7 (LOS E, PM peak hour)

OPENING YEAR (2021) WITH PROJECT

The ICU/delay and Levels of Service for Opening Year (2021) With Project conditions are shown in Table 6. As shown in Table 6, the study intersections are projected to operate within acceptable Levels of Service (D or better) during the peak hours for Opening Year (2021) With Project conditions, except for the following study intersections that are projected to continue to operate at deficient Levels of Service (E or F):

- Valley View Avenue/Bora Drive - #4 (LOS F, AM/PM peak hours)
- Valley View Avenue/De Alcala Drive - #6 (LOS F, AM/PM peak hours)
- Valley View Avenue/Rosecrans Avenue - #7 (LOS E, PM peak hour)

It should be noted that this is a degradation of Level of Service for the already deficient intersection during the Existing conditions. The deficiency is not solely caused by the proposed project.

The project shall construct the following improvements to mitigate the deficient intersections for Opening Year (2021) With Project conditions:

- Valley View Avenue/Bora Drive - #4
  - Install a right-turn only sign to restrict eastbound left turn during the AM and PM peak hours

- Valley View Avenue/De Alcala Drive - #6
  - Install right-turn only signs to restrict eastbound and westbound left turns during the AM and PM peak hours

Table 4
Existing Plus Project Intersection Levels of Service and Significant Impact Evaluation

ID	Study Intersection	Traffic Control[1]	AM Peak Hour						PM Peak Hour					
			Without Project		With Project				Without Project		With Project			
			V/C[2] or [Delay][3]	LOS[4]	V/C[2] or [Delay][3]	LOS[4]	Project Change	Significant Impact?	V/C[2] or [Delay][3]	LOS[4]	V/C[2] or [Delay][3]	LOS[4]	Project Change	Significant Impact?
1.	Valley View Ave at Imperial Hwy	TS	0.833	D	0.835	D	+0.002	No	0.808	D	0.810	D	+0.002	No
2.	Valley View Ave at Adoree St S	TS	0.521	A	0.521	A	-	No	0.550	A	0.552	A	+0.002	No
3.	Valley View Ave at Foster Rd	TS	0.789	C	0.790	C	+0.001	No	0.627	B	0.629	B	+0.002	No
4.	Valley View Ave at Bora Dr	CSS	[137.0]	F	[150.0]	F	+[13.0]	Yes	[74.0]	F	[83.5]	F	+[9.5]	Yes
	- Restrict EB Left Turn	CSS	-	-	[34.6]	D	-[102.4]	No	-	-	[23.7]	C	-[50.3]	No
5.	Valley View Ave at Project Dwy	CSS	[0.0]	A	[15.2]	C	+[15.2]	No	[0.0]	A	[12.5]	B	+[12.5]	No
6.	Valley View Ave at De Alcala Dr	CSS	[146.1]	F	[158.1]	F	+[12.0]	Yes	[149.1]	F	[163.1]	F	+[14.0]	Yes
	- Restrict EB/WB Left Turns	CSS	-	-	[21.5]	C	-[124.6]	No	-	-	[33.8]	D	-[115.3]	No
7.	Valley View Ave at Rosecrans Ave	TS	0.798	C	0.801	C	+0.003	No	0.922	E	0.926	E	+0.004	No

Notes:

(1) TS = Traffic Signal; CSS = Cross Street Stop

(2) V/C = Volume/Capacity

(3) Delay is shown in [seconds/vehicle]. Delay is reported for unsignalized study intersections. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).

(4) LOS = Level of Service

Table 5
Opening Year (2021) Without Project Intersection Levels of Service

ID	Study Intersection	Traffic Control[1]	AM Peak Hour V/C[2] or [Delay][3]	AM Peak Hour LOS[4]	PM Peak Hour V/C[2] or [Delay][3]	PM Peak Hour LOS[4]
1.	Valley View Ave at Imperial Hwy	TS	0.850	D	0.826	D
2.	Valley View Ave at Adoree St S	TS	0.532	A	0.562	A
3.	Valley View Ave at Foster Rd	TS	0.805	D	0.641	B
4.	Valley View Ave at Bora Dr	CSS	[156.2]	F	[80.5]	F
6.	Valley View Ave at De Alcala Dr	CSS	[160.2]	F	[165.6]	F
7.	Valley View Ave at Rosecrans Ave	TS	0.814	D	0.950	E

Notes:

(1) TS = Traffic Signal; CSS = Cross Street Stop

(2) V/C = Volume/Capacity

(3) Delay is shown in [seconds/vehicle]. Delay is reported for unsignalized study intersections. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).

(4) LOS = Level of Service

Table 6
Opening Year (2021) With Project Intersection Levels of Service and Significant Impact Evaluation

ID	Study Intersection	Traffic Control[1]	AM Peak Hour						PM Peak Hour					
			Without Project		With Project				Without Project		With Project			
			V/C[2] or [Delay][3]	LOS[4]	V/C[2] or [Delay][3]	LOS[4]	Project Change	Significant Impact?	V/C[2] or [Delay][3]	LOS[4]	V/C[2] or [Delay][3]	LOS[4]	Project Change	Significant Impact?
1.	Valley View Ave at Imperial Hwy	TS	0.850	D	0.851	D	+0.001	No	0.826	D	0.828	D	+0.002	No
2.	Valley View Ave at Adoree St S	TS	0.532	A	0.533	A	+0.001	No	0.562	A	0.563	A	+0.001	No
3.	Valley View Ave at Foster Rd	TS	0.805	D	0.807	D	+0.002	No	0.641	B	0.643	B	+0.002	No
4.	Valley View Ave at Bora Dr	CSS	[156.2]	F	[172.5]	F	+[16.3]	Yes	[80.5]	F	[91.3]	F	+[10.8]	Yes
	- Restrict EB Left Turn	CSS	-	-	[34.6]	D	-[121.6]	No	-	-	[24.7]	C	-[55.8]	No
5.	Valley View Ave at Project Dwy	CSS	[0.0]	A	[15.6]	C	+[15.6]	No	[0.0]	A	[12.7]	B	+[12.7]	No
6.	Valley View Ave at De Alcala Dr	CSS	[160.2]	F	[173.6]	F	+[13.4]	Yes	[165.6]	F	[181.9]	F	+[16.3]	Yes
	- Restrict EB/WB Left Turns	CSS	-	-	[22.2]	C	-[138.0]	No	-	-	[34.4]	D	-[131.2]	No
7.	Valley View Ave at Rosecrans Ave	TS	0.814	D	0.818	D	+0.004	No	0.950	E	0.954	E	+0.004	No

Notes:

(1) TS = Traffic Signal; CSS = Cross Street Stop

(2) V/C = Volume/Capacity

(3) Delay is shown in [seconds/vehicle]. Delay is reported for unsignalized study intersections. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).

(4) LOS = Level of Service

7. CONCLUSIONS

SITE ACCESS

This analysis assumes the following improvements will be constructed by the project to provide project site access:

Project Driveway at Valley View Avenue

- Install an eastbound cross street stop-control.
- Construct the eastbound approach to consist of one right-turn lane.

MITIGATION MEASURES

The following off-site mitigation measures are recommended to address the Level of Service deficiency for Existing Plus Project conditions and Opening Year With Project conditions:

- Valley View Avenue/Bora Drive - #4
  - Install a right-turn only sign to restrict eastbound left turn during the AM and PM peak hours

- Valley View Avenue/De Alcala Drive - #6
  - Install right-turn only signs to restrict eastbound and westbound left turns during the AM and PM peak hours

GENERAL RECOMMENDATIONS

Figure 29 summarizes the circulation recommendations for the proposed project.

All roadway design, traffic signing and striping, and traffic control improvements relating to the proposed project should be constructed in accordance with applicable engineering standards and to the satisfaction of the City of La Mirada Public Works Department.

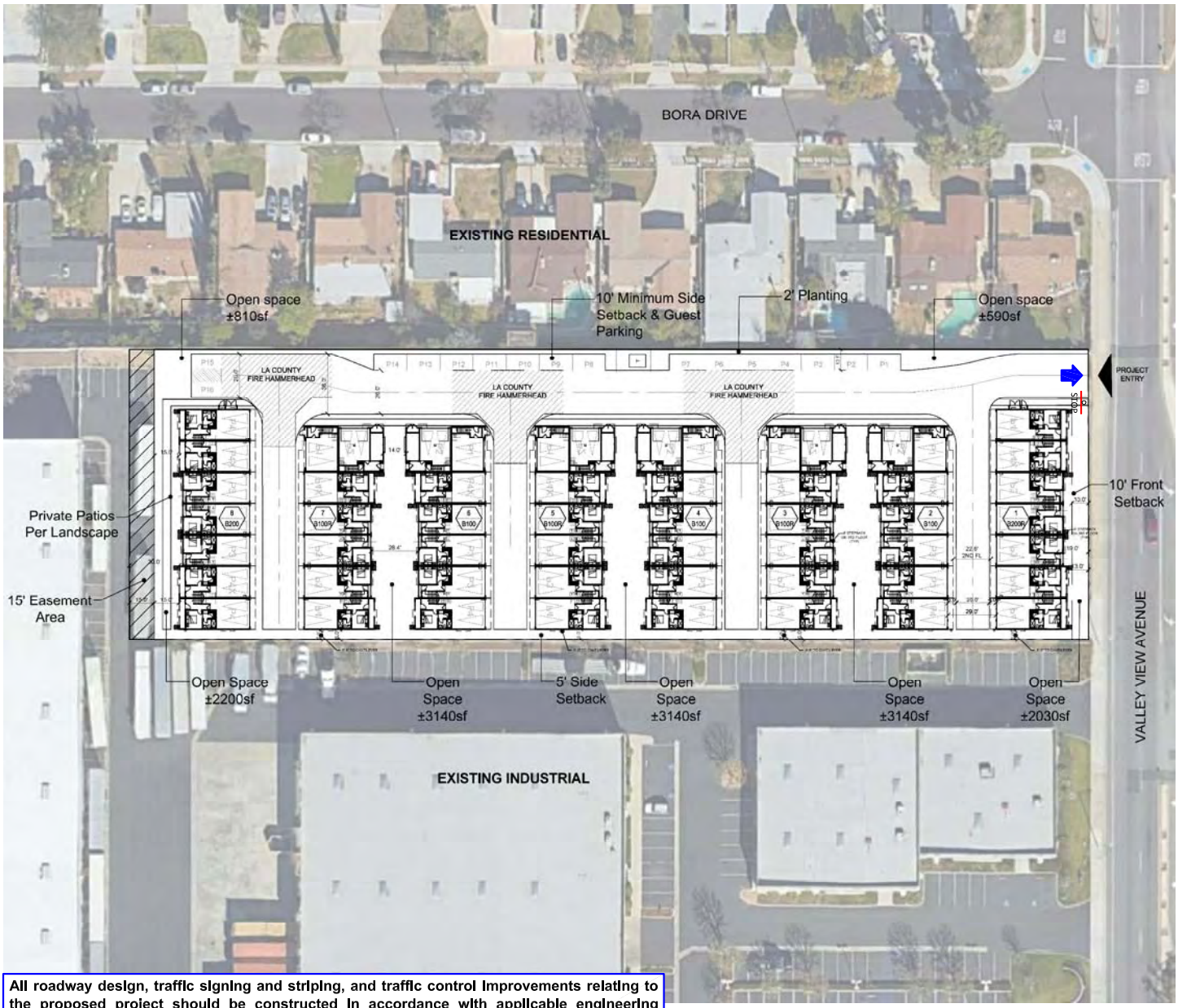
Site-adjacent roadways should be constructed or repaired at their ultimate half-section width, including landscaping and parkway improvements in conjunction with development, or as otherwise required by the City of La Mirada Public Works Department.

On-site traffic signing and striping plans should be submitted for City of La Mirada approval in conjunction with detailed construction plans for the project.

Off-street parking should be provided to meet City of La Mirada Municipal Code requirements.

The final grading, landscaping, and street improvement plans should demonstrate that sight distance standards are met in accordance with applicable City of La Mirada/California Department of Transportation sight distance standards.

As is the case for any roadway design, the City of La Mirada should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.



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As is the case for any roadway design, the City of La Mirada should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

Legend

STOP Stop Sign

Right Turns In/Out Only Access Driveway

Figure 29
Circulation Recommendations

APPENDIX A

GLOSSARY

GLOSSARY OF TERMS

ACRONYMS

AC	Acres
ADT	Average Daily Traffic
Caltrans	California Department of Transportation
DU	Dwelling Unit
ICU	Intersection Capacity Utilization
LOS	Level of Service
TSF	Thousand Square Feet
V/C	Volume/Capacity
VMT	Vehicle Miles Traveled

TERMS

AVERAGE DAILY TRAFFIC: The average 24-hour volume for a stated period divided by the number of days in that period. For example, Annual Average Daily Traffic is the total volume during a year divided by 365 days.

BANDWIDTH: The number of seconds of green time available for through traffic in a signal progression.

BOTTLENECK: A point of constriction along a roadway that limits the amount of traffic that can proceed downstream from its location.

CAPACITY: The maximum number of vehicles that can be reasonably expected to pass over a given section of a lane or a roadway in a given time period.

CHANNELIZATION: The separation or regulation of conflicting traffic movements into definite paths of travel by the use of pavement markings, raised islands, or other suitable means to facilitate the safe and orderly movements of both vehicles and pedestrians.

CLEARANCE INTERVAL: Nearly same as yellow time. If there is an all red interval after the end of a yellow, then that is also added into the clearance interval.

CONTROL DELAY: The component of delay, typically expressed in seconds per vehicle, resulting from the type of traffic control at an intersection. Control delay is measured by comparison with the uncontrolled condition; it includes delay incurred by slowing down, stopping/waiting, and speeding up.

CORDON: An imaginary line around an area across which vehicles, persons, or other items are counted (in and out).

CORNER SIGHT DISTANCE: The minimum sight distance required by the driver of a vehicle to cross or enter the lanes of the major roadway without requiring approaching traffic travelling at a given speed to radically alter their speed or trajectory. Corner sight distance is measured from the driver's eye at 42 inches above the pavement to an object height of 36 inches above the pavement in the center of the nearest approach lane.

CYCLE LENGTH: The time period in seconds required for a traffic signal to complete one full cycle of indications.

CUL-DE-SAC: A local street open at one end only and with special provisions for turning around.

DAILY CAPACITY: A theoretical value representing the daily traffic volume that will typically result in a peak hour volume equal to the capacity of the roadway.

DELAY: The time consumed while traffic is impeded in its movement by some element over which it has no control, usually expressed in seconds per vehicle.

DEMAND RESPONSIVE SIGNAL: Same as traffic-actuated signal.

DENSITY: The number of vehicles occupying in a unit length of the through traffic lanes of a roadway at any given instant. Usually expressed in vehicles per mile.

DETECTOR: A device that responds to a physical stimulus and transmits a resulting impulse to the signal controller.

DESIGN SPEED: A speed selected for purposes of design. Features of a highway, such as curvature, superelevation, and sight distance (upon which the safe operation of vehicles is dependent) are correlated to design speed.

DIRECTIONAL SPLIT: The percent of traffic in the peak direction at any point in time.

DIVERSION: The rerouting of peak hour traffic to avoid congestion.

FORCED FLOW: Opposite of free flow.

FREE FLOW: Volumes are well below capacity. Vehicles can maneuver freely and travel is unimpeded by other traffic.

GAP: Time or distance between successive vehicles in a traffic stream, rear bumper to front bumper.

HEADWAY: Time or distance spacing between successive vehicles in a traffic stream, front bumper to front bumper.

INTERCONNECTED SIGNAL SYSTEM: A number of intersections that are connected to achieve signal progression.

LEVEL OF SERVICE: A qualitative measure of a number of factors, which include speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operating costs.

LOOP DETECTOR: A vehicle detector consisting of a loop of wire embedded in the roadway, energized by alternating current and producing an output circuit closure when passed over by a vehicle.

MINIMUM ACCEPTABLE GAP: Smallest time headway between successive vehicles in a traffic stream into which another vehicle is willing and able to cross or merge.

MULTI-MODAL: More than one mode; such as automobile, bus transit, rail rapid transit, and bicycle transportation modes.

OFFSET: The time interval in seconds between the beginning of green at one intersection and the beginning of green at an adjacent intersection.

PLATOON: A closely grouped component of traffic that is composed of several vehicles moving, or standing ready to move, with clear spaces ahead and behind.

PASSENGER CAR EQUIVALENT (PCE): A metric used to assess the impact of larger vehicles, such as trucks, recreational vehicles, and buses, by converting the traffic volume of larger vehicles to an equivalent number of passenger cars.

PEAK HOUR: The 60 consecutive minutes with the highest number of vehicles.

PRETIMED SIGNAL: A type of traffic signal that directs traffic to stop and go on a predetermined time schedule without regard to traffic conditions. Also, fixed time signal.

PROGRESSION: A term used to describe the progressive movement of traffic through several signalized intersections.

QUEUE: The number of vehicles waiting at a service area such as a traffic signal, stop sign, or access gate.

QUEUE LENGTH: The length of vehicle queue, typically expressed in feet, waiting at a service area such as a traffic signal, stop sign, or access gate.

SCREEN-LINE: An imaginary line or physical feature across which all trips are counted, normally to verify the validity of mathematical traffic models.

SHARED/RECIPROCAL PARKING AGREEMENT: A written binding document executed between property owners to provide a designated number of off-street parking stalls within a designated area to be available for specified businesses or land uses.

SIGHT DISTANCE: The continuous length of roadway visible to a driver or roadway user.

SIGNAL CYCLE: The time period in seconds required for one complete sequence of signal indications.

SIGNAL PHASE: The part of the signal cycle allocated to one or more traffic movements.

STACKING DISTANCE: The length of area available behind a service area, such as a traffic signal or gate, for vehicle queueing to occur.

STARTING DELAY: The delay experienced in initiating the movement of queued traffic from a stop to an average running speed through an intersection.

STOPPING SIGHT DISTANCE: The minimum distance required by the driver of a vehicle on the major roadway travelling at a given speed to bring the vehicle to a stop after an object on the road becomes visible. Stopping sight distance is measured from the driver's eye at 42 inches above the pavement to an object height of 6 inches above the pavement.

TRAFFIC-ACTUATED SIGNAL: A type of traffic signal that directs traffic to stop and go in accordance with the demands of traffic, as registered by the actuation of detectors.

TRIP: The movement of a person or vehicle from one location (origin) to another (destination). For example, from home to store to home is two trips, not one.

TRIP-END: One end of a trip at either the origin or destination (i.e., each trip has two trip-ends). A trip-end occurs when a person, object, or message is transferred to or from a vehicle.

TRIP GENERATION RATE: The quantity of trips produced and/or attracted by a specific land use stated in terms of units such as per dwelling, per acre, and per 1,000 square feet of floor space.

TRUCK: A vehicle having dual tires on one or more axles, or having more than two axles.

TURNING RADIUS: The circular arc formed by the smallest turning path radius of the front outside tire of a vehicle, such as that performed by a U-turn maneuver. This is based on the length and width of the wheel base as well as the steering mechanism of the vehicle.

UNBALANCED FLOW: Heavier traffic flow in one direction than the other. On a daily basis, most facilities have balanced flow. During the peak hours, flow is seldom balanced in an urban area.

VEHICLE MILES OF TRAVEL: A measure of the amount of usage of a section of highway, obtained by multiplying the average daily traffic by length of facility in miles.

APPENDIX B

SCOPING AGREEMENT

SCOPING AGREEMENT FOR CITY OF LA MIRADA TRAFFIC IMPACT ANALYSIS

This Memorandum of Understanding acknowledges the City of La Mirada Traffic Impact Analysis requirements for the following project. The Traffic Impact Analysis will be completed in accordance with Los Angeles TIA guidelines.

Project Name: 13811 Valley View Avenue Project

Project Address/Location: 13811 Valley View Avenue

Governmental Jurisdiction: City of La Mirada

Project Description and Land Use: 56 Multifamily Housing (Low-Rise) – see attached Figure 2

	Consultant	Developer
Name:	Tom Huang, Senior Traffic Engineer	Phil Martin, President
Firm:	Ganddini Group, INC.	PHIL MARTIN & ASSOCIATES
Address:	550 Parkcenter Drive, Suite 202	4860 Irvine Boulevard, Suite 203
	Santa Ana, CA 92705	Irvine, CA 92620
Telephone:	714-795-3100 x 102	949-454-1800
E-mail:	tom@ganddini.com	pmartin@philmartinassociates.com

Trip Generation Source: Institute of Transportation Engineers, Trip Generation Manual, 10th Edition, 2017.

	Morning		Evening		
	In	Out	In	Out	Daily
Total	6	20	20	12	410

Internal Trip Capture Allowance: NO (- Trip Discount)

Pass-By Trip Allowance: NO (- Trip Discount)

Project Full Occupancy Year: 2021

Annual Background Growth Rate: 1.0% [LA 2010 CMP, RSA #22, 5-Year Growth = 5.2%]

Other area projects to be considered: To be provided by the City of La Mirada, if any

Trip Geographic Distribution: (see attached Figure 3 and Figure 4)

North: 30% South: 45% East: 15% West: 10%

Analysis Conditions:

1. Existing
2. Existing + Project
3. Existing + Ambient (2021) + Project
4. Existing + Ambient (2021) + Cumulative + Project

Study Intersections: (See attached Figure 1)

1. Valley View Avenue (NS) at Imperial Highway (EW)
2. Valley View Avenue (NS) at Adoree Street (EW)
3. Valley View Avenue (NS) at Foster Road
4. Valley View Avenue (NS) at Bora Drive
5. Valley View Avenue (NS) at Project Driveway – future
6. Valley View Avenue (NS) at De Alcala Drive
7. Valley View Avenue (NS) at Rosecrans Avenue

Approved by:

Consultant's Representative	05.10.2019 Date	City of La Mirada Representative	Date

19-0059

Table 1
Project Trip Generation

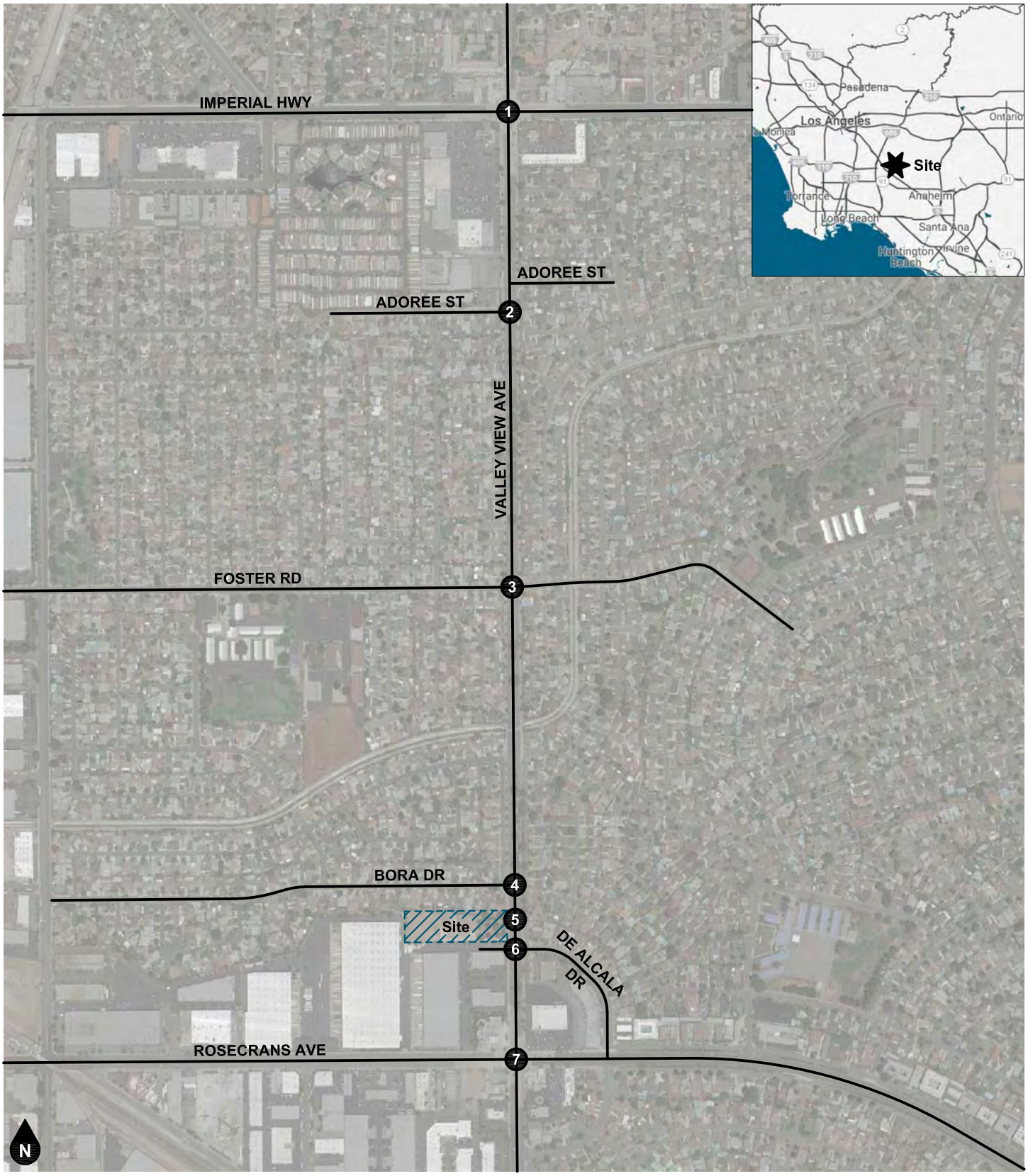
Trip Generation Rates									
			AM Peak Hour			PM Peak Hour			Daily
Land Use	Source[1]	Units[2]	% In	% Out	Rate	% In	% Out	Rate	Rate
Multifamily Housing (Low-Rise)	ITE 220	DU	23%	77%	0.46	63%	37%	0.56	7.32

Trips Generated									
			AM Peak Hour			PM Peak Hour			
Land Use	Quantity	Units[2]	In	Out	Total	In	Out	Total	Daily
Multifamily Housing (Low-Rise)	56	DU	6	20	26	20	12	32	410

Notes:

1) ITE = Institute of Transportation Engineers, Trip Generation Manual, 10th Edition, 2017; XXX= Land Use Code

2) DU = Dwelling Units

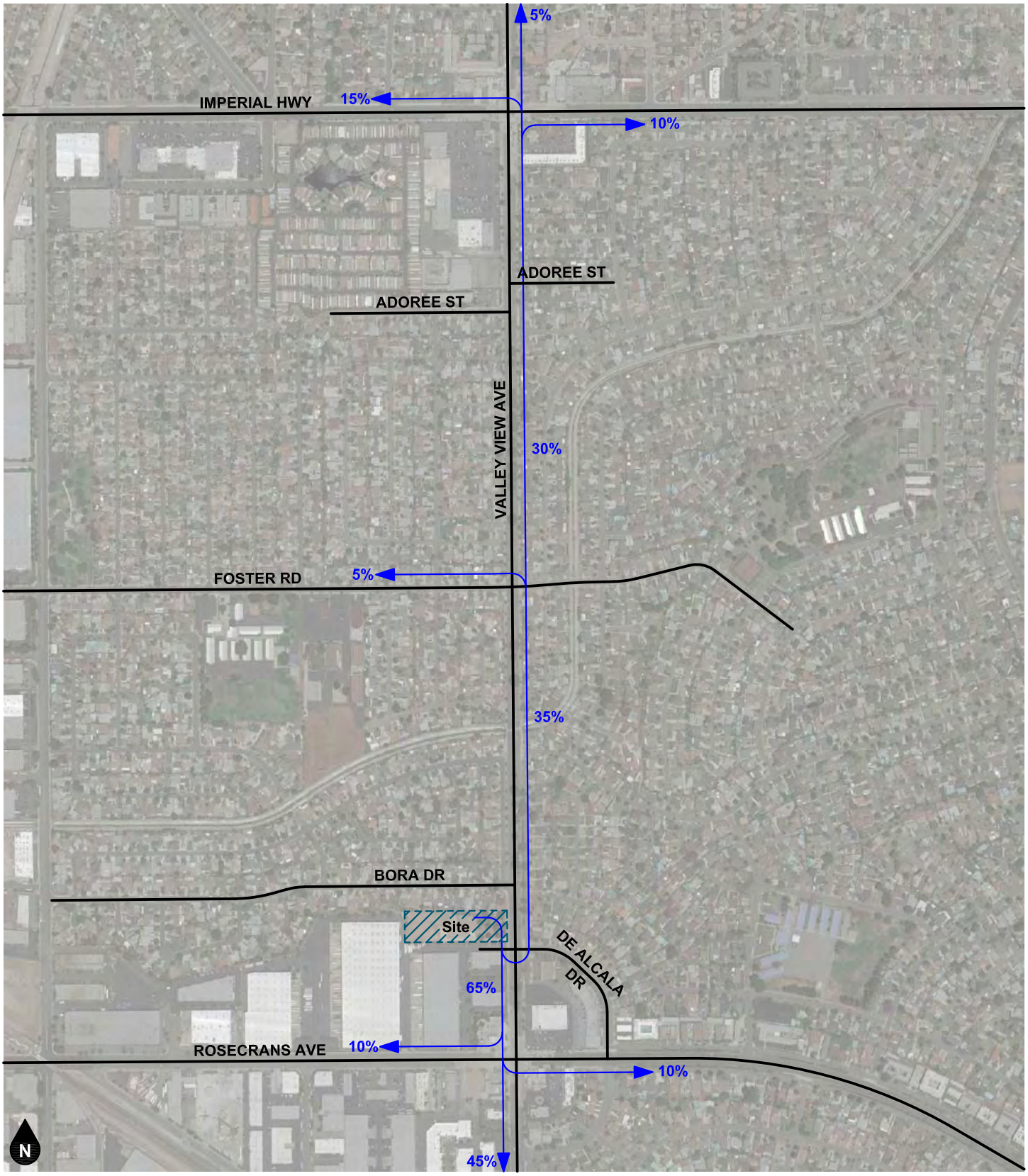


Legend

(#) Study Intersection

Figure 1
Project Location Map

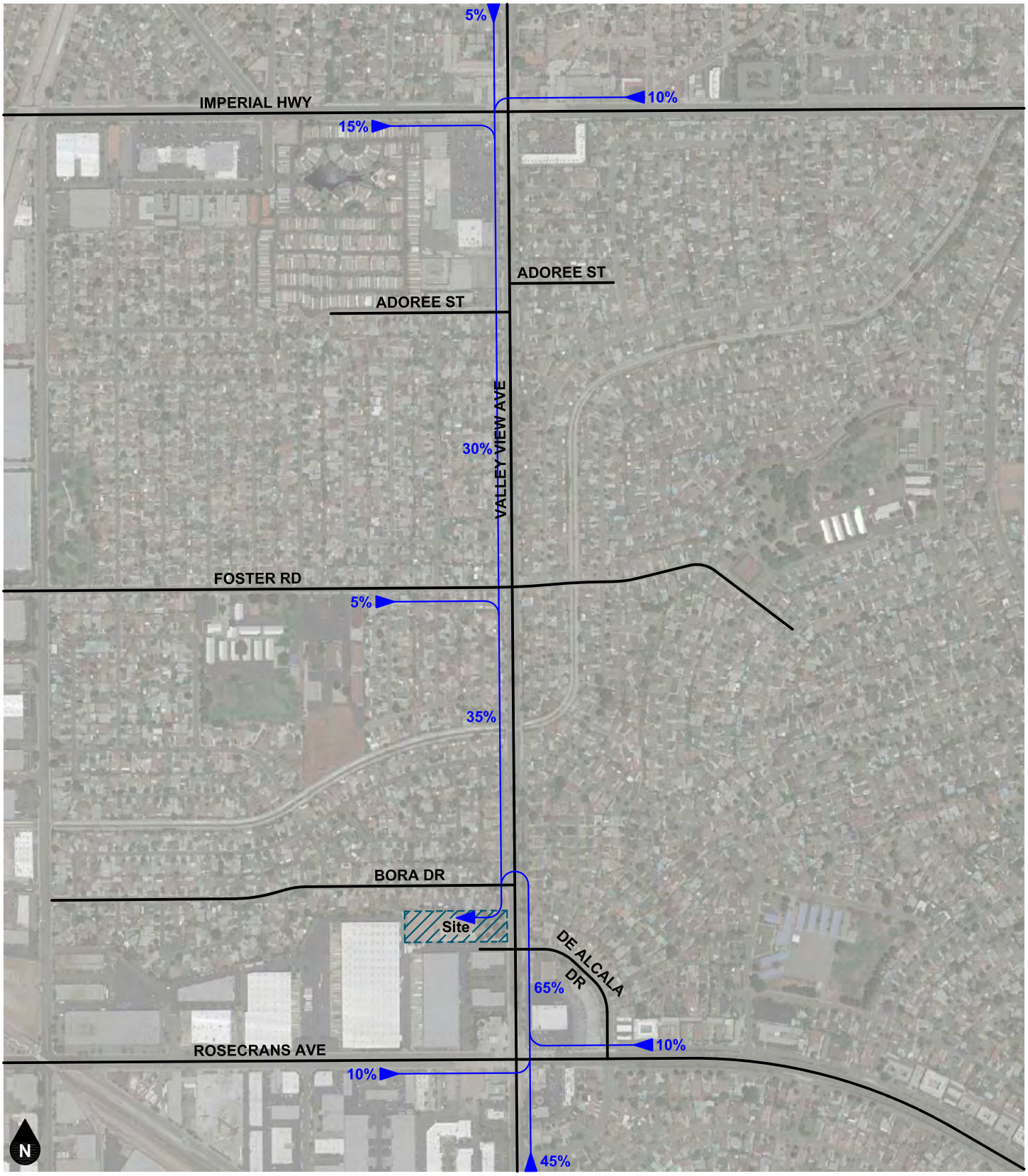
Figure 2
Site Plan



Legend

10% Percent From Project

Figure 3
Project Outbound Trip Distribution



Legend

10% Percent To Project

Figure 4
Project Inbound Trip Distribution

APPENDIX C

VOLUME COUNT WORKSHEETS

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

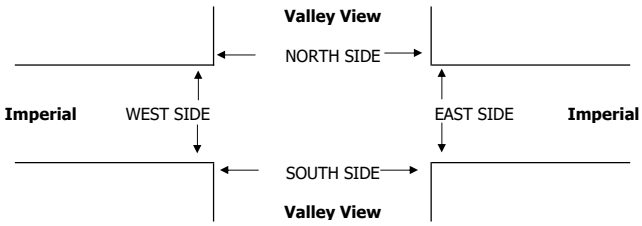
DATE:	LOCATION:	La Mirada	PROJECT #:	SC2184
Tue, May 7, 19	NORTH & SOUTH:	Valley View	LOCATION #:	1
	EAST & WEST:	Imperial	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Valley View			SOUTHBOUND Valley View			EASTBOUND Imperial			WESTBOUND Imperial				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	46	124	37	6	205	16	7	128	31	33	293	10	936	1	0	0	0	1
	7:15 AM	63	117	39	9	194	22	10	190	39	41	312	5	1,041	0	2	1	1	4
	7:30 AM	61	143	34	17	209	22	13	208	37	31	365	8	1,148	2	2	1	1	6
	7:45 AM	60	137	45	12	248	29	18	171	52	55	324	12	1,163	1	0	2	3	6
	8:00 AM	67	133	48	26	186	19	19	141	68	50	293	13	1,063	0	6	2	4	12
	8:15 AM	49	116	40	11	157	11	22	129	41	52	298	6	932	1	1	2	3	7
	8:30 AM	54	131	39	16	161	15	16	82	31	37	226	10	818	0	1	1	3	5
	8:45 AM	38	98	34	16	114	18	19	125	36	37	191	12	738	1	0	2	0	3
	VOLUMES	438	999	316	113	1,474	152	124	1,174	335	336	2,302	76	7,839	6	12	11	15	44
	APPROACH %	25%	57%	18%	6%	85%	9%	8%	72%	21%	12%	85%	3%						
	APP/DEPART	1,753	/	1,200	1,739	/	2,136	1,633	/	1,606	2,714	/	2,897	0					
	BEGIN PEAK HR		7:15 AM																
	VOLUMES	251	530	166	64	837	92	60	710	196	177	1,294	38	4,415					
	APPROACH %	27%	56%	18%	6%	84%	9%	6%	73%	20%	12%	86%	3%						
	PEAK HR FACTOR		0.955			0.859			0.936			0.934		0.949					
	APP/DEPART	947	/	632	993	/	1,204	966	/	939	1,509	/	1,640	0					
PM	4:00 PM	52	227	54	16	107	14	37	240	54	67	164	12	1,044	3	4	5	9	21
	4:15 PM	66	221	32	14	142	17	27	227	51	49	161	8	1,015	2	1	6	5	14
	4:30 PM	55	203	34	11	156	10	40	251	56	54	190	14	1,074	1	1	7	3	12
	4:45 PM	56	208	37	15	158	14	33	237	52	39	179	13	1,041	3	1	2	3	9
	5:00 PM	47	222	44	19	138	8	24	251	51	53	204	13	1,074	0	4	2	6	12
	5:15 PM	55	221	50	32	153	15	28	275	67	53	166	14	1,129	1	5	3	3	12
	5:30 PM	49	214	42	22	144	9	40	241	54	58	199	18	1,090	1	3	0	3	7
	5:45 PM	63	241	51	17	163	9	31	218	40	39	136	12	1,020	1	1	4	3	9
	VOLUMES	443	1,757	344	146	1,161	96	260	1,940	425	412	1,399	104	8,487	12	20	29	35	96
	APPROACH %	17%	69%	14%	10%	83%	7%	10%	74%	16%	22%	73%	5%						
	APP/DEPART	2,544	/	2,112	1,403	/	1,975	2,625	/	2,445	1,915	/	1,955	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	207	865	173	88	593	46	125	1,004	224	203	748	58	4,334					
	APPROACH %	17%	69%	14%	12%	82%	6%	9%	74%	17%	20%	74%	6%						
	PEAK HR FACTOR		0.955			0.909			0.914			0.917		0.960					
	APP/DEPART	1,245	/	1,054	727	/	1,010	1,353	/	1,267	1,009	/	1,003	0					



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR	7:15 AM					0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR	4:45 PM					0	0	0	0	0					

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

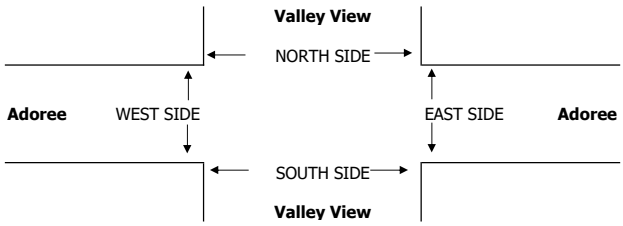
DATE:	LOCATION:	La Mirada	PROJECT #:	SC2184
Tue, May 7, 19	NORTH & SOUTH:	Valley View	LOCATION #:	2
	EAST & WEST:	Adoree	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Valley View			SOUTHBOUND Valley View			EASTBOUND Adoree			WESTBOUND Adoree				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	2	198	0	0	260	11	11	0	0	3	0	9	494	0	0	0	0	0
	7:15 AM	2	209	0	1	268	13	18	0	0	4	1	8	524	0	0	0	0	0
	7:30 AM	1	231	1	5	263	9	14	0	6	1	0	8	539	0	2	0	0	2
	7:45 AM	2	242	1	0	332	13	16	0	5	2	1	4	618	0	0	0	0	0
	8:00 AM	1	226	2	4	281	22	27	0	5	1	1	5	575	0	0	0	0	0
	8:15 AM	2	212	1	3	249	9	23	0	4	2	1	10	516	0	1	0	0	1
	8:30 AM	1	221	1	4	211	12	14	1	1	6	0	3	475	0	3	0	0	3
	8:45 AM	0	182	0	1	174	11	11	0	1	1	0	6	387	0	0	0	0	0
	VOLUMES	11	1,721	6	18	2,038	100	134	1	22	20	4	53	4,128	0	6	0	0	6
	APPROACH %	1%	99%	0%	1%	95%	5%	85%	1%	14%	26%	5%	69%						
	APP/DEPART	1,738	/	1,914	2,156	/	2,080	157	/	19	77	/	115	0					
	BEGIN PEAK HR		7:15 AM																
	VOLUMES	6	908	4	10	1,144	57	75	0	16	8	3	25	2,256					
	APPROACH %	1%	99%	0%	1%	94%	5%	82%	0%	18%	22%	8%	69%						
	PEAK HR FACTOR		0.937			0.878			0.711			0.692		0.913					
	APP/DEPART	918	/	1,010	1,211	/	1,168	91	/	12	36	/	66	0					
PM	4:00 PM	1	343	0	10	203	21	15	0	3	2	0	3	601	0	4	0	0	4
	4:15 PM	3	310	1	9	214	26	13	1	1	2	0	2	582	0	3	0	0	3
	4:30 PM	1	280	0	10	238	14	14	0	1	3	0	4	565	0	6	0	0	6
	4:45 PM	2	317	1	11	249	21	8	0	1	2	0	2	614	0	6	0	0	6
	5:00 PM	3	308	0	9	221	25	12	0	2	1	0	1	582	0	4	0	0	4
	5:15 PM	3	313	2	8	246	26	28	0	1	2	0	6	635	1	2	0	0	3
	5:30 PM	3	327	2	8	235	22	12	1	1	2	0	3	616	1	5	0	0	6
	5:45 PM	3	335	2	9	230	18	14	0	1	4	1	7	624	1	5	0	0	6
	VOLUMES	19	2,533	8	74	1,836	173	116	2	11	18	1	28	4,819	3	35	0	0	38
	APPROACH %	1%	99%	0%	4%	88%	8%	90%	2%	9%	38%	2%	60%						
	APP/DEPART	2,560	/	2,712	2,083	/	1,868	129	/	49	47	/	190	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	12	1,283	6	34	932	91	66	1	5	9	1	17	2,457					
	APPROACH %	1%	99%	0%	3%	88%	9%	92%	1%	7%	33%	4%	63%						
	PEAK HR FACTOR		0.957			0.944			0.621			0.563		0.967					
	APP/DEPART	1,301	/	1,382	1,057	/	949	72	/	25	27	/	101	0					



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR			7:15 AM			0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR			5:00 PM			0	0	0	0	0					

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

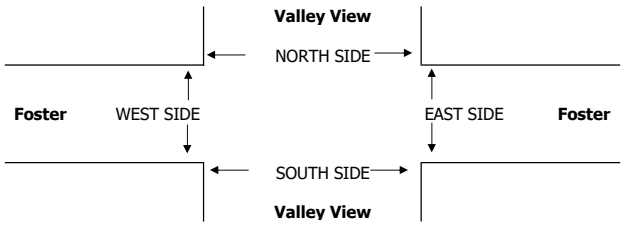
DATE:	LOCATION:	La Mirada	PROJECT #:	SC2184
Tue, May 14, 19	NORTH & SOUTH:	Valley View	LOCATION #:	3
	EAST & WEST:	Foster	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Valley View			SOUTHBOUND Valley View			EASTBOUND Foster			WESTBOUND Foster				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	5	196	1	5	243	4	8	3	25	18	12	9	529	0	1	0	0	1
	7:15 AM	13	175	3	1	301	7	13	3	24	15	14	9	578	0	0	0	0	0
	7:30 AM	24	220	5	3	301	19	11	12	49	7	30	3	684	1	0	0	0	1
	7:45 AM	39	232	17	8	317	18	19	12	53	14	26	8	763	0	0	0	0	0
	8:00 AM	36	194	11	12	288	22	25	25	48	17	18	11	707	0	0	0	0	0
	8:15 AM	39	222	8	4	265	17	15	8	41	23	25	26	693	0	0	0	0	0
	8:30 AM	19	197	2	1	228	9	12	5	29	17	10	9	538	0	0	0	0	0
	8:45 AM	17	163	7	1	195	5	8	2	20	1	3	8	430	1	0	0	0	1
	VOLUMES	192	1,599	54	35	2,138	101	111	70	289	112	138	83	4,922	2	1	0	0	3
	APPROACH %	10%	87%	3%	2%	94%	4%	24%	15%	61%	34%	41%	25%						
	APP/DEPART	1,845	/	1,794	2,274	/	2,541	470	/	158	333	/	429	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	138	868	41	27	1,171	76	70	57	191	61	99	48	2,847					
	APPROACH %	13%	83%	4%	2%	92%	6%	22%	18%	60%	29%	48%	23%						
	PEAK HR FACTOR		0.909			0.929			0.811			0.703		0.933					
	APP/DEPART	1,047	/	986	1,274	/	1,424	318	/	125	208	/	312	0					
PM	4:00 PM	38	302	9	8	205	9	15	10	17	12	8	6	639	0	0	0	0	0
	4:15 PM	25	331	12	6	254	14	10	7	23	11	2	5	700	0	0	0	0	0
	4:30 PM	12	290	8	6	232	8	11	4	18	8	11	7	615	0	0	0	0	0
	4:45 PM	28	311	10	4	261	13	16	9	26	5	10	6	699	0	0	0	0	0
	5:00 PM	20	298	14	11	213	11	8	9	28	10	5	5	632	0	0	0	0	0
	5:15 PM	31	302	18	10	227	13	14	10	11	8	14	6	664	0	1	0	0	1
	5:30 PM	24	307	16	5	218	22	10	12	17	10	7	4	652	0	0	0	0	0
	5:45 PM	29	339	21	10	199	11	14	8	10	10	4	7	662	2	0	0	0	2
	VOLUMES	207	2,480	108	60	1,809	101	98	69	150	74	61	46	5,263	2	1	0	0	3
	APPROACH %	7%	89%	4%	3%	92%	5%	31%	22%	47%	41%	34%	25%						
	APP/DEPART	2,795	/	2,625	1,970	/	2,035	317	/	236	181	/	367	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	103	1,234	39	24	952	44	52	30	84	36	31	24	2,653					
	APPROACH %	7%	90%	3%	2%	93%	4%	31%	18%	51%	40%	34%	26%						
	PEAK HR FACTOR		0.935			0.917			0.814			0.875		0.948					
	APP/DEPART	1,376	/	1,310	1,020	/	1,072	166	/	93	91	/	178	0					



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR			7:30 AM			0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR			4:00 PM			0	0	0	0	0					

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

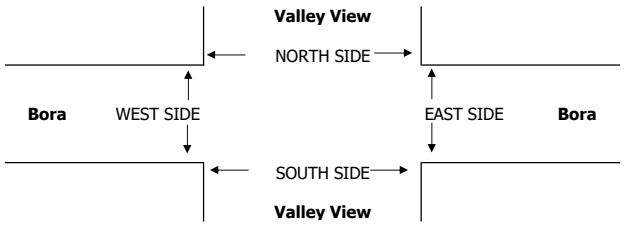
DATE:	LOCATION:	La Mirada	PROJECT #:	SC2184
Tue, May 14, 19	NORTH & SOUTH:	Valley View	LOCATION #:	6
	EAST & WEST:	Bora	CONTROL:	STOP E

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Valley View			SOUTHBOUND Valley View			EASTBOUND Bora			WESTBOUND Bora				U-TURNS				
	LANES:	NL 1	NT 2	NR X	SL X	ST 2	SR 0	EL 0	ET X	ER 0	WL X	WT X	WR X	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	14	181	0	0	307	3	3	0	15	0	0	0	523	0	0	0	0	0
	7:15 AM	15	197	0	0	318	2	4	0	33	0	0	0	569	0	0	0	0	0
	7:30 AM	21	226	0	0	348	3	8	0	25	0	0	0	631	0	0	0	0	0
	7:45 AM	31	260	0	0	368	8	3	0	22	0	0	0	692	0	0	0	0	0
	8:00 AM	27	209	0	0	328	14	2	0	25	0	0	0	605	0	0	0	0	0
	8:15 AM	31	229	0	0	299	5	5	0	20	0	0	0	589	0	0	0	0	0
	8:30 AM	23	178	0	0	263	5	2	0	10	0	0	0	481	1	0	0	0	1
	8:45 AM	9	163	0	0	200	1	3	0	8	0	0	0	384	0	0	0	0	0
	VOLUMES	171	1,643	0	0	2,431	41	30	0	158	0	0	0	4,474	1	0	0	0	1
	APPROACH %	9%	91%	0%	0%	98%	2%	16%	0%	84%	0%	0%	0%						
	APP/DEPART	1,814	/	1,673	2,472	/	2,590	188	/	0	0	/	211	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	110	924	0	0	1,343	30	18	0	92	0	0	0	2,517					
	APPROACH %	11%	89%	0%	0%	98%	2%	16%	0%	84%	0%	0%	0%						
	PEAK HR FACTOR		0.888			0.913			0.833			0.000		0.909					
	APP/DEPART	1,034	/	942	1,373	/	1,435	110	/	0	0	/	140	0					
PM	4:00 PM	22	338	0	0	221	10	5	0	20	0	0	0	616	0	0	0	0	0
	4:15 PM	22	324	0	0	270	10	2	0	20	0	0	0	648	0	0	0	0	0
	4:30 PM	17	333	0	0	233	6	2	0	10	0	0	0	601	0	0	0	0	0
	4:45 PM	19	333	0	0	280	6	5	0	11	0	0	0	654	0	0	0	0	0
	5:00 PM	16	311	0	0	226	8	2	0	25	0	0	0	588	0	0	0	0	0
	5:15 PM	25	352	0	0	243	11	8	0	18	0	0	0	657	0	0	0	0	0
	5:30 PM	25	344	0	0	221	6	6	0	14	0	0	0	616	0	0	0	0	0
	5:45 PM	17	356	0	0	205	15	4	0	18	0	0	0	615	0	0	0	0	0
	VOLUMES	163	2,691	0	0	1,899	72	34	0	136	0	0	0	4,995	0	0	0	0	0
	APPROACH %	6%	94%	0%	0%	96%	4%	20%	0%	80%	0%	0%	0%						
	APP/DEPART	2,854	/	2,725	1,971	/	2,035	170	/	0	0	/	235	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	80	1,328	0	0	1,004	32	14	0	61	0	0	0	2,519					
	APPROACH %	6%	94%	0%	0%	97%	3%	19%	0%	81%	0%	0%	0%						
	PEAK HR FACTOR		0.978			0.906			0.750			0.000		0.963					
	APP/DEPART	1,408	/	1,342	1,036	/	1,065	75	/	0	0	/	112	0					



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR	7:30 AM					0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR	4:00 PM					0	0	0	0	0					

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	La Mirada	PROJECT #:	SC2184
Tue, May 14, 19	NORTH & SOUTH:	Valley View	LOCATION #:	7
	EAST & WEST:	De Alcala	CONTROL:	STOP W

NOTES:

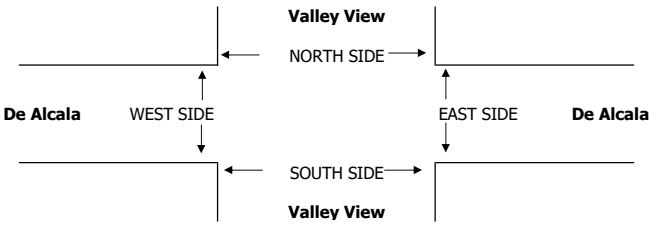
AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Valley View			SOUTHBOUND Valley View			EASTBOUND De Alcala			WESTBOUND De Alcala			
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
AM	7:00 AM	0	186	0	5	317	0	2	0	0	3	0	7	520
	7:15 AM	1	207	1	14	336	1	0	0	0	1	0	6	567
	7:30 AM	1	232	1	14	359	0	0	0	0	0	0	13	620
	7:45 AM	0	269	3	20	369	1	0	0	1	2	0	22	687
	8:00 AM	2	220	0	18	334	1	0	0	0	1	0	15	591
	8:15 AM	1	244	1	13	306	1	2	0	1	0	0	14	583
	8:30 AM	1	192	4	8	266	0	0	0	0	1	0	9	481
	8:45 AM	1	165	0	3	204	2	0	0	0	2	0	7	384
	VOLUMES	7	1,715	10	95	2,491	6	4	0	2	10	0	93	4,433
	APPROACH %	0%	99%	1%	4%	96%	0%	67%	0%	33%	10%	0%	90%	
	APP/DEPART	1,732	/	1,815	2,592	/	2,507	6	/	102	103	/	9	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	4	965	5	65	1,368	3	2	0	2	3	0	64	2,481
	APPROACH %	0%	99%	1%	5%	95%	0%	50%	0%	50%	4%	0%	96%	
	PEAK HR FACTOR		0.895			0.921			0.333			0.698		0.903
	APP/DEPART	974	/	1,034	1,436	/	1,374	4	/	67	67	/	6	0
PM	4:00 PM	0	347	3	10	231	0	2	0	0	1	0	11	605
	4:15 PM	1	334	1	13	275	2	0	0	3	1	0	11	641
	4:30 PM	3	339	2	3	240	0	1	0	4	1	0	10	603
	4:45 PM	1	343	0	8	282	1	2	0	1	1	0	7	646
	5:00 PM	0	322	0	6	244	1	1	0	0	1	0	3	578
	5:15 PM	3	365	1	13	248	0	0	0	0	1	0	11	642
	5:30 PM	3	353	4	8	229	0	2	0	1	0	0	13	613
	5:45 PM	3	358	3	15	208	0	1	0	0	1	0	13	602
	VOLUMES	14	2,761	14	76	1,957	4	9	0	9	7	0	79	4,930
	APPROACH %	1%	99%	1%	4%	96%	0%	50%	0%	50%	8%	0%	92%	
	APP/DEPART	2,789	/	2,853	2,037	/	1,982	18	/	86	86	/	9	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	5	1,363	6	34	1,028	3	5	0	8	4	0	39	2,495
	APPROACH %	0%	99%	0%	3%	97%	0%	38%	0%	62%	9%	0%	91%	
	PEAK HR FACTOR		0.981			0.915			0.650			0.896		0.966
	APP/DEPART	1,374	/	1,408	1,065	/	1,042	13	/	39	43	/	6	0

U-TURNS

	NB	SB	EB	WB	TTL
	0	0	0	0	0
	1	0	0	0	1
	1	2	0	0	3
	0	0	0	0	0
	0	1	0	0	1
	0	0	0	0	0
	1	0	0	0	1
	1	0	0	0	1
	4	3	0	0	7
	0	0	0	0	0
	0	1	0	0	1
	1	0	0	0	1
	1	0	0	0	1
	1	0	0	0	1
	3	0	0	0	3
	3	1	0	0	4
	1	1	0	0	2
	9	4	0	0	13



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR			7:30 AM			0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR			4:00 PM			0	0	0	0	0					

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, May 7, 19

LOCATION: La Mirada
NORTH & SOUTH: Valley View
EAST & WEST: Rosecrans

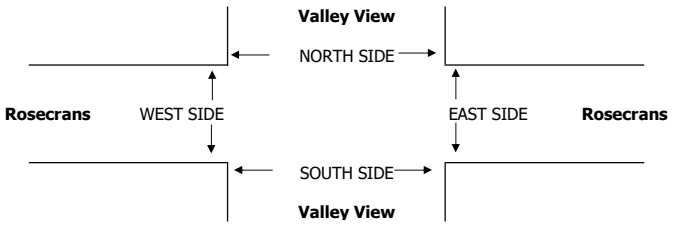
PROJECT #: SC2184
LOCATION #: 4
CONTROL: SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Valley View			SOUTHBOUND Valley View			EASTBOUND Rosecrans			WESTBOUND Rosecrans				U-TURNS				
	LANES:	NL 2	NT 2	NR 0	SL 1	ST 3	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	30	157	11	16	239	27	14	74	8	36	210	23	845	2	0	0	1	3
	7:15 AM	39	148	12	24	295	21	22	83	21	35	203	30	933	7	0	2	0	9
	7:30 AM	28	210	10	38	253	8	25	158	18	45	210	37	1,040	7	0	2	3	12
	7:45 AM	29	185	11	39	278	28	28	96	13	45	222	52	1,026	6	0	3	3	12
	8:00 AM	30	147	12	42	237	24	18	114	16	44	209	43	936	8	0	0	0	8
	8:15 AM	25	151	14	28	251	18	21	85	14	45	202	37	891	4	0	0	1	5
	8:30 AM	28	135	9	21	200	16	11	84	24	39	151	31	749	5	0	1	2	8
	8:45 AM	25	119	7	20	169	14	17	95	25	39	149	36	715	5	0	1	1	7
	VOLUMES	234	1,252	86	228	1,922	156	156	789	139	328	1,556	289	7,135	44	0	9	11	64
	APPROACH %	15%	80%	5%	10%	83%	7%	14%	73%	13%	15%	72%	13%						
	APP/DEPART	1,572	/	1,688	2,306	/	2,422	1,084	/	1,114	2,173	/	1,911	0					
	BEGIN PEAK HR		7:15 AM																
	VOLUMES	126	690	45	143	1,063	81	93	451	68	169	844	162	3,935					
	APPROACH %	15%	80%	5%	11%	83%	6%	15%	74%	11%	14%	72%	14%						
	PEAK HR FACTOR		0.868			0.933			0.761			0.921		0.946					
	APP/DEPART	861	/	938	1,287	/	1,322	612	/	645	1,175	/	1,030	0					
PM	4:00 PM	28	249	7	40	154	15	37	170	23	37	137	36	933	5	0	1	4	10
	4:15 PM	18	265	19	43	147	8	38	124	16	33	126	41	878	3	3	4	2	12
	4:30 PM	26	260	15	35	204	16	37	150	18	33	124	26	944	2	1	0	1	4
	4:45 PM	20	242	11	51	171	18	30	200	18	27	122	41	951	4	0	1	4	9
	5:00 PM	18	290	9	42	186	3	32	204	20	38	114	36	992	2	1	0	1	4
	5:15 PM	20	238	12	60	173	11	35	222	21	21	146	55	1,014	2	0	2	4	8
	5:30 PM	16	302	15	37	175	12	43	203	16	53	108	56	1,036	3	2	0	4	9
	5:45 PM	16	275	22	41	157	11	39	181	14	37	123	42	958	2	1	1	3	7
	VOLUMES	162	2,121	110	349	1,367	94	291	1,454	146	279	1,000	333	7,706	23	8	9	23	63
	APPROACH %	7%	89%	5%	19%	76%	5%	15%	77%	8%	17%	62%	21%						
	APP/DEPART	2,393	/	2,744	1,810	/	1,792	1,891	/	1,928	1,612	/	1,242	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	70	1,105	58	180	691	37	149	810	71	149	491	189	4,000					
	APPROACH %	6%	90%	5%	20%	76%	4%	14%	79%	7%	18%	59%	23%						
	PEAK HR FACTOR		0.926			0.930			0.926			0.934		0.965					
	APP/DEPART	1,233	/	1,444	908	/	908	1,030	/	1,056	829	/	592	0					



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR	7:15 AM					0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR	5:00 PM					0	0	0	0	0					

APPENDIX D

LEVEL OF SERVICE WORKSHEETS

Existing

13811 Valley View Avenue Project

Vistro File: G:\...\AM E.vistro
Report File: G:\...\AM E.pdf

Scenario 1 Existing
5/23/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Valley View Ave (NS) at Imperial Hwy (EW)	Signalized	ICU 1	WB Thru	0.833	-	D
2	Valley View Ave (NS) at Adoree St (EW)	Signalized	ICU 1	SB Thru	0.521	-	A
3	Valley View Ave (NS) at Foster Rd (EW)	Signalized	ICU 1	SB Thru	0.789	-	C
4	Valley View Ave (NS) at Bora Dr (EW)	Two-way stop	HCM 6th Edition	EB Left	0.462	137.0	F
6	Valley View Ave (NS) at De Alcala Dr (EW)	Two-way stop	HCM 6th Edition	EB Thru	0.000	146.1	F
7	Valley View Ave (NS) at Rosecrans Ave (EW)	Signalized	ICU 1	SB Thru	0.798	-	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Valley View Ave (NS) at Imperial Hwy (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.833

Intersection Setup

Name	Valley View Ave			Valley View Ave			Imperial Hwy			Imperial Hwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	293.00	100.00	100.00	204.00	100.00	100.00	150.00	100.00	100.00	195.00	100.00	100.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Valley View Ave			Valley View Ave			Imperial Hwy			Imperial Hwy		
Base Volume Input [veh/h]	251	530	166	64	837	92	60	710	196	177	1294	38
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	251	530	166	64	837	92	60	710	196	177	1294	38
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	63	133	42	16	209	23	15	178	49	44	324	10
Total Analysis Volume [veh/h]	251	530	166	64	837	92	60	710	196	177	1294	38
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.16	0.17	0.10	0.04	0.26	0.06	0.04	0.19	0.19	0.11	0.28	0.28
Intersection LOS	D											
Intersection V/C	0.833											

Intersection Level Of Service Report
Intersection 2: Valley View Ave (NS) at Adoree St (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.521

Intersection Setup

Name	Valley View Ave		Valley View Ave		Adoree St	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	105.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		Yes	

Volumes

Name	Valley View Ave		Valley View Ave		Adoree St	
Base Volume Input [veh/h]	6	912	1152	60	75	16
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	912	1152	60	75	16
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	228	288	15	19	4
Total Analysis Volume [veh/h]	6	912	1152	60	75	16
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	5	2	6	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.29	0.36	0.04	0.05	0.06
Intersection LOS	A					
Intersection V/C	0.521					

Intersection Level Of Service Report
Intersection 3: Valley View Ave (NS) at Foster Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.789

Intersection Setup

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	160.00	100.00	100.00	160.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
Base Volume Input [veh/h]	138	868	41	27	1171	76	70	57	191	61	99	48
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	138	868	41	27	1171	76	70	57	191	61	99	48
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	35	217	10	7	293	19	18	14	48	15	25	12
Total Analysis Volume [veh/h]	138	868	41	27	1171	76	70	57	191	61	99	48
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.27	0.03	0.02	0.37	0.05	0.04	0.20	0.20	0.04	0.13	0.13
Intersection LOS	C											
Intersection V/C	0.789											

Intersection Level Of Service Report
Intersection 4: Valley View Ave (NS) at Bora Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	137.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.462

Intersection Setup

Name	Valley View Ave			Valley View Ave		Bora Dr	
Approach	Northbound			Southbound		Eastbound	
Lane Configuration							
Turning Movement	U-turn	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00		25.00	
Grade [%]	0.00			0.00		0.00	
Crosswalk	No			No		No	

Volumes

Name	Valley View Ave			Valley View Ave		Bora Dr	
Base Volume Input [veh/h]	0	110	924	1343	30	18	92
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	110	924	1343	30	18	92
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	28	231	336	8	5	23
Total Analysis Volume [veh/h]	0	110	924	1343	30	18	92
Pedestrian Volume [ped/h]	0			0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.22	0.01	0.01	0.00	0.46	0.23
d_M, Delay for Movement [s/veh]	38.98	14.32	0.00	0.00	0.00	136.97	53.68
Movement LOS	E	B	A	A	A	F	F
95th-Percentile Queue Length [veh/ln]	0.84	0.84	0.00	0.00	0.00	4.06	4.06
95th-Percentile Queue Length [ft/ln]	21.03	21.03	0.00	0.00	0.00	101.44	101.44
d_A, Approach Delay [s/veh]	1.52			0.00		67.31	
Approach LOS	A			A		F	
d_I, Intersection Delay [s/veh]	3.57						
Intersection LOS	F						

Intersection Level Of Service Report
Intersection 6: Valley View Ave (NS) at De Alcala Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	146.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Valley View Ave			Valley View Ave				Commercial Dwy			De Alcala Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	77.00	100.00	100.00	103.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00				25.00			25.00		
Grade [%]	0.00			0.00				0.00			0.00		
Crosswalk	No			No				No			No		

Volumes

Name	Valley View Ave			Valley View Ave				Commercial Dwy			De Alcala Dr		
Base Volume Input [veh/h]	4	965	5	0	65	1368	3	2	0	2	3	0	64
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	965	5	0	65	1368	3	2	0	2	3	0	64
Peak Hour Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	241	1	0	16	342	1	1	0	1	1	0	16
Total Analysis Volume [veh/h]	4	965	5	0	65	1368	3	2	0	2	3	0	64
Pedestrian Volume [ped/h]	0			0				0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.00	0.09	0.01	0.00	0.07	0.00	0.01	0.06	0.00	0.12
d_M, Delay for Movement [s/veh]	12.31	0.00	0.00	20.97	10.61	0.00	0.00	133.12	146.08	19.38	86.53	145.64	12.72
Movement LOS	B	A	A	C	B	A	A	F	F	C	F	F	B
95th-Percentile Queue Length [veh/ln]	0.02	0.00	0.00	0.30	0.30	0.00	0.00	0.23	0.23	0.23	0.20	0.20	0.41
95th-Percentile Queue Length [ft/ln]	0.61	0.00	0.00	7.57	7.57	0.00	0.00	5.73	5.73	5.73	4.92	4.92	10.23
d_A, Approach Delay [s/veh]	0.05			0.48				76.25			16.03		
Approach LOS	A			A				F			C		
d_I, Intersection Delay [s/veh]	0.85												
Intersection LOS	F												

Intersection Level Of Service Report
Intersection 7: Valley View Ave (NS) at Rosecrans Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.798

Intersection Setup

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	136.00	100.00	100.00	176.00	100.00	100.00	195.00	100.00	100.00	85.00	100.00	100.00
Speed [mph]	40.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Base Volume Input [veh/h]	126	690	45	143	1063	81	93	451	68	169	844	162
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	126	690	45	143	1063	81	93	451	68	169	844	162
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	173	11	36	266	20	23	113	17	42	211	41
Total Analysis Volume [veh/h]	126	690	45	143	1063	81	93	451	68	169	844	162
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.23	0.23	0.09	0.33	0.05	0.06	0.14	0.04	0.11	0.26	0.10
Intersection LOS	C											
Intersection V/C	0.798											

13811 Valley View Avenue Project

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Scenario 1 Existing
5/23/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Valley View Ave (NS) at Imperial Hwy (EW)	Signalized	ICU 1	NB Thru	0.808	-	D
2	Valley View Ave (NS) at Adoree St (EW)	Signalized	ICU 1	NB Thru	0.550	-	A
3	Valley View Ave (NS) at Foster Rd (EW)	Signalized	ICU 1	NB Thru	0.627	-	B
4	Valley View Ave (NS) at Bora Dr (EW)	Two-way stop	HCM 6th Edition	EB Left	0.234	74.0	F
6	Valley View Ave (NS) at De Alcala Dr (EW)	Two-way stop	HCM 6th Edition	WB Thru	0.000	149.1	F
7	Valley View Ave (NS) at Rosecrans Ave (EW)	Signalized	ICU 1	NB Thru	0.922	-	E

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Valley View Ave (NS) at Imperial Hwy (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.808

Intersection Setup

Name	Valley View Ave			Valley View Ave			Imperial Hwy			Imperial Hwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	293.00	100.00	100.00	204.00	100.00	100.00	150.00	100.00	100.00	195.00	100.00	100.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Valley View Ave			Valley View Ave			Imperial Hwy			Imperial Hwy		
Base Volume Input [veh/h]	207	865	173	88	593	46	125	1004	224	203	748	58
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	207	865	173	88	593	46	125	1004	224	203	748	58
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	52	216	43	22	148	12	31	251	56	51	187	15
Total Analysis Volume [veh/h]	207	865	173	88	593	46	125	1004	224	203	748	58
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.27	0.11	0.06	0.19	0.03	0.08	0.26	0.26	0.13	0.17	0.17
Intersection LOS	D											
Intersection V/C	0.808											

Intersection Level Of Service Report
Intersection 2: Valley View Ave (NS) at Adoree St (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.550

Intersection Setup

Name	Valley View Ave		Valley View Ave		Adoree St	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	105.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		Yes	

Volumes

Name	Valley View Ave		Valley View Ave		Adoree St	
Base Volume Input [veh/h]	12	1299	932	92	66	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	12	1299	932	92	66	5
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	325	233	23	17	1
Total Analysis Volume [veh/h]	12	1299	932	92	66	5
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	5	2	6	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.41	0.29	0.06	0.04	0.04
Intersection LOS	A					
Intersection V/C	0.550					

Intersection Level Of Service Report
Intersection 3: Valley View Ave (NS) at Foster Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.627

Intersection Setup

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	160.00	100.00	100.00	160.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
Base Volume Input [veh/h]	103	1234	39	24	952	44	52	30	84	36	31	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	103	1234	39	24	952	44	52	30	84	36	31	24
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	309	10	6	238	11	13	8	21	9	8	6
Total Analysis Volume [veh/h]	103	1234	39	24	952	44	52	30	84	36	31	24
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.39	0.02	0.02	0.30	0.03	0.03	0.10	0.10	0.02	0.06	0.06
Intersection LOS	B											
Intersection V/C	0.627											

Intersection Level Of Service Report
Intersection 4: Valley View Ave (NS) at Bora Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	74.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.234

Intersection Setup

Name	Valley View Ave			Valley View Ave		Bora Dr	
Approach	Northbound			Southbound		Eastbound	
Lane Configuration							
Turning Movement	U-turn	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00		25.00	
Grade [%]	0.00			0.00		0.00	
Crosswalk	No			No		No	

Volumes

Name	Valley View Ave			Valley View Ave		Bora Dr	
Base Volume Input [veh/h]	0	80	1328	1004	32	14	61
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	80	1328	1004	32	14	61
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	20	332	251	8	4	15
Total Analysis Volume [veh/h]	0	80	1328	1004	32	14	61
Pedestrian Volume [ped/h]	0			0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.12	0.01	0.01	0.00	0.23	0.12
d_M, Delay for Movement [s/veh]	22.11	11.14	0.00	0.00	0.00	73.99	20.91
Movement LOS	C	B	A	A	A	F	C
95th-Percentile Queue Length [veh/ln]	0.41	0.41	0.00	0.00	0.00	1.50	1.50
95th-Percentile Queue Length [ft/ln]	10.17	10.17	0.00	0.00	0.00	37.51	37.51
d_A, Approach Delay [s/veh]	0.63			0.00		30.82	
Approach LOS	A			A		D	
d_I, Intersection Delay [s/veh]	1.27						
Intersection LOS	F						

Intersection Level Of Service Report
Intersection 6: Valley View Ave (NS) at De Alcala Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	149.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Valley View Ave			Valley View Ave				Commercial Dwy			De Alcala Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	77.00	100.00	100.00	103.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00				25.00			25.00		
Grade [%]	0.00			0.00				0.00			0.00		
Crosswalk	No			No				No			No		

Volumes

Name	Valley View Ave			Valley View Ave				Commercial Dwy			De Alcala Dr		
Base Volume Input [veh/h]	5	1363	6	0	34	1028	3	5	0	8	4	0	39
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	1363	6	0	34	1028	3	5	0	8	4	0	39
Peak Hour Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	341	2	0	9	257	1	1	0	2	1	0	10
Total Analysis Volume [veh/h]	5	1363	6	0	34	1028	3	5	0	8	4	0	39
Pedestrian Volume [ped/h]	0			0				0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.00	0.07	0.01	0.00	0.12	0.00	0.02	0.11	0.00	0.10
d_M, Delay for Movement [s/veh]	10.42	0.00	0.00	33.66	12.77	0.00	0.00	93.19	142.56	17.50	119.06	149.11	15.18
Movement LOS	B	A	A	D	B	A	A	F	F	C	F	F	C
95th-Percentile Queue Length [veh/ln]	0.02	0.00	0.00	0.22	0.22	0.00	0.00	0.43	0.43	0.43	0.35	0.35	0.33
95th-Percentile Queue Length [ft/ln]	0.56	0.00	0.00	5.48	5.48	0.00	0.00	10.85	10.85	10.85	8.76	8.76	8.21
d_A, Approach Delay [s/veh]	0.04			0.41				46.61			24.84		
Approach LOS	A			A				E			C		
d_I, Intersection Delay [s/veh]	0.87												
Intersection LOS	F												

Intersection Level Of Service Report
Intersection 7: Valley View Ave (NS) at Rosecrans Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.922

Intersection Setup

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	136.00	100.00	100.00	176.00	100.00	100.00	195.00	100.00	100.00	85.00	100.00	100.00
Speed [mph]	40.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Base Volume Input [veh/h]	70	1105	58	180	691	37	149	810	71	149	491	189
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	70	1105	58	180	691	37	149	810	71	149	491	189
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	276	15	45	173	9	37	203	18	37	123	47
Total Analysis Volume [veh/h]	70	1105	58	180	691	37	149	810	71	149	491	189
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.36	0.36	0.11	0.22	0.02	0.09	0.25	0.04	0.09	0.15	0.12
Intersection LOS	E											
Intersection V/C	0.922											

Existing Plus Project

13811 Valley View Avenue Project

Vistro File: G:\...\AM E.vistro
Report File: G:\...\AM EP.pdf

Scenario 2 Existing Plus Project
5/23/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Valley View Ave (NS) at Imperial Hwy (EW)	Signalized	ICU 1	WB Thru	0.835	-	D
2	Valley View Ave (NS) at Adoree St (EW)	Signalized	ICU 1	SB Thru	0.521	-	A
3	Valley View Ave (NS) at Foster Rd (EW)	Signalized	ICU 1	SB Thru	0.790	-	C
4	Valley View Ave (NS) at Bora Dr (EW)	Two-way stop	HCM 6th Edition	EB Left	0.495	150.0	F
5	Valley View Ave (NS) at Project Dwy (EW)	Two-way stop	HCM 6th Edition	EB Right	0.054	15.2	C
6	Valley View Ave (NS) at De Alcala Dr (EW)	Two-way stop	HCM 6th Edition	EB Thru	0.000	158.1	F
7	Valley View Ave (NS) at Rosecrans Ave (EW)	Signalized	ICU 1	SB Thru	0.801	-	D

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Valley View Ave (NS) at Imperial Hwy (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.835

Intersection Setup

Name	Valley View Ave			Valley View Ave			Imperial Hwy			Imperial Hwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	293.00	100.00	100.00	204.00	100.00	100.00	150.00	100.00	100.00	195.00	100.00	100.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Valley View Ave			Valley View Ave			Imperial Hwy			Imperial Hwy		
Base Volume Input [veh/h]	251	530	166	64	837	92	60	710	196	177	1294	38
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	1	2	0	0	0	0	0	1	1	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	254	531	168	64	837	92	60	710	197	178	1294	38
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	64	133	42	16	209	23	15	178	49	45	324	10
Total Analysis Volume [veh/h]	254	531	168	64	837	92	60	710	197	178	1294	38
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.16	0.17	0.11	0.04	0.26	0.06	0.04	0.19	0.19	0.11	0.28	0.28
Intersection LOS	D											
Intersection V/C	0.835											

Intersection Level Of Service Report
Intersection 2: Valley View Ave (NS) at Adoree St (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.521

Intersection Setup

Name	Valley View Ave		Valley View Ave		Adoree St	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	105.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		Yes	

Volumes

Name	Valley View Ave		Valley View Ave		Adoree St	
Base Volume Input [veh/h]	6	912	1152	60	75	16
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	6	2	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	918	1154	60	75	16
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	230	289	15	19	4
Total Analysis Volume [veh/h]	6	918	1154	60	75	16
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	5	2	6	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.29	0.36	0.04	0.05	0.06
Intersection LOS	A					
Intersection V/C	0.521					

Intersection Level Of Service Report
Intersection 3: Valley View Ave (NS) at Foster Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.790

Intersection Setup

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	160.00	100.00	100.00	160.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
Base Volume Input [veh/h]	138	868	41	27	1171	76	70	57	191	61	99	48
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	6	0	0	2	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	139	874	41	27	1173	76	70	57	191	61	99	48
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	35	219	10	7	293	19	18	14	48	15	25	12
Total Analysis Volume [veh/h]	139	874	41	27	1173	76	70	57	191	61	99	48
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.27	0.03	0.02	0.37	0.05	0.04	0.20	0.20	0.04	0.13	0.13
Intersection LOS	C											
Intersection V/C	0.790											

Intersection Level Of Service Report
Intersection 4: Valley View Ave (NS) at Bora Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	150.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.495

Intersection Setup

Name	Valley View Ave			Valley View Ave		Bora Dr	
Approach	Northbound			Southbound		Eastbound	
Lane Configuration							
Turning Movement	U-turn	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00		25.00	
Grade [%]	0.00			0.00		0.00	
Crosswalk	No			No		No	

Volumes

Name	Valley View Ave			Valley View Ave		Bora Dr	
Base Volume Input [veh/h]	0	110	924	1343	30	18	92
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	7	2	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	110	931	1345	30	18	92
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	28	233	336	8	5	23
Total Analysis Volume [veh/h]	5	110	931	1345	30	18	92
Pedestrian Volume [ped/h]	0			0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.22	0.01	0.01	0.00	0.50	0.23
d_M, Delay for Movement [s/veh]	40.04	15.29	0.00	0.00	0.00	149.99	60.00
Movement LOS	E	C	A	A	A	F	F
95th-Percentile Queue Length [veh/ln]	1.00	1.00	0.00	0.00	0.00	4.34	4.34
95th-Percentile Queue Length [ft/ln]	25.07	25.07	0.00	0.00	0.00	108.38	108.38
d_A, Approach Delay [s/veh]	1.80			0.00		74.72	
Approach LOS	A			A		F	
d_I, Intersection Delay [s/veh]	3.99						
Intersection LOS	F						

Intersection Level Of Service Report
Intersection 5: Valley View Ave (NS) at Project Dwy (EW)

Control Type:	Two-way stop	Delay (sec / veh):	15.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.054

Intersection Setup

Name	Valley View Ave		Valley View Ave		Project Dwy	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Valley View Ave		Valley View Ave		Project Dwy	
Base Volume Input [veh/h]	0	1034	1436	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	12	0	7	0	20
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1046	1436	7	0	20
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	262	359	2	0	5
Total Analysis Volume [veh/h]	0	1046	1436	7	0	20
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.01	0.00	0.00	0.05
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	15.24
Movement LOS		A	A	A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.17
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	4.25
d_A, Approach Delay [s/veh]	0.00		0.00		15.24	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.12					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 6: Valley View Ave (NS) at De Alcala Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	158.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Valley View Ave			Valley View Ave				Commercial Dwy			De Alcala Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	77.00	100.00	100.00	103.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00				25.00			25.00		
Grade [%]	0.00			0.00				0.00			0.00		
Crosswalk	No			No				No			No		

Volumes

Name	Valley View Ave			Valley View Ave				Commercial Dwy			De Alcala Dr		
Base Volume Input [veh/h]	4	965	5	0	65	1368	3	2	0	2	3	0	64
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	5	0	7	0	13	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	970	5	7	65	1381	3	2	0	2	3	0	64
Peak Hour Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	243	1	2	16	345	1	1	0	1	1	0	16
Total Analysis Volume [veh/h]	4	970	5	7	65	1381	3	2	0	2	3	0	64
Pedestrian Volume [ped/h]	0			0				0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.03	0.09	0.01	0.00	0.07	0.00	0.01	0.07	0.00	0.12
d_M, Delay for Movement [s/veh]	12.39	0.00	0.00	21.44	10.98	0.00	0.00	143.61	158.07	20.28	92.66	157.54	12.76
Movement LOS	B	A	A	C	B	A	A	F	F	C	F	F	B
95th-Percentile Queue Length [veh/ln]	0.02	0.00	0.00	0.37	0.37	0.00	0.00	0.25	0.25	0.25	0.21	0.21	0.41
95th-Percentile Queue Length [ft/ln]	0.62	0.00	0.00	9.29	9.29	0.00	0.00	6.16	6.16	6.16	5.27	5.27	10.27
d_A, Approach Delay [s/veh]	0.05			0.59				81.95			16.33		
Approach LOS	A			A				F			C		
d_I, Intersection Delay [s/veh]	0.93												
Intersection LOS	F												

Intersection Level Of Service Report
Intersection 7: Valley View Ave (NS) at Rosecrans Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.801

Intersection Setup

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	136.00	100.00	100.00	176.00	100.00	100.00	195.00	100.00	100.00	85.00	100.00	100.00
Speed [mph]	40.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Base Volume Input [veh/h]	126	690	45	143	1063	81	93	451	68	169	844	162
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	0	2	9	2	1	0	0	0	0	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	126	693	45	145	1072	83	94	451	68	169	844	163
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	173	11	36	268	21	24	113	17	42	211	41
Total Analysis Volume [veh/h]	126	693	45	145	1072	83	94	451	68	169	844	163
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.23	0.23	0.09	0.34	0.05	0.06	0.14	0.04	0.11	0.26	0.10
Intersection LOS	D											
Intersection V/C	0.801											

13811 Valley View Avenue Project

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Scenario 2 Existing Plus Project
5/23/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Valley View Ave (NS) at Imperial Hwy (EW)	Signalized	ICU 1	NB Thru	0.810	-	D
2	Valley View Ave (NS) at Adoree St (EW)	Signalized	ICU 1	NB Thru	0.552	-	A
3	Valley View Ave (NS) at Foster Rd (EW)	Signalized	ICU 1	NB Thru	0.629	-	B
4	Valley View Ave (NS) at Bora Dr (EW)	Two-way stop	HCM 6th Edition	EB Left	0.263	83.5	F
5	Valley View Ave (NS) at Project Dwy (EW)	Two-way stop	HCM 6th Edition	EB Right	0.024	12.5	B
6	Valley View Ave (NS) at De Alcala Dr (EW)	Two-way stop	HCM 6th Edition	WB Thru	0.000	163.1	F
7	Valley View Ave (NS) at Rosecrans Ave (EW)	Signalized	ICU 1	NB Thru	0.926	-	E

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Valley View Ave (NS) at Imperial Hwy (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.810

Intersection Setup

Name	Valley View Ave			Valley View Ave			Imperial Hwy			Imperial Hwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	293.00	100.00	100.00	204.00	100.00	100.00	150.00	100.00	100.00	195.00	100.00	100.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Valley View Ave			Valley View Ave			Imperial Hwy			Imperial Hwy		
Base Volume Input [veh/h]	207	865	173	88	593	46	125	1004	224	203	748	58
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	1	1	0	1	0	0	0	3	2	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	209	866	174	88	594	46	125	1004	227	205	748	58
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	52	217	44	22	149	12	31	251	57	51	187	15
Total Analysis Volume [veh/h]	209	866	174	88	594	46	125	1004	227	205	748	58
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.27	0.11	0.06	0.19	0.03	0.08	0.26	0.26	0.13	0.17	0.17
Intersection LOS	D											
Intersection V/C	0.810											

Intersection Level Of Service Report
Intersection 2: Valley View Ave (NS) at Adoree St (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.552

Intersection Setup

Name	Valley View Ave		Valley View Ave		Adoree St	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	105.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		Yes	

Volumes

Name	Valley View Ave		Valley View Ave		Adoree St	
Base Volume Input [veh/h]	12	1299	932	92	66	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	6	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	12	1303	938	92	66	5
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	326	235	23	17	1
Total Analysis Volume [veh/h]	12	1303	938	92	66	5
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	5	2	6	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.41	0.29	0.06	0.04	0.04
Intersection LOS	A					
Intersection V/C	0.552					

Intersection Level Of Service Report
Intersection 3: Valley View Ave (NS) at Foster Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.629

Intersection Setup

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	160.00	100.00	100.00	160.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
Base Volume Input [veh/h]	103	1234	39	24	952	44	52	30	84	36	31	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	4	0	0	6	0	0	0	1	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	104	1238	39	24	958	44	52	30	85	36	31	24
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	310	10	6	240	11	13	8	21	9	8	6
Total Analysis Volume [veh/h]	104	1238	39	24	958	44	52	30	85	36	31	24
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.39	0.02	0.02	0.30	0.03	0.03	0.10	0.10	0.02	0.06	0.06
Intersection LOS	B											
Intersection V/C	0.629											

Intersection Level Of Service Report
Intersection 4: Valley View Ave (NS) at Bora Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	83.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.263

Intersection Setup

Name	Valley View Ave			Valley View Ave		Bora Dr	
Approach	Northbound			Southbound		Eastbound	
Lane Configuration							
Turning Movement	U-turn	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00		25.00	
Grade [%]	0.00			0.00		0.00	
Crosswalk	No			No		No	

Volumes

Name	Valley View Ave			Valley View Ave		Bora Dr	
Base Volume Input [veh/h]	0	80	1328	1004	32	14	61
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	13	0	5	7	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	80	1333	1011	32	14	61
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	20	333	253	8	4	15
Total Analysis Volume [veh/h]	13	80	1333	1011	32	14	61
Pedestrian Volume [ped/h]	0			0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.12	0.01	0.01	0.00	0.26	0.12
d_M, Delay for Movement [s/veh]	23.10	11.97	0.00	0.00	0.00	83.48	22.93
Movement LOS	C	B	A	A	A	F	C
95th-Percentile Queue Length [veh/ln]	0.55	0.55	0.00	0.00	0.00	1.67	1.67
95th-Percentile Queue Length [ft/ln]	13.65	13.65	0.00	0.00	0.00	41.75	41.75
d_A, Approach Delay [s/veh]	0.88			0.00		34.23	
Approach LOS	A			A		D	
d_I, Intersection Delay [s/veh]	1.50						
Intersection LOS	F						

Intersection Level Of Service Report
Intersection 5: Valley View Ave (NS) at Project Dwy (EW)

Control Type:	Two-way stop	Delay (sec / veh):	12.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.024

Intersection Setup

Name	Valley View Ave		Valley View Ave		Project Dwy	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Valley View Ave		Valley View Ave		Project Dwy	
Base Volume Input [veh/h]	0	1408	1065	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	18	0	20	0	12
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1426	1065	20	0	12
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	357	266	5	0	3
Total Analysis Volume [veh/h]	0	1426	1065	20	0	12
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.01	0.00	0.00	0.02
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	12.51
Movement LOS		A	A	A		B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.07
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	1.87
d_A, Approach Delay [s/veh]	0.00		0.00		12.51	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.06					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 6: Valley View Ave (NS) at De Alcala Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	163.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Valley View Ave			Valley View Ave				Commercial Dwy			De Alcala Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	77.00	100.00	100.00	103.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00				25.00			25.00		
Grade [%]	0.00			0.00				0.00			0.00		
Crosswalk	No			No				No			No		

Volumes

Name	Valley View Ave			Valley View Ave				Commercial Dwy			De Alcala Dr		
Base Volume Input [veh/h]	5	1363	6	0	34	1028	3	5	0	8	4	0	39
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	13	0	5	0	7	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	1376	6	5	34	1035	3	5	0	8	4	0	39
Peak Hour Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	344	2	1	9	259	1	1	0	2	1	0	10
Total Analysis Volume [veh/h]	5	1376	6	5	34	1035	3	5	0	8	4	0	39
Pedestrian Volume [ped/h]	0			0				0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.04	0.07	0.01	0.00	0.12	0.00	0.02	0.12	0.00	0.10
d_M, Delay for Movement [s/veh]	10.45	0.00	0.00	34.97	13.55	0.00	0.00	100.29	155.27	18.34	129.46	163.15	15.29
Movement LOS	B	A	A	D	B	A	A	F	F	C	F	F	C
95th-Percentile Queue Length [veh/ln]	0.02	0.00	0.00	0.31	0.31	0.00	0.00	0.47	0.47	0.47	0.38	0.38	0.33
95th-Percentile Queue Length [ft/ln]	0.57	0.00	0.00	7.82	7.82	0.00	0.00	11.63	11.63	11.63	9.43	9.43	8.30
d_A, Approach Delay [s/veh]	0.04			0.59				49.86			25.91		
Approach LOS	A			A				E			D		
d_I, Intersection Delay [s/veh]	0.97												
Intersection LOS	F												

Intersection Level Of Service Report
Intersection 7: Valley View Ave (NS) at Rosecrans Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.926

Intersection Setup

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	136.00	100.00	100.00	176.00	100.00	100.00	195.00	100.00	100.00	85.00	100.00	100.00
Speed [mph]	40.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Base Volume Input [veh/h]	70	1105	58	180	691	37	149	810	71	149	491	189
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	9	0	1	5	1	2	0	0	0	0	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	70	1114	58	181	696	38	151	810	71	149	491	191
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	279	15	45	174	10	38	203	18	37	123	48
Total Analysis Volume [veh/h]	70	1114	58	181	696	38	151	810	71	149	491	191
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.37	0.37	0.11	0.22	0.02	0.09	0.25	0.04	0.09	0.15	0.12
Intersection LOS	E											
Intersection V/C	0.926											

13811 Valley View Avenue Project

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Scenario 2 Existing Plus Project
6/13/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
4	Valley View Ave (NS) at Bora Dr (EW)	Two-way stop	HCM 6th Edition	NB U-T	0.037	34.6	D
6	Valley View Ave (NS) at De Alcala Dr (EW)	Two-way stop	HCM 6th Edition	SB U-T	0.030	21.5	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 4: Valley View Ave (NS) at Bora Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	34.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.037

Intersection Setup

Name	Valley View Ave			Valley View Ave		Bora Dr	
Approach	Northbound			Southbound		Eastbound	
Lane Configuration							
Turning Movement	U-turn	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00		25.00	
Grade [%]	0.00			0.00		0.00	
Crosswalk	No			No		No	

Volumes

Name	Valley View Ave			Valley View Ave		Bora Dr	
Base Volume Input [veh/h]	0	110	924	1343	30	0	110
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	7	2	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	110	931	1345	30	0	110
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	28	233	336	8	0	28
Total Analysis Volume [veh/h]	5	110	931	1345	30	0	110
Pedestrian Volume [ped/h]	0			0		0	

Intersection Settings

Priority Scheme	Free			Free		Stop	
Flared Lane							
Storage Area [veh]	0			0		0	
Two-Stage Gap Acceptance						No	
Number of Storage Spaces in Median	0			0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.22	0.01	0.01	0.00	0.00	0.28
d_M, Delay for Movement [s/veh]	34.62	15.10	0.00	0.00	0.00	0.00	17.46
Movement LOS	D	C	A	A	A		C
95th-Percentile Queue Length [veh/ln]	0.97	0.97	0.00	0.00	0.00	0.00	1.11
95th-Percentile Queue Length [ft/ln]	24.20	24.20	0.00	0.00	0.00	0.00	27.79
d_A, Approach Delay [s/veh]	1.75			0.00		17.46	
Approach LOS	A			A		C	
d_I, Intersection Delay [s/veh]	1.48						
Intersection LOS	D						

Intersection Level Of Service Report
Intersection 6: Valley View Ave (NS) at De Alcala Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	21.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.030

Intersection Setup

Name	Valley View Ave			Valley View Ave				Commercial Dwy			De Alcala Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	77.00	100.00	100.00	103.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00				25.00			25.00		
Grade [%]	0.00			0.00				0.00			0.00		
Crosswalk	No			No				No			No		

Volumes

Name	Valley View Ave			Valley View Ave				Commercial Dwy			De Alcala Dr		
Base Volume Input [veh/h]	4	965	5	0	65	1368	3	0	0	4	0	0	67
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	5	0	7	0	13	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	970	5	7	65	1381	3	0	0	4	0	0	67
Peak Hour Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	243	1	2	16	345	1	0	0	1	0	0	17
Total Analysis Volume [veh/h]	4	970	5	7	65	1381	3	0	0	4	0	0	67
Pedestrian Volume [ped/h]	0			0				0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.03	0.09	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.13
d_M, Delay for Movement [s/veh]	12.39	0.00	0.00	21.54	10.98	0.00	0.00	0.00	0.00	14.39	0.00	0.00	12.81
Movement LOS	B	A	A	C	B	A	A			B			B
95th-Percentile Queue Length [veh/ln]	0.02	0.00	0.00	0.37	0.37	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.43
95th-Percentile Queue Length [ft/ln]	0.62	0.00	0.00	9.31	9.31	0.00	0.00	0.00	0.00	0.78	0.00	0.00	10.82
d_A, Approach Delay [s/veh]	0.05			0.59				14.39			12.81		
Approach LOS	A			A				B			B		
d_I, Intersection Delay [s/veh]	0.73												
Intersection LOS	C												

13811 Valley View Avenue Project

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Scenario 2 Existing Plus Project
6/13/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
4	Valley View Ave (NS) at Bora Dr (EW)	Two-way stop	HCM 6th Edition	NB U-T	0.062	23.7	C
6	Valley View Ave (NS) at De Alcala Dr (EW)	Two-way stop	HCM 6th Edition	SB U-T	0.038	33.8	D

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 4: Valley View Ave (NS) at Bora Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	23.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.062

Intersection Setup

Name	Valley View Ave			Valley View Ave		Bora Dr	
Approach	Northbound			Southbound		Eastbound	
Lane Configuration							
Turning Movement	U-turn	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00		25.00	
Grade [%]	0.00			0.00		0.00	
Crosswalk	No			No		No	

Volumes

Name	Valley View Ave			Valley View Ave		Bora Dr	
Base Volume Input [veh/h]	0	80	1328	1004	32	0	75
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	13	0	5	7	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	80	1333	1011	32	0	75
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	20	333	253	8	0	19
Total Analysis Volume [veh/h]	13	80	1333	1011	32	0	75
Pedestrian Volume [ped/h]	0			0		0	

Intersection Settings

Priority Scheme	Free			Free		Stop	
Flared Lane							
Storage Area [veh]	0			0		0	
Two-Stage Gap Acceptance						No	
Number of Storage Spaces in Median	0			0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.12	0.01	0.01	0.00	0.00	0.15
d_M, Delay for Movement [s/veh]	23.67	12.00	0.00	0.00	0.00	0.00	13.23
Movement LOS	C	B	A	A	A		B
95th-Percentile Queue Length [veh/ln]	0.55	0.55	0.00	0.00	0.00	0.00	0.51
95th-Percentile Queue Length [ft/ln]	13.82	13.82	0.00	0.00	0.00	0.00	12.75
d_A, Approach Delay [s/veh]	0.89			0.00		13.23	
Approach LOS	A			A		B	
d_I, Intersection Delay [s/veh]	0.89						
Intersection LOS	C						

Intersection Level Of Service Report
Intersection 6: Valley View Ave (NS) at De Alcala Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	33.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.038

Intersection Setup

Name	Valley View Ave			Valley View Ave				Commercial Dwy			De Alcala Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	77.00	100.00	100.00	103.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00				25.00			25.00		
Grade [%]	0.00			0.00				0.00			0.00		
Crosswalk	No			No				No			No		

Volumes

Name	Valley View Ave			Valley View Ave				Commercial Dwy			De Alcala Dr		
Base Volume Input [veh/h]	5	1363	6	0	34	1028	3	0	0	13	0	0	43
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	13	0	5	0	7	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	1376	6	5	34	1035	3	0	0	13	0	0	43
Peak Hour Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	344	2	1	9	259	1	0	0	3	0	0	11
Total Analysis Volume [veh/h]	5	1376	6	5	34	1035	3	0	0	13	0	0	43
Pedestrian Volume [ped/h]	0			0				0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.04	0.07	0.01	0.00	0.00	0.00	0.03	0.00	0.00	0.11
d_M, Delay for Movement [s/veh]	10.45	0.00	0.00	33.75	13.51	0.00	0.00	0.00	0.00	12.35	0.00	0.00	15.41
Movement LOS	B	A	A	D	B	A	A			B			C
95th-Percentile Queue Length [veh/ln]	0.02	0.00	0.00	0.31	0.31	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.37
95th-Percentile Queue Length [ft/ln]	0.57	0.00	0.00	7.69	7.69	0.00	0.00	0.00	0.00	1.99	0.00	0.00	9.25
d_A, Approach Delay [s/veh]	0.04			0.58				12.35			15.41		
Approach LOS	A			A				B			C		
d_I, Intersection Delay [s/veh]	0.60												
Intersection LOS	D												

Opening Year (2021) Without Project

13811 Valley View Avenue Project

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Scenario 1 Opening Year (2021) Without Project
5/23/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Valley View Ave (NS) at Imperial Hwy (EW)	Signalized	ICU 1	WB Right	0.850	-	D
2	Valley View Ave (NS) at Adoree St (EW)	Signalized	ICU 1	SB Thru	0.532	-	A
3	Valley View Ave (NS) at Foster Rd (EW)	Signalized	ICU 1	SB Thru	0.805	-	D
4	Valley View Ave (NS) at Bora Dr (EW)	Two-way stop	HCM 6th Edition	EB Left	0.507	156.2	F
6	Valley View Ave (NS) at De Alcala Dr (EW)	Two-way stop	HCM 6th Edition	EB Thru	0.000	160.2	F
7	Valley View Ave (NS) at Rosecrans Ave (EW)	Signalized	ICU 1	SB Thru	0.814	-	D

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Valley View Ave (NS) at Imperial Hwy (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.850

Intersection Setup

Name	Valley View Ave			Valley View Ave			Imperial Hwy			Imperial Hwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	293.00	100.00	100.00	204.00	100.00	100.00	150.00	100.00	100.00	195.00	100.00	100.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Valley View Ave			Valley View Ave			Imperial Hwy			Imperial Hwy		
Base Volume Input [veh/h]	251	530	166	64	837	92	60	710	196	177	1294	38
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	1	1	0	0	0	0	0	1	0	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	258	542	170	65	854	94	61	724	201	181	1321	39
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	65	136	43	16	214	24	15	181	50	45	330	10
Total Analysis Volume [veh/h]	258	542	170	65	854	94	61	724	201	181	1321	39
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.16	0.17	0.11	0.04	0.27	0.06	0.04	0.19	0.19	0.11	0.28	0.28
Intersection LOS	D											
Intersection V/C	0.850											

Intersection Level Of Service Report
Intersection 2: Valley View Ave (NS) at Adoree St (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.532

Intersection Setup

Name	Valley View Ave		Valley View Ave		Adoree St	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	105.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		Yes	

Volumes

Name	Valley View Ave		Valley View Ave		Adoree St	
Base Volume Input [veh/h]	6	912	1152	60	75	16
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	10	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	932	1185	61	77	16
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	233	296	15	19	4
Total Analysis Volume [veh/h]	6	932	1185	61	77	16
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	5	2	6	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.29	0.37	0.04	0.05	0.06
Intersection LOS	A					
Intersection V/C	0.532					

Intersection Level Of Service Report
Intersection 3: Valley View Ave (NS) at Foster Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.805

Intersection Setup

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	160.00	100.00	100.00	160.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
Base Volume Input [veh/h]	138	868	41	27	1171	76	70	57	191	61	99	48
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	0	0	9	1	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	141	887	42	28	1203	79	71	58	195	62	101	49
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	35	222	11	7	301	20	18	15	49	16	25	12
Total Analysis Volume [veh/h]	141	887	42	28	1203	79	71	58	195	62	101	49
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.28	0.03	0.02	0.38	0.05	0.04	0.20	0.20	0.04	0.13	0.13
Intersection LOS	D											
Intersection V/C	0.805											

Intersection Level Of Service Report
Intersection 4: Valley View Ave (NS) at Bora Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	156.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.507

Intersection Setup

Name	Valley View Ave			Valley View Ave		Bora Dr	
Approach	Northbound			Southbound		Eastbound	
Lane Configuration							
Turning Movement	U-turn	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00		25.00	
Grade [%]	0.00			0.00		0.00	
Crosswalk	No			No		No	

Volumes

Name	Valley View Ave			Valley View Ave		Bora Dr	
Base Volume Input [veh/h]	0	110	924	1343	30	18	92
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	2	9	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	112	944	1379	31	18	94
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	28	236	345	8	5	24
Total Analysis Volume [veh/h]	0	112	944	1379	31	18	94
Pedestrian Volume [ped/h]	0			0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.23	0.01	0.01	0.00	0.51	0.24
d_M, Delay for Movement [s/veh]	41.57	14.78	0.00	0.00	0.00	156.18	64.13
Movement LOS	E	B	A	A	A	F	F
95th-Percentile Queue Length [veh/ln]	0.90	0.90	0.00	0.00	0.00	4.55	4.55
95th-Percentile Queue Length [ft/ln]	22.41	22.41	0.00	0.00	0.00	113.67	113.67
d_A, Approach Delay [s/veh]	1.57			0.00		78.93	
Approach LOS	A			A		F	
d_I, Intersection Delay [s/veh]	4.07						
Intersection LOS	F						

Intersection Level Of Service Report
Intersection 6: Valley View Ave (NS) at De Alcala Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	160.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Valley View Ave			Valley View Ave				Commercial Dwy			De Alcala Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	77.00	100.00	100.00	103.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00				25.00			25.00		
Grade [%]	0.00			0.00				0.00			0.00		
Crosswalk	No			No				No			No		

Volumes

Name	Valley View Ave			Valley View Ave				Commercial Dwy			De Alcala Dr		
Base Volume Input [veh/h]	4	965	5	0	65	1368	3	2	0	2	3	0	64
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	0	0	0	9	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	986	5	0	66	1404	3	2	0	2	3	0	65
Peak Hour Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	247	1	0	17	351	1	1	0	1	1	0	16
Total Analysis Volume [veh/h]	4	986	5	0	66	1404	3	2	0	2	3	0	65
Pedestrian Volume [ped/h]	0			0				0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.00	0.10	0.01	0.00	0.07	0.00	0.01	0.07	0.00	0.12
d_M, Delay for Movement [s/veh]	12.55	0.00	0.00	21.58	10.74	0.00	0.00	146.05	160.16	20.66	93.28	159.49	12.88
Movement LOS	B	A	A	C	B	A	A	F	F	C	F	F	B
95th-Percentile Queue Length [veh/ln]	0.03	0.00	0.00	0.31	0.31	0.00	0.00	0.25	0.25	0.25	0.21	0.21	0.42
95th-Percentile Queue Length [ft/ln]	0.63	0.00	0.00	7.86	7.86	0.00	0.00	6.26	6.26	6.26	5.30	5.30	10.60
d_A, Approach Delay [s/veh]	0.05			0.48				83.35			16.43		
Approach LOS	A			A				F			C		
d_I, Intersection Delay [s/veh]	0.87												
Intersection LOS	F												

Intersection Level Of Service Report
Intersection 7: Valley View Ave (NS) at Rosecrans Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.814

Intersection Setup

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	136.00	100.00	100.00	176.00	100.00	100.00	195.00	100.00	100.00	85.00	100.00	100.00
Speed [mph]	40.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Base Volume Input [veh/h]	126	690	45	143	1063	81	93	451	68	169	844	162
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	0	1	7	1	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	129	706	46	147	1091	84	95	460	69	172	861	165
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	177	12	37	273	21	24	115	17	43	215	41
Total Analysis Volume [veh/h]	129	706	46	147	1091	84	95	460	69	172	861	165
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.24	0.24	0.09	0.34	0.05	0.06	0.14	0.04	0.11	0.27	0.10
Intersection LOS	D											
Intersection V/C	0.814											

13811 Valley View Avenue Project

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Scenario 1 Opening Year (2021) Without Project
5/23/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Valley View Ave (NS) at Imperial Hwy (EW)	Signalized	ICU 1	NB Thru	0.826	-	D
2	Valley View Ave (NS) at Adoree St (EW)	Signalized	ICU 1	NB Thru	0.562	-	A
3	Valley View Ave (NS) at Foster Rd (EW)	Signalized	ICU 1	NB Thru	0.641	-	B
4	Valley View Ave (NS) at Bora Dr (EW)	Two-way stop	HCM 6th Edition	EB Left	0.253	80.5	F
6	Valley View Ave (NS) at De Alcala Dr (EW)	Two-way stop	HCM 6th Edition	WB Thru	0.000	165.6	F
7	Valley View Ave (NS) at Rosecrans Ave (EW)	Signalized	ICU 1	NB Right	0.950	-	E

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Valley View Ave (NS) at Imperial Hwy (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.826

Intersection Setup

Name	Valley View Ave			Valley View Ave			Imperial Hwy			Imperial Hwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	293.00	100.00	100.00	204.00	100.00	100.00	150.00	100.00	100.00	195.00	100.00	100.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Valley View Ave			Valley View Ave			Imperial Hwy			Imperial Hwy		
Base Volume Input [veh/h]	207	865	173	88	593	46	125	1004	224	203	748	58
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	1	3	1	0	0	4	2	1	4	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	212	882	177	93	606	47	128	1028	230	208	767	62
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	53	221	44	23	152	12	32	257	58	52	192	16
Total Analysis Volume [veh/h]	212	882	177	93	606	47	128	1028	230	208	767	62
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.28	0.11	0.06	0.19	0.03	0.08	0.26	0.26	0.13	0.17	0.17
Intersection LOS	D											
Intersection V/C	0.826											

Intersection Level Of Service Report
Intersection 2: Valley View Ave (NS) at Adoree St (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.562

Intersection Setup

Name	Valley View Ave		Valley View Ave		Adoree St	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	105.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		Yes	

Volumes

Name	Valley View Ave		Valley View Ave		Adoree St	
Base Volume Input [veh/h]	12	1299	932	92	66	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	9	6	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	12	1334	957	94	67	5
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	334	239	24	17	1
Total Analysis Volume [veh/h]	12	1334	957	94	67	5
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	5	2	6	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.42	0.30	0.06	0.04	0.05
Intersection LOS	A					
Intersection V/C	0.562					

Intersection Level Of Service Report
Intersection 3: Valley View Ave (NS) at Foster Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.641

Intersection Setup

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	160.00	100.00	100.00	160.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
Base Volume Input [veh/h]	103	1234	39	24	952	44	52	30	84	36	31	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	8	0	0	6	0	1	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	105	1267	40	24	977	45	54	31	86	37	32	24
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	317	10	6	244	11	14	8	22	9	8	6
Total Analysis Volume [veh/h]	105	1267	40	24	977	45	54	31	86	37	32	24
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.40	0.03	0.02	0.31	0.03	0.03	0.11	0.11	0.02	0.06	0.06
Intersection LOS	B											
Intersection V/C	0.641											

Intersection Level Of Service Report
Intersection 4: Valley View Ave (NS) at Bora Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	80.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.253

Intersection Setup

Name	Valley View Ave			Valley View Ave		Bora Dr	
Approach	Northbound			Southbound		Eastbound	
Lane Configuration							
Turning Movement	U-turn	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00		25.00	
Grade [%]	0.00			0.00		0.00	
Crosswalk	No			No		No	

Volumes

Name	Valley View Ave			Valley View Ave		Bora Dr	
Base Volume Input [veh/h]	0	80	1328	1004	32	14	61
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	8	6	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	82	1363	1030	33	14	62
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	21	341	258	8	4	16
Total Analysis Volume [veh/h]	0	82	1363	1030	33	14	62
Pedestrian Volume [ped/h]	0			0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.13	0.01	0.01	0.00	0.25	0.12
d_M, Delay for Movement [s/veh]	22.93	11.32	0.00	0.00	0.00	80.47	22.49
Movement LOS	C	B	A	A	A	F	C
95th-Percentile Queue Length [veh/ln]	0.43	0.43	0.00	0.00	0.00	1.64	1.64
95th-Percentile Queue Length [ft/ln]	10.74	10.74	0.00	0.00	0.00	40.95	40.95
d_A, Approach Delay [s/veh]	0.64			0.00		33.17	
Approach LOS	A			A		D	
d_I, Intersection Delay [s/veh]	1.33						
Intersection LOS	F						

Intersection Level Of Service Report
Intersection 6: Valley View Ave (NS) at De Alcala Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	165.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Valley View Ave			Valley View Ave				Commercial Dwy			De Alcala Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	77.00	100.00	100.00	103.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00				25.00			25.00		
Grade [%]	0.00			0.00				0.00			0.00		
Crosswalk	No			No				No			No		

Volumes

Name	Valley View Ave			Valley View Ave				Commercial Dwy			De Alcala Dr		
Base Volume Input [veh/h]	5	1363	6	0	34	1028	3	5	0	8	4	0	39
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	8	0	0	0	6	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	1398	6	0	35	1055	3	5	0	8	4	0	40
Peak Hour Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	350	2	0	9	264	1	1	0	2	1	0	10
Total Analysis Volume [veh/h]	5	1398	6	0	35	1055	3	5	0	8	4	0	40
Pedestrian Volume [ped/h]	0			0				0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.00	0.07	0.01	0.00	0.13	0.00	0.02	0.12	0.00	0.10
d_M, Delay for Movement [s/veh]	10.55	0.00	0.00	35.49	13.05	0.00	0.00	102.06	157.50	18.68	131.53	165.59	15.51
Movement LOS	B	A	A	E	B	A	A	F	F	C	F	F	C
95th-Percentile Queue Length [veh/ln]	0.02	0.00	0.00	0.23	0.23	0.00	0.00	0.47	0.47	0.47	0.38	0.38	0.35
95th-Percentile Queue Length [ft/ln]	0.58	0.00	0.00	5.84	5.84	0.00	0.00	11.85	11.85	11.85	9.56	9.56	8.69
d_A, Approach Delay [s/veh]	0.04			0.42				50.75			26.06		
Approach LOS	A			A				F			D		
d_I, Intersection Delay [s/veh]	0.90												
Intersection LOS	F												

Intersection Level Of Service Report
Intersection 7: Valley View Ave (NS) at Rosecrans Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.950

Intersection Setup

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	136.00	100.00	100.00	176.00	100.00	100.00	195.00	100.00	100.00	85.00	100.00	100.00
Speed [mph]	40.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Base Volume Input [veh/h]	70	1105	58	180	691	37	149	810	71	149	491	189
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	6	10	1	4	1	1	3	0	8	3	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	71	1133	69	185	709	39	153	829	72	160	504	194
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	283	17	46	177	10	38	207	18	40	126	49
Total Analysis Volume [veh/h]	71	1133	69	185	709	39	153	829	72	160	504	194
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.38	0.38	0.12	0.22	0.02	0.10	0.26	0.05	0.10	0.16	0.12
Intersection LOS	E											
Intersection V/C	0.950											

Opening Year (2021) With Project

13811 Valley View Avenue Project

Vistro File: G:\...\AM OY.vistro
Report File: G:\...\AM OYP.pdf

Scenario 2 Opening Year (2021) With Project
5/23/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Valley View Ave (NS) at Imperial Hwy (EW)	Signalized	ICU 1	WB Right	0.851	-	D
2	Valley View Ave (NS) at Adoree St (EW)	Signalized	ICU 1	SB Thru	0.533	-	A
3	Valley View Ave (NS) at Foster Rd (EW)	Signalized	ICU 1	SB Thru	0.807	-	D
4	Valley View Ave (NS) at Bora Dr (EW)	Two-way stop	HCM 6th Edition	EB Left	0.545	172.5	F
5	Valley View Ave (NS) at Project Dwy (EW)	Two-way stop	HCM 6th Edition	EB Right	0.055	15.6	C
6	Valley View Ave (NS) at De Alcala Dr (EW)	Two-way stop	HCM 6th Edition	EB Thru	0.000	173.6	F
7	Valley View Ave (NS) at Rosecrans Ave (EW)	Signalized	ICU 1	SB Thru	0.818	-	D

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Valley View Ave (NS) at Imperial Hwy (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.851

Intersection Setup

Name	Valley View Ave			Valley View Ave			Imperial Hwy			Imperial Hwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	293.00	100.00	100.00	204.00	100.00	100.00	150.00	100.00	100.00	195.00	100.00	100.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Valley View Ave			Valley View Ave			Imperial Hwy			Imperial Hwy		
Base Volume Input [veh/h]	251	530	166	64	837	92	60	710	196	177	1294	38
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	2	3	0	0	0	0	0	2	1	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	261	543	172	65	854	94	61	724	202	182	1321	39
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	65	136	43	16	214	24	15	181	51	46	330	10
Total Analysis Volume [veh/h]	261	543	172	65	854	94	61	724	202	182	1321	39
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.16	0.17	0.11	0.04	0.27	0.06	0.04	0.19	0.19	0.11	0.28	0.28
Intersection LOS	D											
Intersection V/C	0.851											

Intersection Level Of Service Report
Intersection 2: Valley View Ave (NS) at Adoree St (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.533

Intersection Setup

Name	Valley View Ave		Valley View Ave		Adoree St	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	105.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		Yes	

Volumes

Name	Valley View Ave		Valley View Ave		Adoree St	
Base Volume Input [veh/h]	6	912	1152	60	75	16
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	8	12	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	938	1187	61	77	16
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	235	297	15	19	4
Total Analysis Volume [veh/h]	6	938	1187	61	77	16
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	5	2	6	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.29	0.37	0.04	0.05	0.06
Intersection LOS	A					
Intersection V/C	0.533					

Intersection Level Of Service Report
Intersection 3: Valley View Ave (NS) at Foster Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.807

Intersection Setup

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	160.00	100.00	100.00	160.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
Base Volume Input [veh/h]	138	868	41	27	1171	76	70	57	191	61	99	48
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	8	0	0	11	1	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	142	893	42	28	1205	79	71	58	195	62	101	49
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	36	223	11	7	301	20	18	15	49	16	25	12
Total Analysis Volume [veh/h]	142	893	42	28	1205	79	71	58	195	62	101	49
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.28	0.03	0.02	0.38	0.05	0.04	0.20	0.20	0.04	0.13	0.13
Intersection LOS	D											
Intersection V/C	0.807											

Intersection Level Of Service Report
Intersection 4: Valley View Ave (NS) at Bora Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	172.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.545

Intersection Setup

Name	Valley View Ave			Valley View Ave		Bora Dr	
Approach	Northbound			Southbound		Eastbound	
Lane Configuration							
Turning Movement	U-turn	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00		25.00	
Grade [%]	0.00			0.00		0.00	
Crosswalk	No			No		No	

Volumes

Name	Valley View Ave			Valley View Ave		Bora Dr	
Base Volume Input [veh/h]	0	110	924	1343	30	18	92
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	9	11	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	112	951	1381	31	18	94
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	28	238	345	8	5	24
Total Analysis Volume [veh/h]	5	112	951	1381	31	18	94
Pedestrian Volume [ped/h]	0			0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.23	0.01	0.01	0.00	0.55	0.24
d_M, Delay for Movement [s/veh]	42.79	15.88	0.00	0.00	0.00	172.54	72.74
Movement LOS	E	C	A	A	A	F	F
95th-Percentile Queue Length [veh/ln]	1.08	1.08	0.00	0.00	0.00	4.87	4.87
95th-Percentile Queue Length [ft/ln]	26.93	26.93	0.00	0.00	0.00	121.68	121.68
d_A, Approach Delay [s/veh]	1.87			0.00		88.78	
Approach LOS	A			A		F	
d_I, Intersection Delay [s/veh]	4.61						
Intersection LOS	F						

Intersection Level Of Service Report
Intersection 5: Valley View Ave (NS) at Project Dwy (EW)

Control Type:	Two-way stop	Delay (sec / veh):	15.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.055

Intersection Setup

Name	Valley View Ave		Valley View Ave		Project Dwy	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Valley View Ave		Valley View Ave		Project Dwy	
Base Volume Input [veh/h]	0	1034	1436	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.02	1.02	1.02	1.00	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	14	9	7	0	20
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1069	1474	7	0	20
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	267	369	2	0	5
Total Analysis Volume [veh/h]	0	1069	1474	7	0	20
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.01	0.00	0.00	0.06
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	15.56
Movement LOS		A	A	A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.18
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	4.38
d_A, Approach Delay [s/veh]	0.00		0.00		15.56	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.12					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 6: Valley View Ave (NS) at De Alcala Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	173.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Valley View Ave			Valley View Ave				Commercial Dwy			De Alcala Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	77.00	100.00	100.00	103.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00				25.00			25.00		
Grade [%]	0.00			0.00				0.00			0.00		
Crosswalk	No			No				No			No		

Volumes

Name	Valley View Ave			Valley View Ave				Commercial Dwy			De Alcala Dr		
Base Volume Input [veh/h]	4	965	5	0	65	1368	3	2	0	2	3	0	64
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	7	0	7	0	22	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	991	5	7	66	1417	3	2	0	2	3	0	65
Peak Hour Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	248	1	2	17	354	1	1	0	1	1	0	16
Total Analysis Volume [veh/h]	4	991	5	7	66	1417	3	2	0	2	3	0	65
Pedestrian Volume [ped/h]	0			0				0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.03	0.10	0.01	0.00	0.08	0.00	0.01	0.07	0.00	0.13
d_M, Delay for Movement [s/veh]	12.64	0.00	0.00	22.08	11.12	0.00	0.00	157.80	173.61	21.74	100.05	172.81	12.91
Movement LOS	B	A	A	C	B	A	A	F	F	C	F	F	B
95th-Percentile Queue Length [veh/ln]	0.03	0.00	0.00	0.39	0.39	0.00	0.00	0.27	0.27	0.27	0.23	0.23	0.43
95th-Percentile Queue Length [ft/ln]	0.64	0.00	0.00	9.67	9.67	0.00	0.00	6.73	6.73	6.73	5.68	5.68	10.64
d_A, Approach Delay [s/veh]	0.05			0.60				89.77			16.76		
Approach LOS	A			A				F			C		
d_I, Intersection Delay [s/veh]	0.95												
Intersection LOS	F												

Intersection Level Of Service Report
Intersection 7: Valley View Ave (NS) at Rosecrans Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.818

Intersection Setup

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	136.00	100.00	100.00	176.00	100.00	100.00	195.00	100.00	100.00	85.00	100.00	100.00
Speed [mph]	40.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Base Volume Input [veh/h]	126	690	45	143	1063	81	93	451	68	169	844	162
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	5	0	3	16	3	1	0	0	0	0	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	129	709	46	149	1100	86	96	460	69	172	861	166
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	177	12	37	275	22	24	115	17	43	215	42
Total Analysis Volume [veh/h]	129	709	46	149	1100	86	96	460	69	172	861	166
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.24	0.24	0.09	0.34	0.05	0.06	0.14	0.04	0.11	0.27	0.10
Intersection LOS	D											
Intersection V/C	0.818											

13811 Valley View Avenue Project

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Scenario 2 Opening Year (2021) With Project
5/23/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Valley View Ave (NS) at Imperial Hwy (EW)	Signalized	ICU 1	NB Thru	0.828	-	D
2	Valley View Ave (NS) at Adoree St (EW)	Signalized	ICU 1	NB Thru	0.563	-	A
3	Valley View Ave (NS) at Foster Rd (EW)	Signalized	ICU 1	NB Thru	0.643	-	B
4	Valley View Ave (NS) at Bora Dr (EW)	Two-way stop	HCM 6th Edition	EB Left	0.286	91.3	F
5	Valley View Ave (NS) at Project Dwy (EW)	Two-way stop	HCM 6th Edition	EB Right	0.025	12.7	B
6	Valley View Ave (NS) at De Alcala Dr (EW)	Two-way stop	HCM 6th Edition	WB Thru	0.000	181.9	F
7	Valley View Ave (NS) at Rosecrans Ave (EW)	Signalized	ICU 1	NB Thru	0.954	-	E

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Valley View Ave (NS) at Imperial Hwy (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.828

Intersection Setup

Name	Valley View Ave			Valley View Ave			Imperial Hwy			Imperial Hwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	293.00	100.00	100.00	204.00	100.00	100.00	150.00	100.00	100.00	195.00	100.00	100.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Valley View Ave			Valley View Ave			Imperial Hwy			Imperial Hwy		
Base Volume Input [veh/h]	207	865	173	88	593	46	125	1004	224	203	748	58
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	1	2	3	2	0	0	4	5	3	4	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	214	883	178	93	607	47	128	1028	233	210	767	62
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	54	221	45	23	152	12	32	257	58	53	192	16
Total Analysis Volume [veh/h]	214	883	178	93	607	47	128	1028	233	210	767	62
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.28	0.11	0.06	0.19	0.03	0.08	0.26	0.26	0.13	0.17	0.17
Intersection LOS	D											
Intersection V/C	0.828											

Intersection Level Of Service Report
Intersection 2: Valley View Ave (NS) at Adoree St (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.563

Intersection Setup

Name	Valley View Ave		Valley View Ave		Adoree St	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	105.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		Yes	

Volumes

Name	Valley View Ave		Valley View Ave		Adoree St	
Base Volume Input [veh/h]	12	1299	932	92	66	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	13	12	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	12	1338	963	94	67	5
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	335	241	24	17	1
Total Analysis Volume [veh/h]	12	1338	963	94	67	5
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	5	2	6	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.42	0.30	0.06	0.04	0.05
Intersection LOS	A					
Intersection V/C	0.563					

Intersection Level Of Service Report
Intersection 3: Valley View Ave (NS) at Foster Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.643

Intersection Setup

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	160.00	100.00	100.00	160.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
Base Volume Input [veh/h]	103	1234	39	24	952	44	52	30	84	36	31	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	12	0	0	12	0	1	0	1	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	106	1271	40	24	983	45	54	31	87	37	32	24
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	27	318	10	6	246	11	14	8	22	9	8	6
Total Analysis Volume [veh/h]	106	1271	40	24	983	45	54	31	87	37	32	24
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.40	0.03	0.02	0.31	0.03	0.03	0.11	0.11	0.02	0.06	0.06
Intersection LOS	B											
Intersection V/C	0.643											

Intersection Level Of Service Report
Intersection 4: Valley View Ave (NS) at Bora Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	91.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.286

Intersection Setup

Name	Valley View Ave			Valley View Ave		Bora Dr	
Approach	Northbound			Southbound		Eastbound	
Lane Configuration							
Turning Movement	U-turn	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00		25.00	
Grade [%]	0.00			0.00		0.00	
Crosswalk	No			No		No	

Volumes

Name	Valley View Ave			Valley View Ave		Bora Dr	
Base Volume Input [veh/h]	0	80	1328	1004	32	14	61
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	13	0	13	13	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	82	1368	1037	33	14	62
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	21	342	259	8	4	16
Total Analysis Volume [veh/h]	13	82	1368	1037	33	14	62
Pedestrian Volume [ped/h]	0			0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.13	0.01	0.01	0.00	0.29	0.12
d_M, Delay for Movement [s/veh]	24.00	12.23	0.00	0.00	0.00	91.28	24.98
Movement LOS	C	B	A	A	A	F	C
95th-Percentile Queue Length [veh/ln]	0.58	0.58	0.00	0.00	0.00	1.83	1.83
95th-Percentile Queue Length [ft/ln]	14.49	14.49	0.00	0.00	0.00	45.82	45.82
d_A, Approach Delay [s/veh]	0.90			0.00		37.19	
Approach LOS	A			A		E	
d_I, Intersection Delay [s/veh]	1.59						
Intersection LOS	F						

Intersection Level Of Service Report
Intersection 5: Valley View Ave (NS) at Project Dwy (EW)

Control Type:	Two-way stop	Delay (sec / veh):	12.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.025

Intersection Setup

Name	Valley View Ave		Valley View Ave		Project Dwy	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Valley View Ave		Valley View Ave		Project Dwy	
Base Volume Input [veh/h]	0	1408	1065	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.02	1.02	1.02	1.00	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	26	6	20	0	12
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1462	1092	20	0	12
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	366	273	5	0	3
Total Analysis Volume [veh/h]	0	1462	1092	20	0	12
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.01	0.00	0.00	0.02
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	12.66
Movement LOS		A	A	A		B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.08
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	1.91
d_A, Approach Delay [s/veh]	0.00		0.00		12.66	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.06					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 6: Valley View Ave (NS) at De Alcala Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	181.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Valley View Ave			Valley View Ave				Commercial Dwy			De Alcala Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	77.00	100.00	100.00	103.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00				25.00			25.00		
Grade [%]	0.00			0.00				0.00			0.00		
Crosswalk	No			No				No			No		

Volumes

Name	Valley View Ave			Valley View Ave				Commercial Dwy			De Alcala Dr		
Base Volume Input [veh/h]	5	1363	6	0	34	1028	3	5	0	8	4	0	39
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	21	0	5	0	13	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	1411	6	5	35	1062	3	5	0	8	4	0	40
Peak Hour Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	353	2	1	9	266	1	1	0	2	1	0	10
Total Analysis Volume [veh/h]	5	1411	6	5	35	1062	3	5	0	8	4	0	40
Pedestrian Volume [ped/h]	0			0				0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.04	0.07	0.01	0.00	0.14	0.00	0.02	0.13	0.00	0.11
d_M, Delay for Movement [s/veh]	10.58	0.00	0.00	36.92	13.91	0.00	0.00	110.15	172.11	19.71	143.50	181.85	15.63
Movement LOS	B	A	A	E	B	A	A	F	F	C	F	F	C
95th-Percentile Queue Length [veh/ln]	0.02	0.00	0.00	0.34	0.34	0.00	0.00	0.51	0.51	0.51	0.41	0.41	0.35
95th-Percentile Queue Length [ft/ln]	0.58	0.00	0.00	8.39	8.39	0.00	0.00	12.73	12.73	12.73	10.30	10.30	8.79
d_A, Approach Delay [s/veh]	0.04			0.61				54.49			27.25		
Approach LOS	A			A				F			D		
d_I, Intersection Delay [s/veh]	1.02												
Intersection LOS	F												

Intersection Level Of Service Report
Intersection 7: Valley View Ave (NS) at Rosecrans Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.954

Intersection Setup

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	136.00	100.00	100.00	176.00	100.00	100.00	195.00	100.00	100.00	85.00	100.00	100.00
Speed [mph]	40.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Base Volume Input [veh/h]	70	1105	58	180	691	37	149	810	71	149	491	189
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	15	10	2	9	2	3	3	0	8	3	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	71	1142	69	186	714	40	155	829	72	160	504	196
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	286	17	47	179	10	39	207	18	40	126	49
Total Analysis Volume [veh/h]	71	1142	69	186	714	40	155	829	72	160	504	196
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.38	0.38	0.12	0.22	0.03	0.10	0.26	0.05	0.10	0.16	0.12
Intersection LOS	E											
Intersection V/C	0.954											

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Scenario 2 Opening Year (2021) With Project
6/13/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
4	Valley View Ave (NS) at Bora Dr (EW)	Two-way stop	HCM 6th Edition	NB U-T	0.037	34.6	D
6	Valley View Ave (NS) at De Alcala Dr (EW)	Two-way stop	HCM 6th Edition	SB U-T	0.032	22.2	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 4: Valley View Ave (NS) at Bora Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	34.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.037

Intersection Setup

Name	Valley View Ave			Valley View Ave		Bora Dr	
Approach	Northbound			Southbound		Eastbound	
Lane Configuration							
Turning Movement	U-turn	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00		25.00	
Grade [%]	0.00			0.00		0.00	
Crosswalk	No			No		No	

Volumes

Name	Valley View Ave			Valley View Ave		Bora Dr	
Base Volume Input [veh/h]	0	110	924	1343	30	0	110
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	9	11	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	112	951	1381	31	0	112
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	28	238	345	8	0	28
Total Analysis Volume [veh/h]	5	112	951	1381	31	0	112
Pedestrian Volume [ped/h]	0			0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.23	0.01	0.01	0.00	0.00	0.29
d_M, Delay for Movement [s/veh]	34.64	15.58	0.00	0.00	0.00	0.00	18.03
Movement LOS	D	C	A	A	A		C
95th-Percentile Queue Length [veh/ln]	1.02	1.02	0.00	0.00	0.00	0.00	1.18
95th-Percentile Queue Length [ft/ln]	25.59	25.59	0.00	0.00	0.00	0.00	29.50
d_A, Approach Delay [s/veh]	1.80			0.00		18.03	
Approach LOS	A			A		C	
d_I, Intersection Delay [s/veh]	1.52						
Intersection LOS	D						

Intersection Level Of Service Report
Intersection 6: Valley View Ave (NS) at De Alcala Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	22.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.032

Intersection Setup

Name	Valley View Ave			Valley View Ave				Commercial Dwy			De Alcala Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	77.00	100.00	100.00	103.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00				25.00			25.00		
Grade [%]	0.00			0.00				0.00			0.00		
Crosswalk	No			No				No			No		

Volumes

Name	Valley View Ave			Valley View Ave				Commercial Dwy			De Alcala Dr		
Base Volume Input [veh/h]	4	965	5	0	65	1368	3	0	0	4	0	0	67
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	7	0	7	0	22	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	991	5	7	66	1417	3	0	0	4	0	0	68
Peak Hour Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	248	1	2	17	354	1	0	0	1	0	0	17
Total Analysis Volume [veh/h]	4	991	5	7	66	1417	3	0	0	4	0	0	68
Pedestrian Volume [ped/h]	0			0				0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.03	0.10	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.13
d_M, Delay for Movement [s/veh]	12.64	0.00	0.00	22.19	11.13	0.00	0.00	0.00	0.00	14.66	0.00	0.00	12.97
Movement LOS	B	A	A	C	B	A	A			B			B
95th-Percentile Queue Length [veh/ln]	0.03	0.00	0.00	0.39	0.39	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.45
95th-Percentile Queue Length [ft/ln]	0.64	0.00	0.00	9.69	9.69	0.00	0.00	0.00	0.00	0.80	0.00	0.00	11.20
d_A, Approach Delay [s/veh]	0.05			0.60				14.66			12.97		
Approach LOS	A			A				B			B		
d_I, Intersection Delay [s/veh]	0.73												
Intersection LOS	C												

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Scenario 2 Opening Year (2021) With Project
6/13/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
4	Valley View Ave (NS) at Bora Dr (EW)	Two-way stop	HCM 6th Edition	NB U-T	0.065	24.7	C
6	Valley View Ave (NS) at De Alcala Dr (EW)	Two-way stop	HCM 6th Edition	SB U-T	0.039	34.4	D

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 4: Valley View Ave (NS) at Bora Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	24.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.065

Intersection Setup

Name	Valley View Ave			Valley View Ave		Bora Dr	
Approach	Northbound			Southbound		Eastbound	
Lane Configuration							
Turning Movement	U-turn	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00		25.00	
Grade [%]	0.00			0.00		0.00	
Crosswalk	No			No		No	

Volumes

Name	Valley View Ave			Valley View Ave		Bora Dr	
Base Volume Input [veh/h]	0	80	1328	1004	32	0	75
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	13	0	13	13	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	82	1368	1037	33	0	77
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	21	342	259	8	0	19
Total Analysis Volume [veh/h]	13	82	1368	1037	33	0	77
Pedestrian Volume [ped/h]	0			0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.13	0.01	0.01	0.00	0.00	0.15
d_M, Delay for Movement [s/veh]	24.66	12.27	0.00	0.00	0.00	0.00	13.46
Movement LOS	C	B	A	A	A		B
95th-Percentile Queue Length [veh/ln]	0.59	0.59	0.00	0.00	0.00	0.00	0.54
95th-Percentile Queue Length [ft/ln]	14.69	14.69	0.00	0.00	0.00	0.00	13.45
d_A, Approach Delay [s/veh]	0.91			0.00		13.46	
Approach LOS	A			A		B	
d_I, Intersection Delay [s/veh]	0.91						
Intersection LOS	C						

Intersection Level Of Service Report
Intersection 6: Valley View Ave (NS) at De Alcala Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	34.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.039

Intersection Setup

Name	Valley View Ave			Valley View Ave				Commercial Dwy			De Alcala Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	77.00	100.00	100.00	103.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00				25.00			25.00		
Grade [%]	0.00			0.00				0.00			0.00		
Crosswalk	No			No				No			No		

Volumes

Name	Valley View Ave			Valley View Ave				Commercial Dwy			De Alcala Dr		
Base Volume Input [veh/h]	5	1363	6	0	34	1028	3	0	0	13	0	0	43
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	21	0	5	0	13	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	1411	6	5	35	1062	3	0	0	13	0	0	44
Peak Hour Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	353	2	1	9	266	1	0	0	3	0	0	11
Total Analysis Volume [veh/h]	5	1411	6	5	35	1062	3	0	0	13	0	0	44
Pedestrian Volume [ped/h]	0			0				0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.04	0.07	0.01	0.00	0.00	0.00	0.03	0.00	0.00	0.12
d_M, Delay for Movement [s/veh]	10.58	0.00	0.00	34.43	13.83	0.00	0.00	0.00	0.00	12.50	0.00	0.00	15.76
Movement LOS	B	A	A	D	B	A	A			B			C
95th-Percentile Queue Length [veh/ln]	0.02	0.00	0.00	0.32	0.32	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.39
95th-Percentile Queue Length [ft/ln]	0.58	0.00	0.00	8.12	8.12	0.00	0.00	0.00	0.00	2.03	0.00	0.00	9.77
d_A, Approach Delay [s/veh]	0.04			0.59				12.50			15.76		
Approach LOS	A			A				B			C		
d_I, Intersection Delay [s/veh]	0.61												
Intersection LOS	D												

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