APPENDIX F

TRAFFIC IMPACT ASSESSMENT

REV 2

ROSEMEAD AND RUSH INDUSTRIAL PROJECT TRANSPORTATION IMPACT ANALYSIS

City of South El Monte

April 28, 2023

gandhi

Traffic Engineering ● Transportation Planning ● Parking ● Noise & Vibration
Air Quality ● Global Climate Change ● Health Risk Assessment

ROSEMEAD AND RUSH INDUSTRIAL PROJECT TRANSPORTATION IMPACT ANALYSIS

City of South El Monte

April 28, 2023

prepared by

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Project No. 19618

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EXECUTIVE SUMMARY

The project site is located east of Rosemead Boulevard and north of Rush Street at 2222 Rosemead Boulevard in the City of South El Monte, California. The 5.14-acre project site is currently vacant with the previous buildings already demolished. The project is proposed to be developed as a warehouse project with 113,525 square feet of warehouse use plus 19,994 square feet of accessory warehouse office use and 15,245 square feet of accessory warehouse storage with another 8,235 square feet of retail/show room use for a total of 156,999 square feet of building area. There are 13 loading docks located along the southern side of the building.

Existing Operations

The study intersection currently operates within acceptable Levels of Service (D or better) during the peak hours for Existing (2023) conditions (see Table 1), except for the following intersection that currently operates at deficient Levels of Service:

- Rosemead Boulevard/Klingerman Street – #1 (LOS F, AM & PM peak hours)

Project Trip Generation

The proposed project is forecast to generate approximately 661 net daily trips, including 48 net trips during the AM peak hour and 60 net trips during the PM peak hour.

Level of Service Analysis

The study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Existing Plus Project and Opening Year (2025) With Project conditions, except for the following intersection that currently operates at deficient Levels of Service:

- Rosemead Boulevard/Klingerman Street – #1 (LOS F, AM & PM peak hours)

The proposed project is forecast to result in no Level of Service impacts at the study intersections for Existing Plus Project or Opening Year (2025) With Project conditions based on the City-established standards. The intersection does not meet peak hour signal warrants and the project contributes less than two percent (2%) of the total future traffic at the intersection. Additionally, the Level of Service deficiency relates to existing eastbound left turn movements to which the project is not forecast to contribute any trips. Therefore, the project is not responsible for improvements to address this pre-existing deficiency.

Truck Traffic Management

The project should provide a minimum storage length of one vehicle or 55 feet to accommodate one WB-50 or WB-55 truck outside the proposed security gate for the inbound trucks. Therefore, adequate gate stacking distance is anticipated to be provided since sufficient on-site stacking distances would be provided to accommodate approximately three to five WB-50 or WB-55 trucks at the Project North Driveway and Project South Driveway.

Although trucks to and from the project site are neither anticipated to queue, stage, or park on Rosemead Boulevard nor block any driveways along Rosemead Boulevard or other adjacent public streets, the operator of the site shall work with City staff to address unforeseen truck issues in public right-of-way in a mutually agreeable manner.

Parking Management Plan with WB-55 Trucks

The applicant is anticipating that the larger WB-55 trucks will be rarely used. In the event when a larger WB-55 truck is used, a parking management plan will be implemented to keep clear the parking stalls along the southerly boundary to accommodate the truck turning movements in and out of the loading docks. The parking management plan includes the following provisions:

- Designate all the 34 parking stalls along the southern project boundary as "employee parking only" so that parked vehicles could be relocated if there is ever a need to keep this parking area clear.

- Prior to a larger WB-55 truck is due to arrive, "no parking" signage and traffic cones will be placed to block off the 34 employee parking stalls along the southern project boundary to keep that parking area clear.

- While a larger WB-55 truck is accessing loading dock, any parked vehicles within the "no parking" and employee only parking" area shall be relocated to keep this parking area clear.

Sight Distance Analysis

The desirable intersection sight distance of 772 feet for trucks and minimum stopping sight distance of 430 for both cars and trucks would be provided for the right turns exiting the proposed project driveway, as long as any landscaping near the southeast corner of the curb returns at the project driveways on Rosemead Boulevard do not obstruct drivers views.

On-street parking may partially obstruct line of sight at the project driveway depending on the level of utilization. If appropriate, the City may elect to prohibit on-street parking along the northbound side of Rosemead Boulevard from the driveways to approximately 430 south; however, this may result in the loss of substantial on-street parking near adjacent properties. At a minimum, the California Manual on Uniform Traffic Control Devices (CA MUTCD; Figure 3B-21) guidance recommends 20 feet of no parking on either side of unsignalized intersections/driveways.

VMT Assessment

The project is forecast to generate 16.4 VMT per worker, which exceeds the City-established threshold of 15.83 VMT per worker. Therefore, the following additional VMT reduction measure was identified as mitigation to reduce the project's VMT impact to a less than significant level:

Mitigation Measure TRA-1
Implement a Commute Trip Reduction Marketing/Education Program: Implement marketing campaign targeting all project employees and visitors that encourages the use of transit, shared rides, and active modes. Marketing strategies may include new employee orientation on alternative commute options, event promotions, and publications. Providing information and encouragement to use transit, share ride modes, and active modes, reducing drive-alone trips and thereby reducing VMT.

With implementation of Mitigation Measure TRA-1, the project is forecast to generate 15.8 VMT per worker, which does not exceed the City-established threshold of 15.83 VMT per worker. The project would result in a less than significant VMT impact with mitigation incorporated.

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 Transportation Impact Analysis is to provide an assessment of traffic operations resulting from development of the proposed Rosemead and Rush Industrial Project and to identify measures necessary to maintain roadway performance standards established by the City of South El Monte. This analysis also contains an assessment of the project vehicle miles travelled (VMT) impact in context of the California Environmental Quality Act (CEQA). 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 east of Rosemead Boulevard and north of Rush Street at 2222 Rosemead Boulevard in the City of South El Monte, California. The 5.14-acre project site is currently vacant with the previous buildings already demolished. The project is proposed to be developed as a warehouse project with 113,525 square feet of warehouse use plus 19,994 square feet of accessory warehouse office use and 15,245 square feet of accessory warehouse storage with another 8,235 square feet of retail/show room use for a total of 156,999 square feet of building area. There are 13 loading docks located along the southern side of the building.

Two stop-controlled right-in/right-out only access are proposed on Rosemead Boulevard, and these two driveways will be restricted right-in/right-out only because of the existing raised center median along Rosemead Boulevard. The width of the project north driveway is 30 feet and the width of the south driveway is 28 feet. The project south driveway is for vans, passenger cars and bobtail trucks only. Trucks larger than a bobtail must enter and exit the site from the project north driveway.

The hours of operation would be determined by the lessee, but at this time the hours are proposed to be seven days a week, 24-hours a day. The project does not propose to allow any refrigeration as part of the warehouse operations.

The proposed project is anticipated to be constructed and fully operational by year 2025.

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 South El Monte jurisdiction:

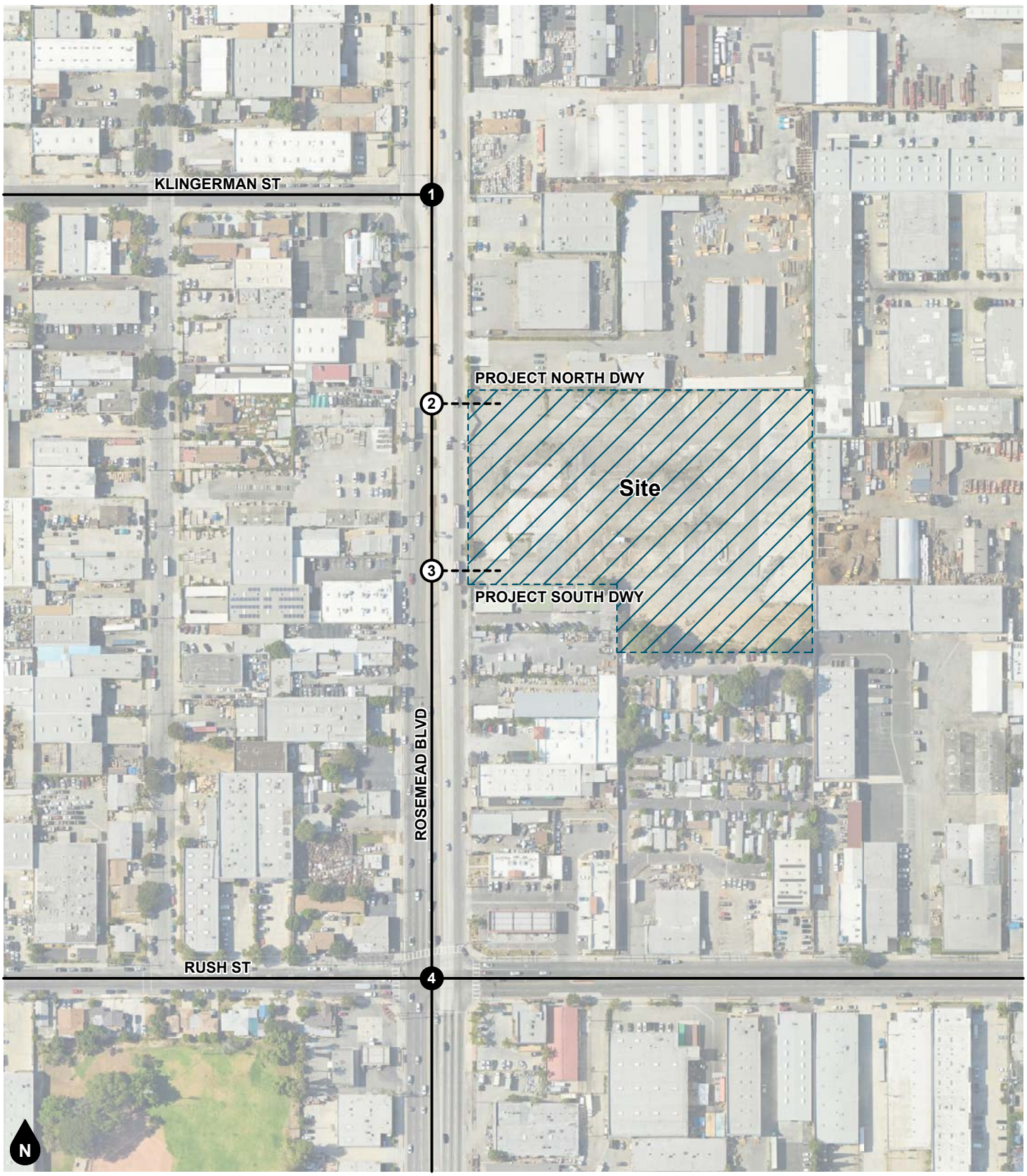
Study Intersections[1]	Jurisdiction
1. Rosemead Boulevard (NS) at Klingerman Street (EW)	South El Monte
2. Rosemead Boulevard (NS) at Project North Driveway (EW) [Proposed]	South El Monte
3. Rosemead Boulevard (NS) at Project South Driveway (EW) [Proposed]	South El Monte
4. Rosemead Boulevard (NS) at Rush Street (EW)	South El Monte

[1] (NS) = North-South roadway; (EW) = East-West roadway

ANALYSIS SCENARIOS

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

- Existing (2023) Conditions
- Existing Plus Project Conditions
- Opening Year (2025) Without Project Conditions
- Opening Year (2025) With Project Conditions



Legend

(#) Study Intersection

(#) Project Driveway

Figure 1
Project Location Map

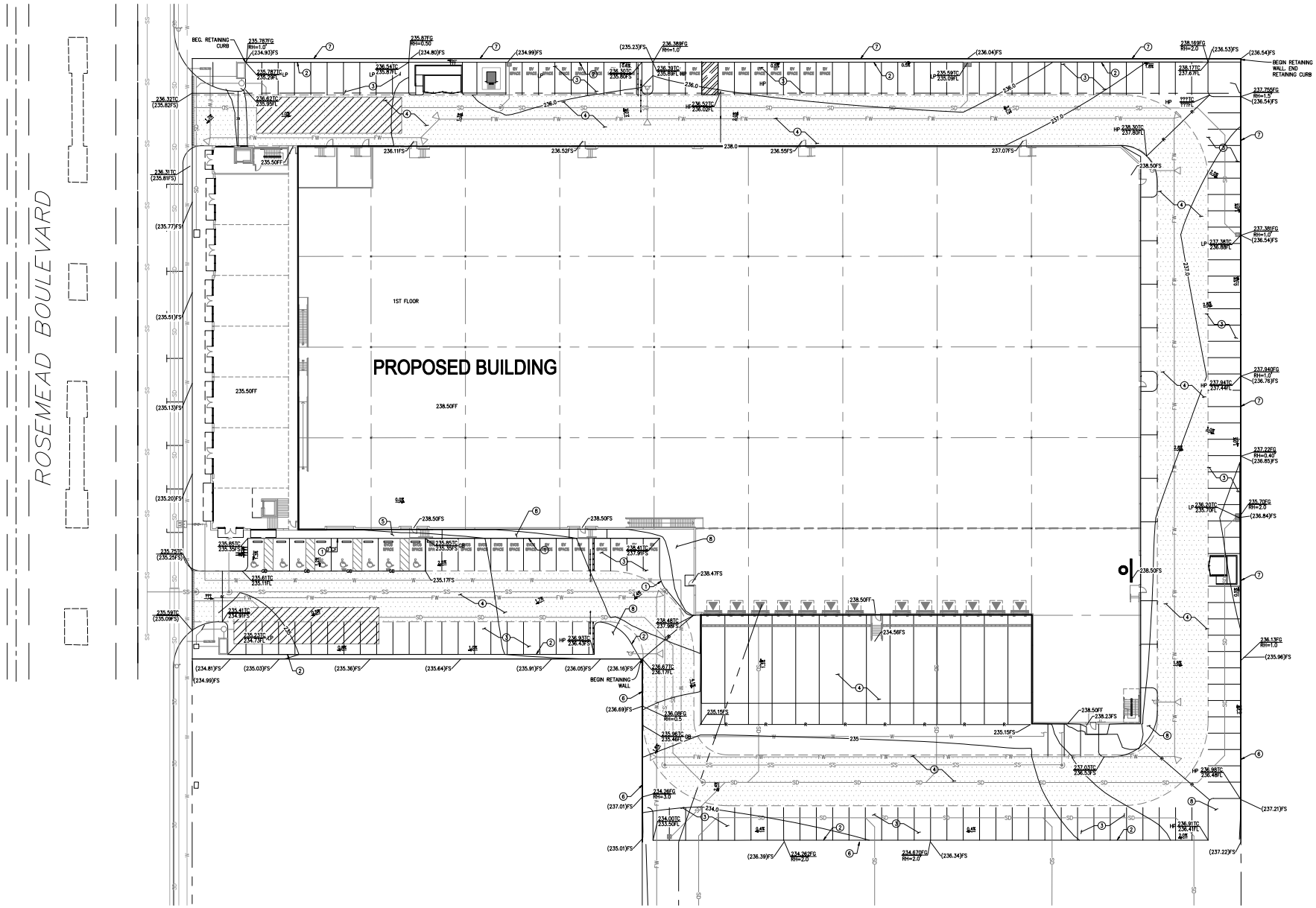


Figure 2
Site Plan

2. METHODOLOGY

This section discusses the analysis methodologies used to assess transportation facility performance as adopted by the respective jurisdictional agencies. This study was prepared in consultation with the City of South El Monte engineering staff and in accordance with the City's *Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment* (October 2020) ["Transportation Study Guidelines"].

INTERSECTION CAPACITY UTILIZATION METHODOLOGY

Analysis of signalized intersections within the City of South El Monte 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 2022) software.

In accordance with the City's Transportation Study Guidelines, the ICU analysis utilizes the following parameters: 1,800 vehicles per hour per lane for through and single turn lanes, and a total clearance adjustment of 10 percent (i.e., 0.10 added to critical Volume/Capacity). Lane capacities of 3,240 vehicles per hour per lane are used for dual turn lanes.

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, 7th 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:

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 (7th 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 2022) software with default values recommended in the Highway Capacity Manual.

PERFORMANCE STANDARDS

City of South El Monte. The City of South El Monte has established Level of Service D as the target Level of Service standard. Any intersection operating at a LOS of E or F is considered deficient. If the Project contributes 2% or more of the total traffic at an intersection that is expected to be deficient, improvements should be considered.

REQUIREMENTS FOR IMPROVEMENTS

Based on the established performance standards for the City of South El Monte, a potentially significant transportation impact is defined to occur if:

Signalized Intersection

- The addition of project traffic to an intersection results in the degradation of intersection operations from LOS D or better operations to LOS E or F and will increase the V/C by .01 or more.

Unsignalized Intersection

- The addition of project traffic to an intersection results in the degradation of any individual movement at the intersection from LOS D or better to LOS E or F), and

- The intersection meets peak hour signal warrants either caused by project volumes, or project volumes are added at an intersection that meets peak hour signal warrants in the baseline scenario(s). Peak hour signal warrants should be determined based on one or more of the latest California Manual on Uniform Traffic Control Devices (CA MUTCD).

The fair share cost for the proposed improvements in the cumulative condition should also be calculated.

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 for the project includes the SR-60 Freeway approximately one mile to the south and the I-10 Freeway approximately one mile to the north. The primary roadway providing local circulation is Rosemead Boulevard, Klingerman Street and Rush Street.

Rosemead Boulevard is a 6-lane divided roadway. Rosemead Boulevard is classified as an Arterial Highway in the City of South El Monte General Plan Circulation Element. On-street parking is generally allowed on both sides of Rosemead Boulevard. Bicycle lanes are not provided on both sides of Rosemead Boulevard. Sidewalks are provided on both sides of the roadway. The posted speed limit is 50 miles per hour in the project vicinity.

Klingerman Street is a two-lane undivided roadway. Klingerman Street is classified as an Industrial Collector in the City of South El Monte General Plan Circulation Element. On-street parking is generally allowed on both sides of Klingerman Street. Bicycle lanes are not provided on both sides of Klingerman Street. Sidewalks are provided on both sides of the roadway. There is no posted speed limit in the project vicinity.

Rush Street is a 4-lane divided roadway. Rush Street is classified as a Secondary Highway in the City of South El Monte General Plan Circulation Element. On-street parking is generally prohibited on both sides of Rush Street. Bicycle lanes are not provided on both sides of Rush Street. Sidewalks are provided on both sides of the roadway. The posted speed limit is 30 miles per hour west of Rosemead Boulevard and 35 miles per hour east of Rosemead Boulevard.

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 Rosemead Boulevard adjacent to the project site.

BICYCLE ROUTES

Figure 5 shows the City of South El Monte Bikeway Master Plan. There are currently no on-street bicycle lanes on both sides of Rosemead Boulevard. Class II Bikeway is proposed along Rush Street.

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 South El Monte. Rush Street is identified as a designated truck route on the City of South El Monte Truck Routes map.

GENERAL PLAN CONTEXT

Figure 7 shows the City of South El Monte 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 South El Monte standard roadway cross-sections are illustrated on Figure 8.

EXISTING TRAFFIC VOLUMES

Existing peak hour traffic conditions are based upon AM and PM peak period intersection turning movement counts obtained in South El Monte during typical weekday conditions. The AM peak period was counted between 7:00 AM and 9:00 AM and the PM 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 data sheets are provided in Appendix C.

Figure 9 and Figure 10 show the existing AM peak hour and PM peak hour intersection turning movement volumes.

EXISTING LEVEL OF SERVICE

The Levels of Service for Existing (2023) conditions are shown in Table 1. 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 intersection that currently operates at deficient Levels of Service:

- Rosemead Boulevard/Klingerman Street – #1 (LOS F, AM & PM peak hours)

The deficient Level of Service at Rosemead Boulevard/Klingerman Street [#1] relates to the eastbound left turn movement. To provide a conservative assessment, this analysis assumes the eastbound left turn movement must cross both the southbound through lanes and enter the northbound through lanes in a single movement. In reality, some vehicles may be able to perform a two-stage left turn by using the median break area as a refuge, which would result in lower delay and better Level of Service.

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.	Rosemead Blvd at Klingerman St	CSS	[89.3]	F	[108.2]	F
4.	Rosemead Blvd at Rush St	TS	0.693	B	0.738	C

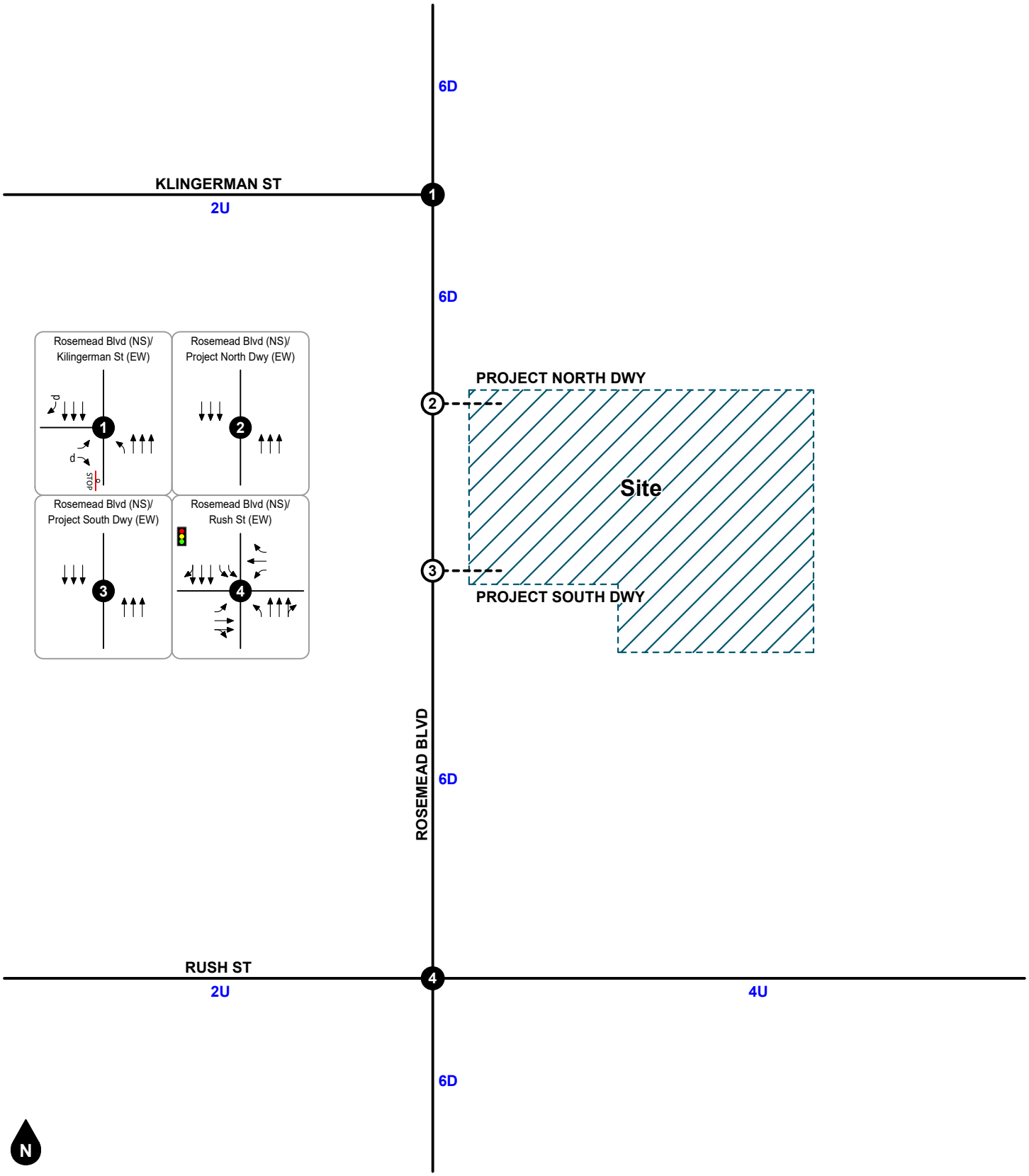
Notes:

(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).

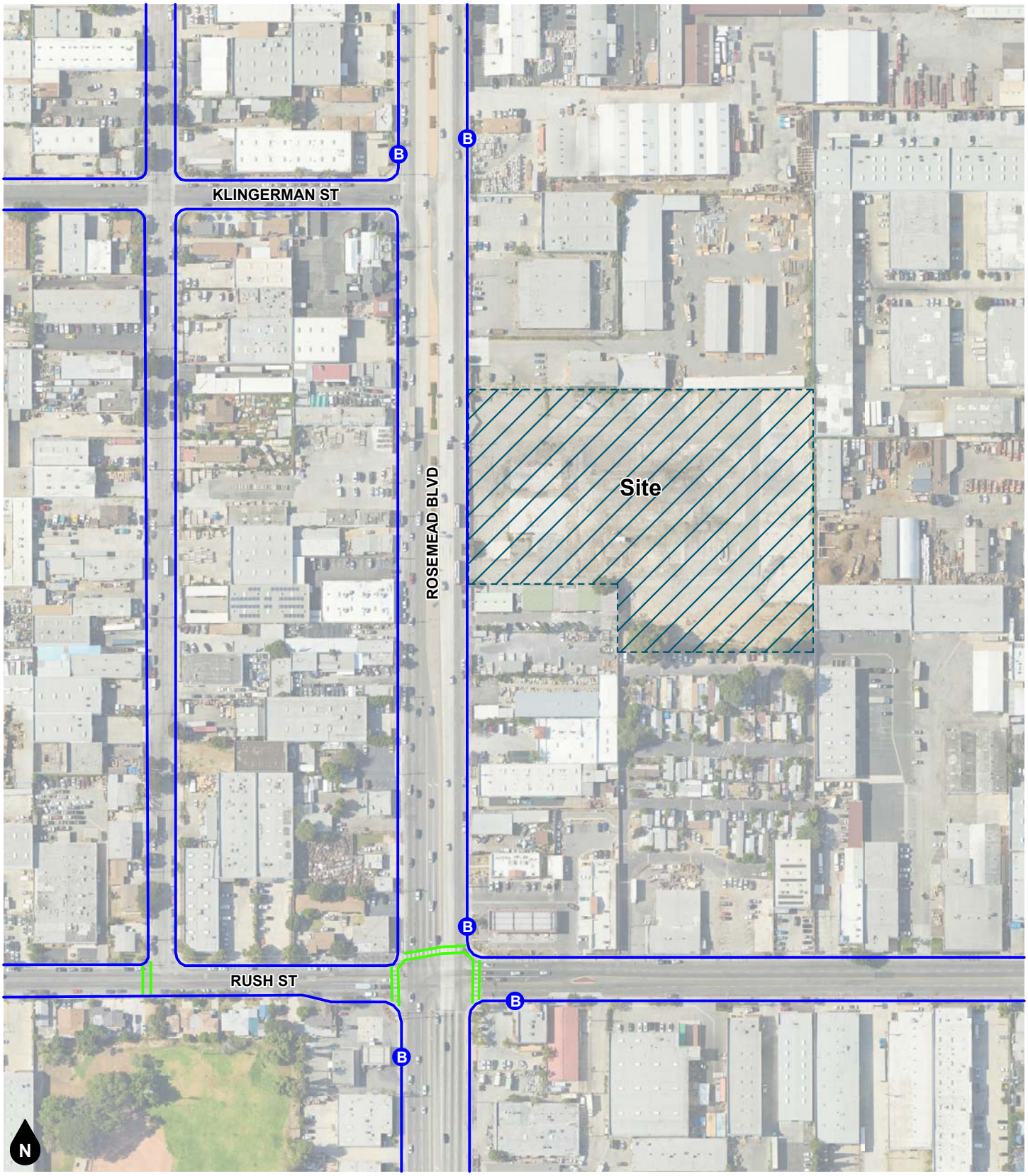
(4) LOS = Level of Service



Legend

- Traffic Signal
- All Way 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

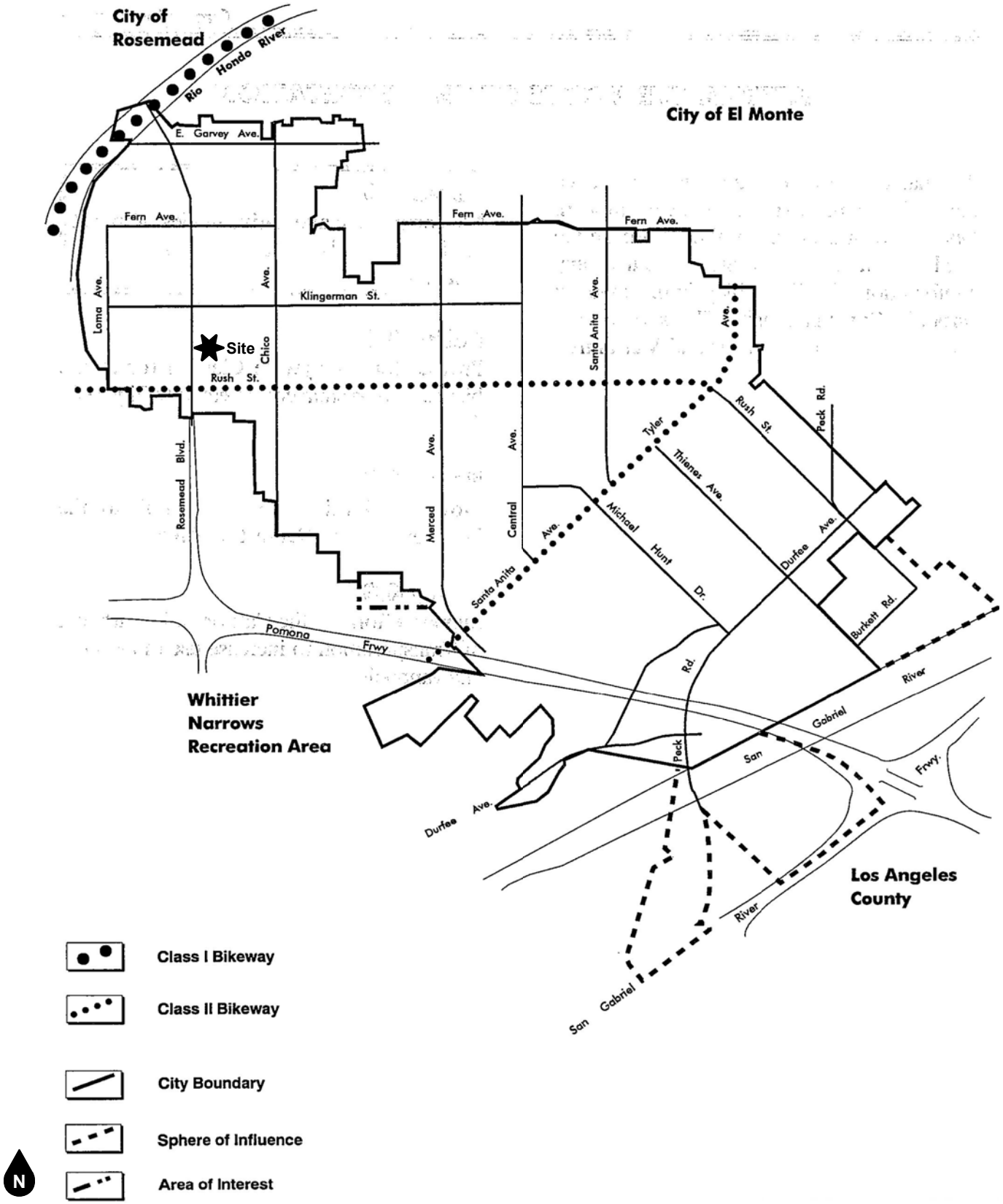


Figure 5
City of South El Monte Bikeway Master Plan

Source: City of South El Monte

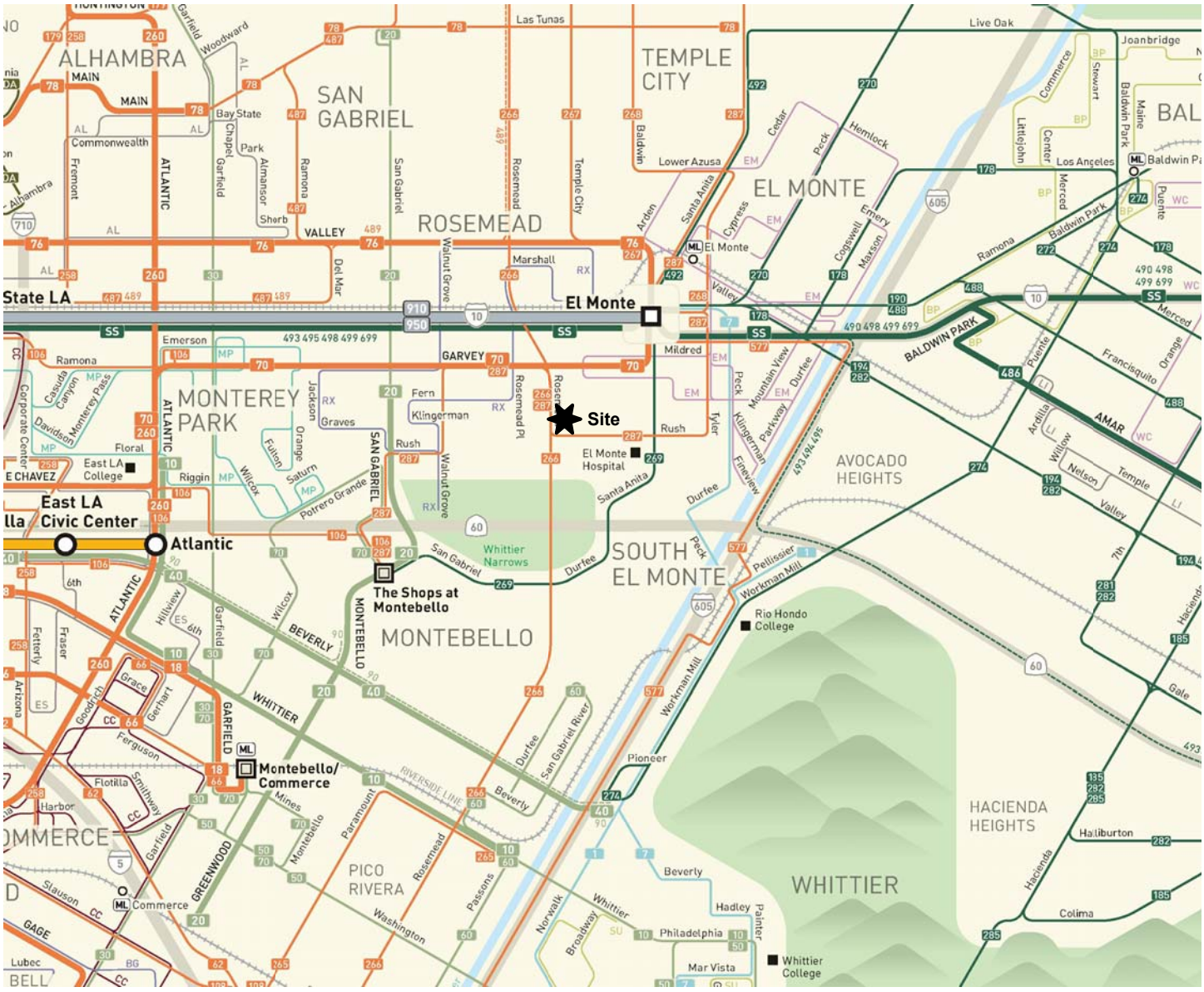


Figure 6
City of South El Monte Transit Routes

Source: L.A. Metro

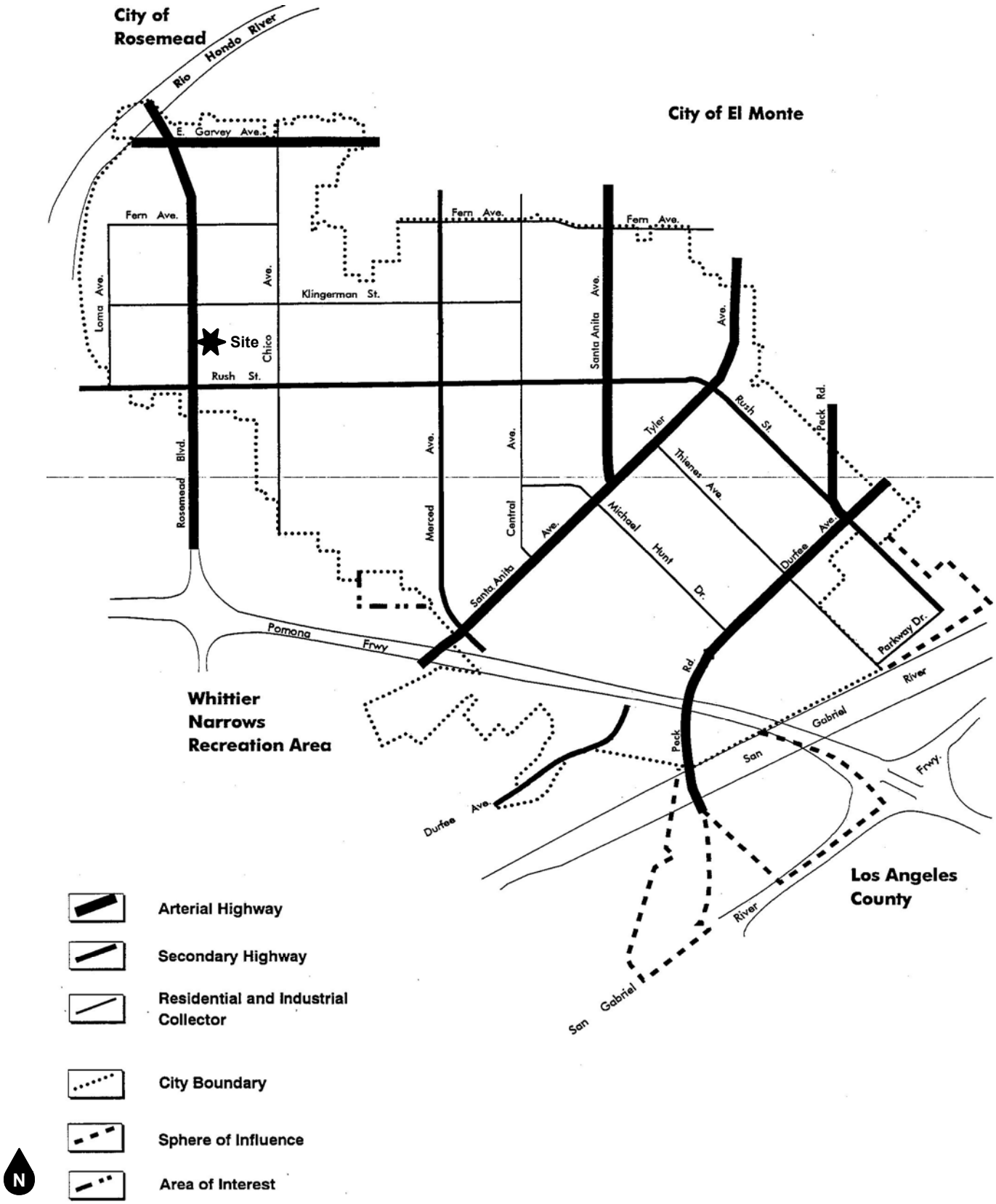


Figure 7
City of South El Monte General Plan Circulation Element

Source: City of South El Monte

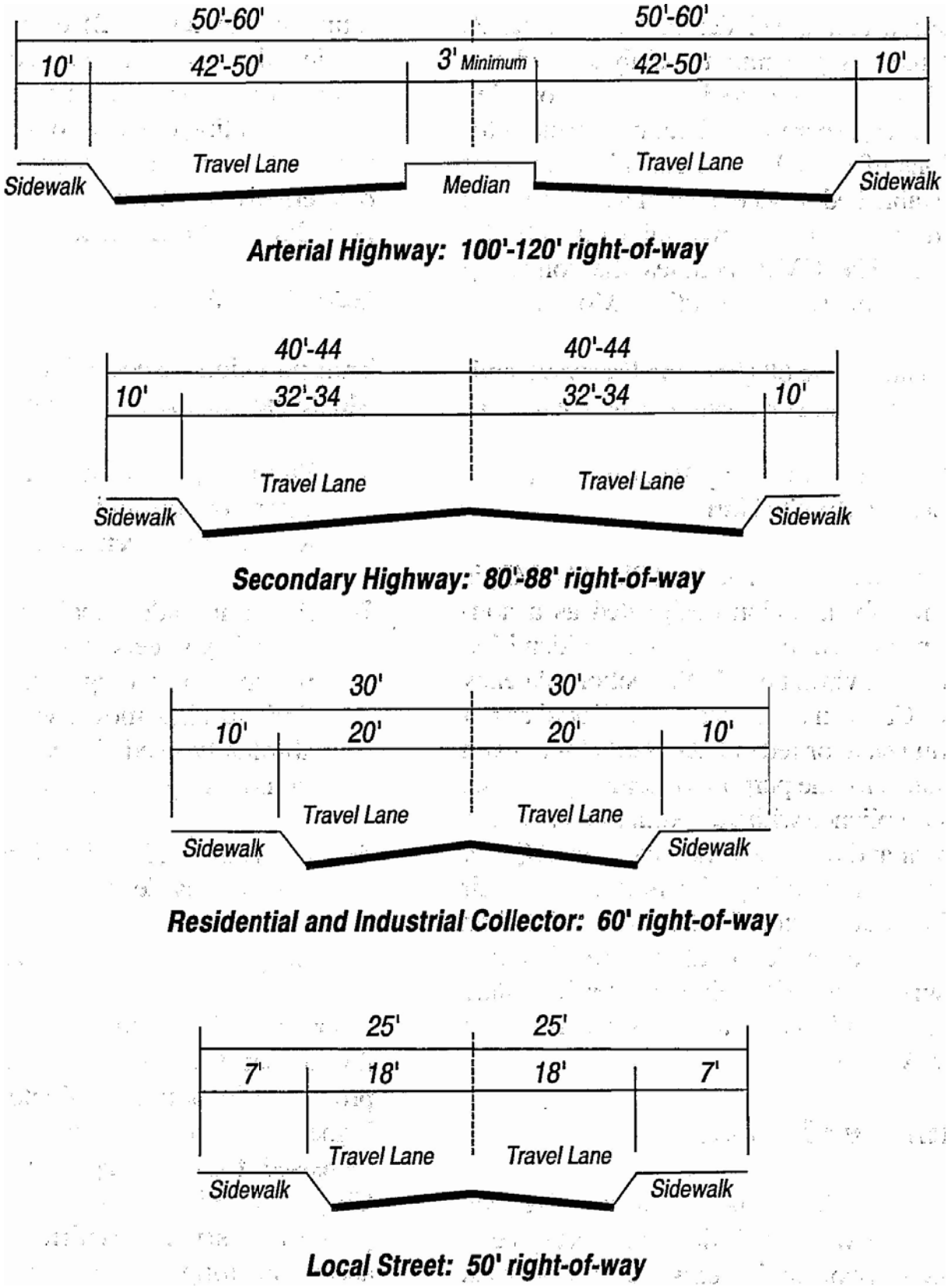
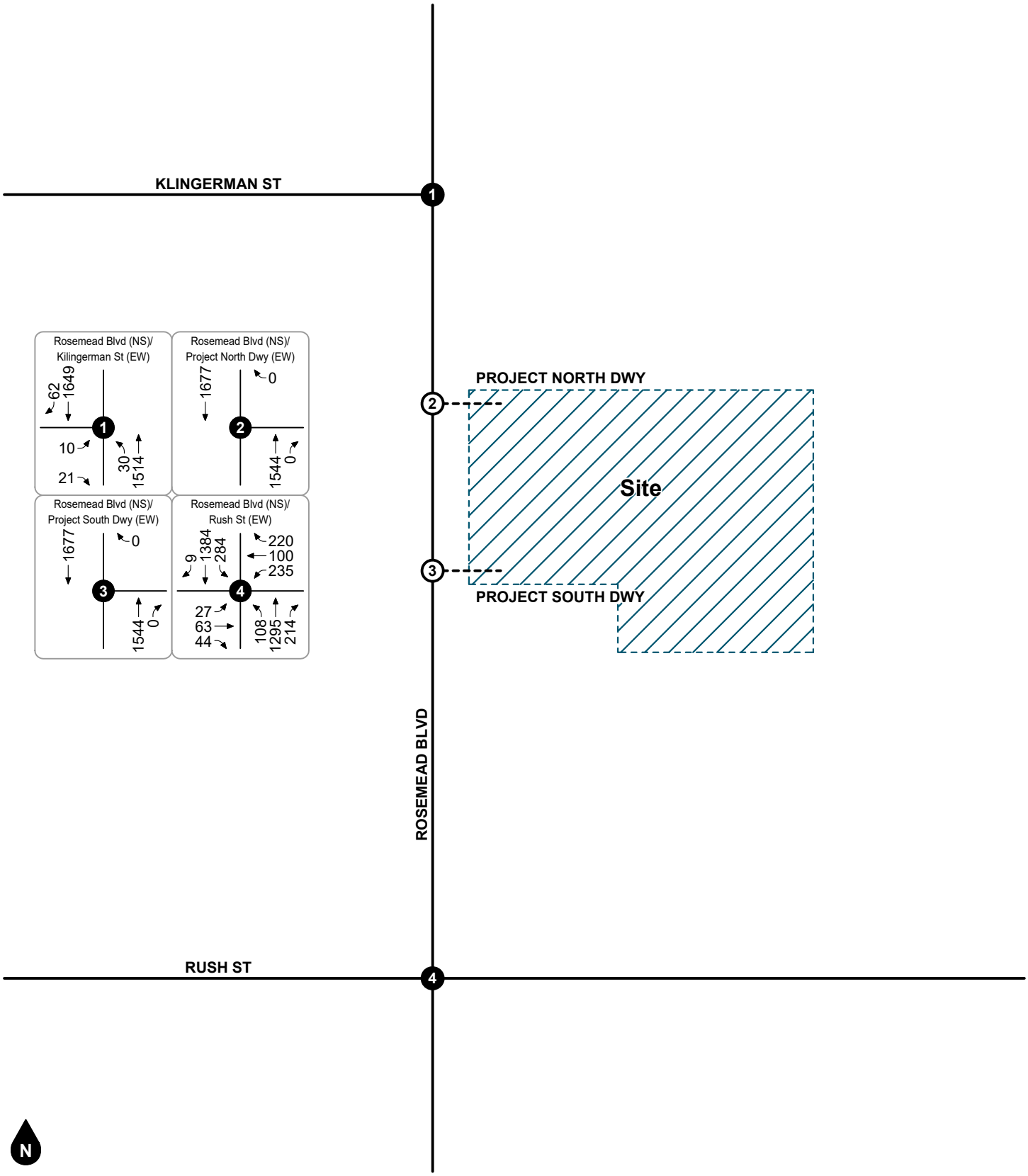


Figure 8
City of South El Monte General Plan Roadway Cross-Sections

Source: City of South El Monte

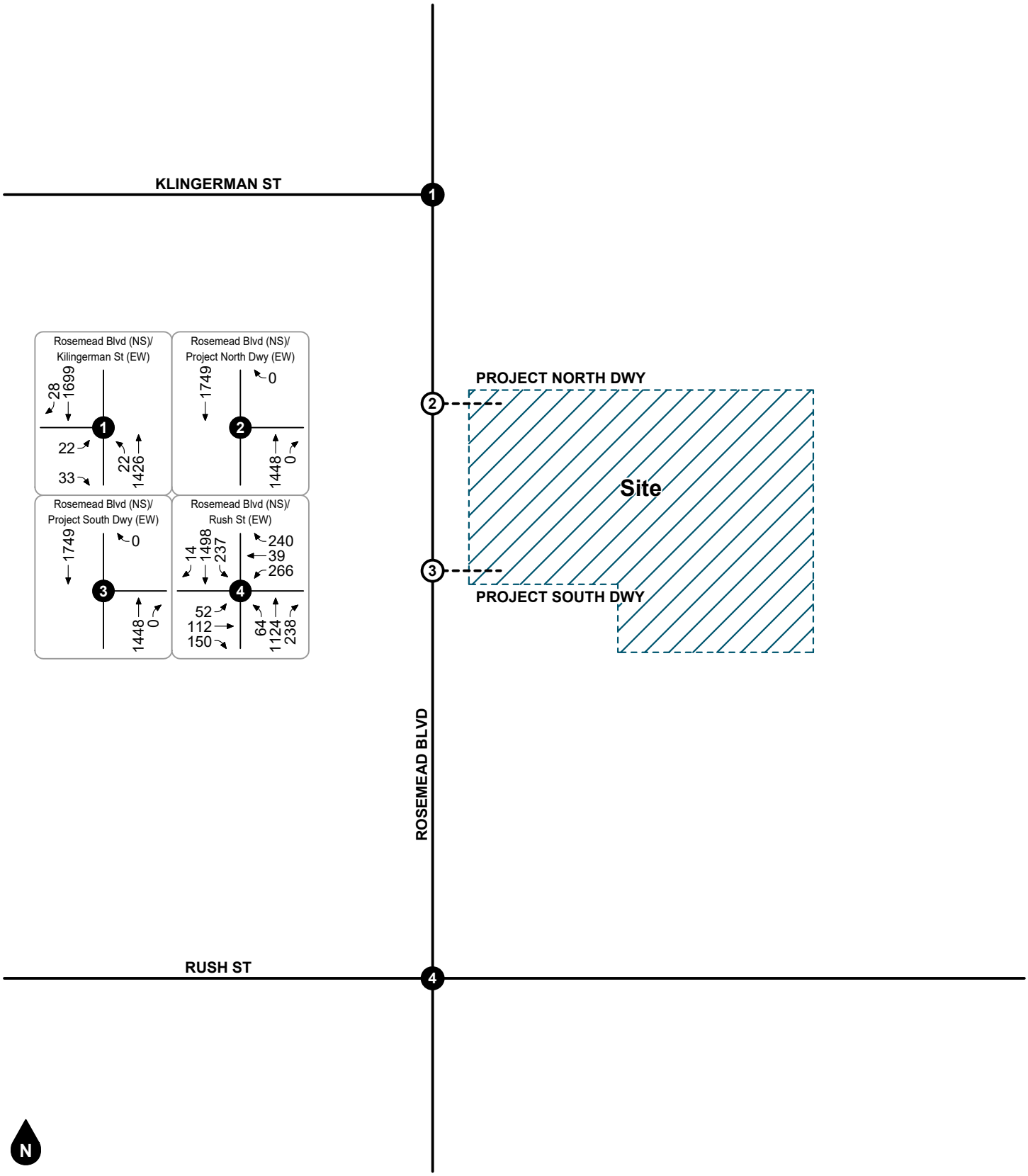


Legend

(#) Study Intersection

(#) Project Driveway

Figure 9
Existing AM Peak Hour Intersection Turning Movement Volumes



Legend

(#) Study Intersection

(#) Project Driveway

Figure 10
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 overall project trip generation summary based upon rates obtained from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition, 2021). Based on review of the ITE land use descriptions, trip generation rates for warehousing (Land Use Code 150) and strip retail plaza (Land Use Code 822) were determined to adequately represent the proposed project land uses and were selected for the analysis.

As shown in Table 2, the proposed project is forecast to generate approximately 661 net daily trips, including 48 net trips during the AM peak hour and 60 net trips during the PM peak hour.

Pass-by Trips

The trip generation shown in Table 2 includes adjustments for pass-by trips. Retail land uses will often locate next to busy roadways to attract motorists already on the street. Since the trip generation rates contained in the ITE *Trip Generation Manual* represent vehicles entering and exiting at the site driveways, it is appropriate to reduce the initial trip generation forecast by the applicable pass-by trip rate when calculating the net new trips that will be added to the surrounding street system. This analysis applies a 40% pass-by trip adjustment for the retail use during the PM peak hour and daily period based on average pass-by rates from the ITE *Trip Generation Manual* (11th Edition, 2021).

Warehousing/Truck Trips

Table 3 shows the trip generation for the warehouse portion of the project. As described by ITE, the warehousing land use category includes accessory office areas. For this analysis, a total of 148,764 square feet of warehouse use is assumed for the trip generation calculation combining the square footages for the accessory office use and the accessory warehouse storage use. In accordance with industry practice for truck-oriented uses, trip generation for the warehouse portion of the project is calculated in terms of Passenger Car Equivalent (PCE) trips. Truck trip rates were obtained from the ITE *Trip Generation Manual* (11th Edition, 2021). The truck mix by axle type was determined based on South Coast Air Quality Management District (SCAQMD) recommendations for warehousing facilities. Truck trips were converted to PCE trips based on the following factors: 1.5 for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for trucks with four or more axles.

PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

Rush Street is identified as a designated truck route on the City of South El Monte Truck Routes map. Regional access for the project includes the SR-60 Freeway approximately one mile to the south and the I-10 Freeway approximately one mile to the north.

Project site access is proposed via two stop-controlled driveways on Rosemead Boulevard. Due to the existing raised median along Rosemead Boulevard, both driveways will be restricted to right-in/right-out only access. The proposed width of the project north driveway is 30 feet and the width of the south driveway is 28 feet. The southerly driveway will provide access for vans, passenger cars, and bobtail trucks only. Larger trucks will enter and exit the site from the project north driveway.

Figure 11 and Figure 12 show the forecast inbound and outbound trip distribution patterns for project-generated passenger cars. Figure 13 and Figure 14 show the inbound and outbound trip distribution patterns for project-generated trucks. The project trip distribution patterns were developed in consultation with City staff using engineering judgment based on review of existing volume data, surrounding land uses, and the local and regional roadway facilities in the project vicinity.

Based on the identified project trip generation and distributions, project-only AM and PM peak hour intersection turning movement volumes are shown 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:

Rosemead Boulevard (NS) at Project North Driveway (EW)

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

Rosemead Boulevard (NS) at Project South Driveway (EW)

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

This analysis also assumes the project shall comply with the following conditions as part of the City of South El Monte standard development review process to ensure adequate geometric design and emergency access:

- A construction work site traffic control plan shall comply with applicable engineering standards set forth in the California *Manual of Uniform Traffic Control Devices* and shall be submitted to the City for review and approval prior to the issuance of a grading permit or start of construction. The plan shall identify any roadway, sidewalk, bike route, or bus stop closures and detours as well as haul routes and hours of operation. All construction-related trips shall be restricted to off-peak hours to the extent possible.

- All roadway design, traffic signing and striping, and traffic control improvements relating to the proposed project shall be constructed in accordance with applicable engineering standards and to the satisfaction of the City of South El Monte 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 South El Monte Public Works Department.

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

Table 2
Overall Project Trip Generation Summary

Trip Generation Rates									
			AM Peak Hour			PM Peak Hour			
Land Use	Source[1]	Land Use Variable[2]	% In	% Out	Rate	% In	% Out	Rate	Daily Rate
Strip Retail Plaza (<40k)	ITE 822	TSF	60%	40%	2.36	50%	50%	6.59	54.45
Warehousing	ITE 150	TSF	77%	23%	0.17	28%	72%	0.18	1.71

Trips Generated									
			AM Peak Hour			PM Peak Hour			
Land Use	Source	Quantity	In	Out	Total	In	Out	Total	Daily
Strip Retail Plaza (<40k)	ITE 822	8.235 TSF	12	8	20	27	27	54	448
- Pass-By Trips[3] (PM/Daily)		40% [3]	0	0	0	-11	-11	-22	-179
Retail Net Trips			12	8	20	16	16	32	269
Warehousing Passenger Car Trips[4]	ITE 150	148.764 TSF	17	5	22	6	16	22	165
Warehousing Truck Trips[4]			3	3	6	3	3	6	227
TOTAL NET TRIPS GENERATED			**32**	**16**	**48**	**25**	**35**	**60**	**661**
Project Passenger Car Trips			29	13	42	22	32	54	434
Project Truck Trips			3	3	6	3	3	6	227

Project Driveway Volumes	Vehicle Type Trip Distribution		AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Project North Driveway [#2]	Passenger Cars	50%	15	7	22	11	16	27	217
	Trucks	70%	2	2	4	2	2	4	159
	Total		**17**	**9**	**26**	**13**	**18**	**31**	**376**
Project South Driveway [#3]	Passenger Cars	50%	14	6	20	11	16	27	217
	Trucks	30%	1	1	2	1	1	2	68
	Total		**15**	**7**	**22**	**12**	**17**	**29**	**285**

Notes:

(1) ITE = Institute of Transportation Engineers *Trip Generation Manual* (11th Edition, 2021); ### = Land Use Code. All rates based on General Urban/Suburban setting unless otherwise noted.

(2) TSF = Thousand Square Feet

(3) Pass-By Trips: ITE, Trip Generation Manual, 11th Edition, 2021. Land Use Code 821 - Shopping Plaza (40-150k), Average Pass-By Trip Percentage = 40%. Daily and PM Only.

(4) Project warehouse trip generation; see Table 3.

Table 3
Project Warehouse Trip Generation

Land Use: Warehousing
Size: 148.764 TSF

TRIP GENERATION RATES PER TSF[1]								
		AM Peak Hour			PM Peak Hour			
Vehicle Type	Source[2]	In	Out	Rate	In	Out	Rate	Daily Rate
All Vehicles	ITE 150	77%	23%	0.170	28%	72%	0.180	1.710
Trucks Only	ITE 150	52%	48%	0.020	52%	48%	0.030	0.600
Passenger Car (88.2% AM, 83.3% PM, 64.9% Daily)		0.116	0.035	0.151	0.042	0.108	0.150	1.110
Truck (11.8% AM, 16.7% PM, 35.1% Daily)		0.010	0.010	0.020	0.016	0.014	0.030	0.600
Truck Mix:	SCAQMD							
2-Axle Trucks (16.7%)		0.002	0.002	0.004	0.003	0.002	0.005	0.100
3-Axle Trucks (20.7%)		0.002	0.002	0.004	0.003	0.003	0.006	0.124
4+ Axle Trucks (62.6%)		0.007	0.006	0.013	0.010	0.009	0.019	0.376

VEHICLE TRIPS GENERATED							
	AM Peak Hour			PM Peak Hour			
Vehicle Type	In	Out	Total	In	Out	Total	Daily
Passenger Car	17	5	22	6	16	22	165
Trucks							
2-Axle Trucks	0	0	0	0	0	0	15
3-Axle Trucks	0	0	0	0	0	0	18
4+ Axle Trucks	1	1	2	1	1	2	56
Subtotal	1	1	2	1	1	2	89
Total Vehicle Trips Generated	**18**	**6**	**24**	**7**	**17**	**24**	**254**

PCE[3] TRIPS GENERATED								
		AM Peak Hour			PM Peak Hour			
Vehicle Type	PCE Factor[4]	In	Out	Total	In	Out	Total	Daily
Passenger Car	1.0	17	5	22	6	16	22	165
Trucks								
2-Axle Trucks	1.5	0	0	0	0	0	0	23
3-Axle Trucks	2.0	0	0	0	0	0	0	36
4+ Axle Trucks	3.0	3	3	6	3	3	6	168
Subtotal		3	3	6	3	3	6	227
Total PCE Trips Generated		**20**	**8**	**28**	**9**	**19**	**28**	**392**

Notes:
(1) TSF = Thousand Square Feet

(2) ITE = Institute of Transportation Engineers *Trip Generation Manual* (11th Edition, 2021); ### = ITE Land Use Code.
SCAQMD = South Coast Air Quality Management District recommendations for non-cold storage high-cube warehouse.

(3) PCE = Passenger Car Equivalent

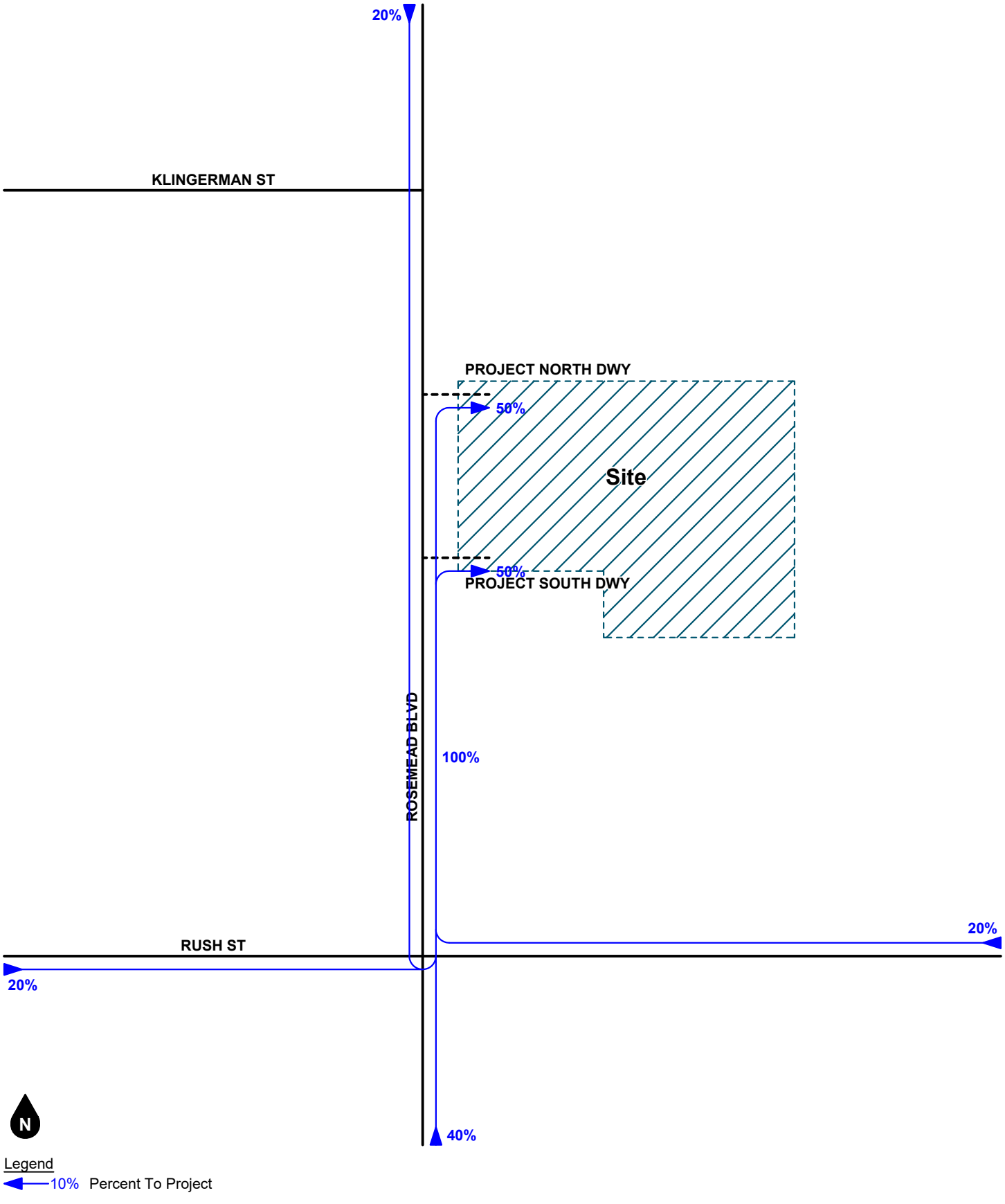


Figure 11
Project Passenger Car Inbound Trip Distribution

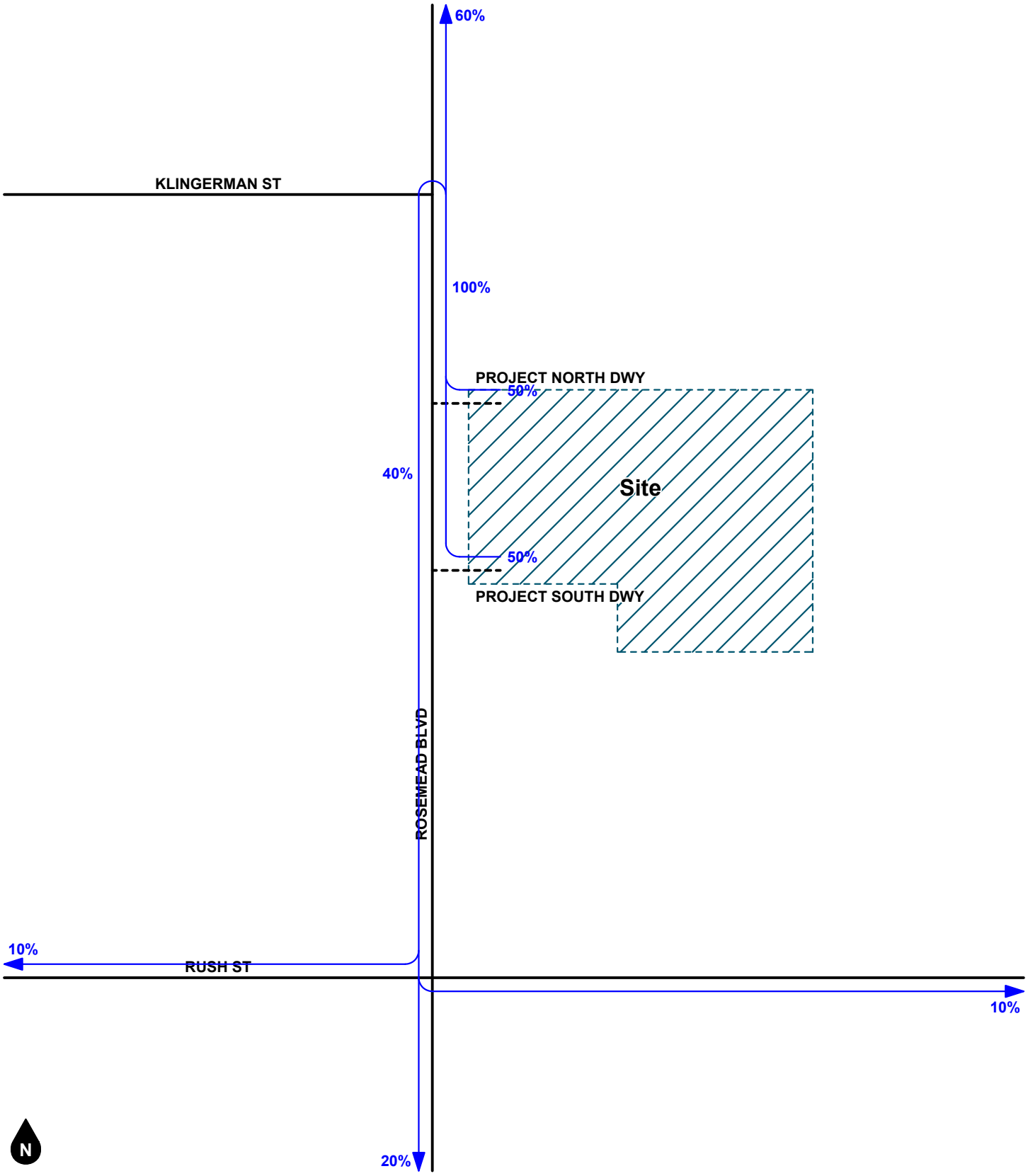


Figure 12
Project Passenger Car Outbound Trip Distribution

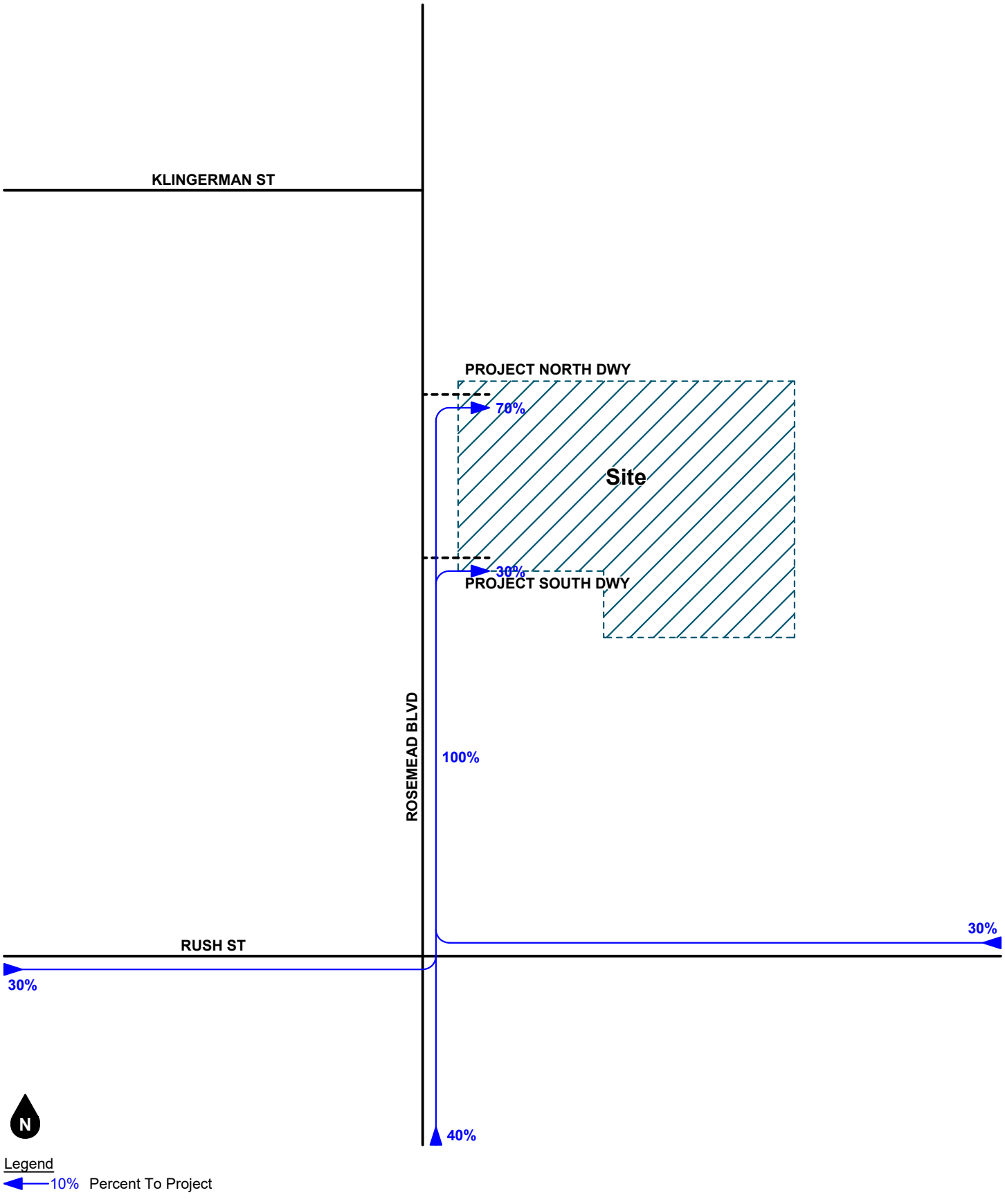


Figure 13
Project Truck Inbound Trip Distribution

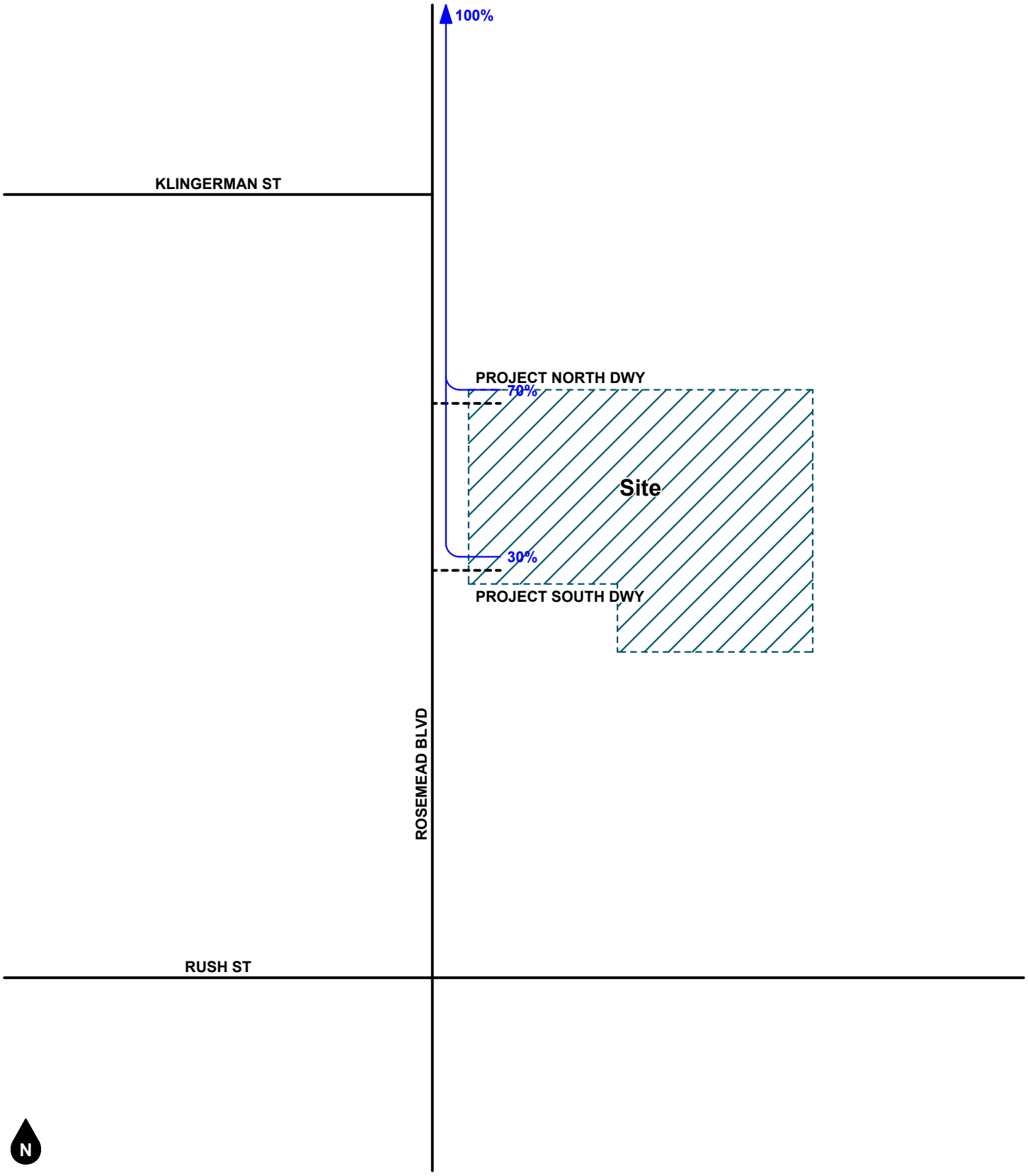


Figure 14
Project Truck Outbound Trip Distribution

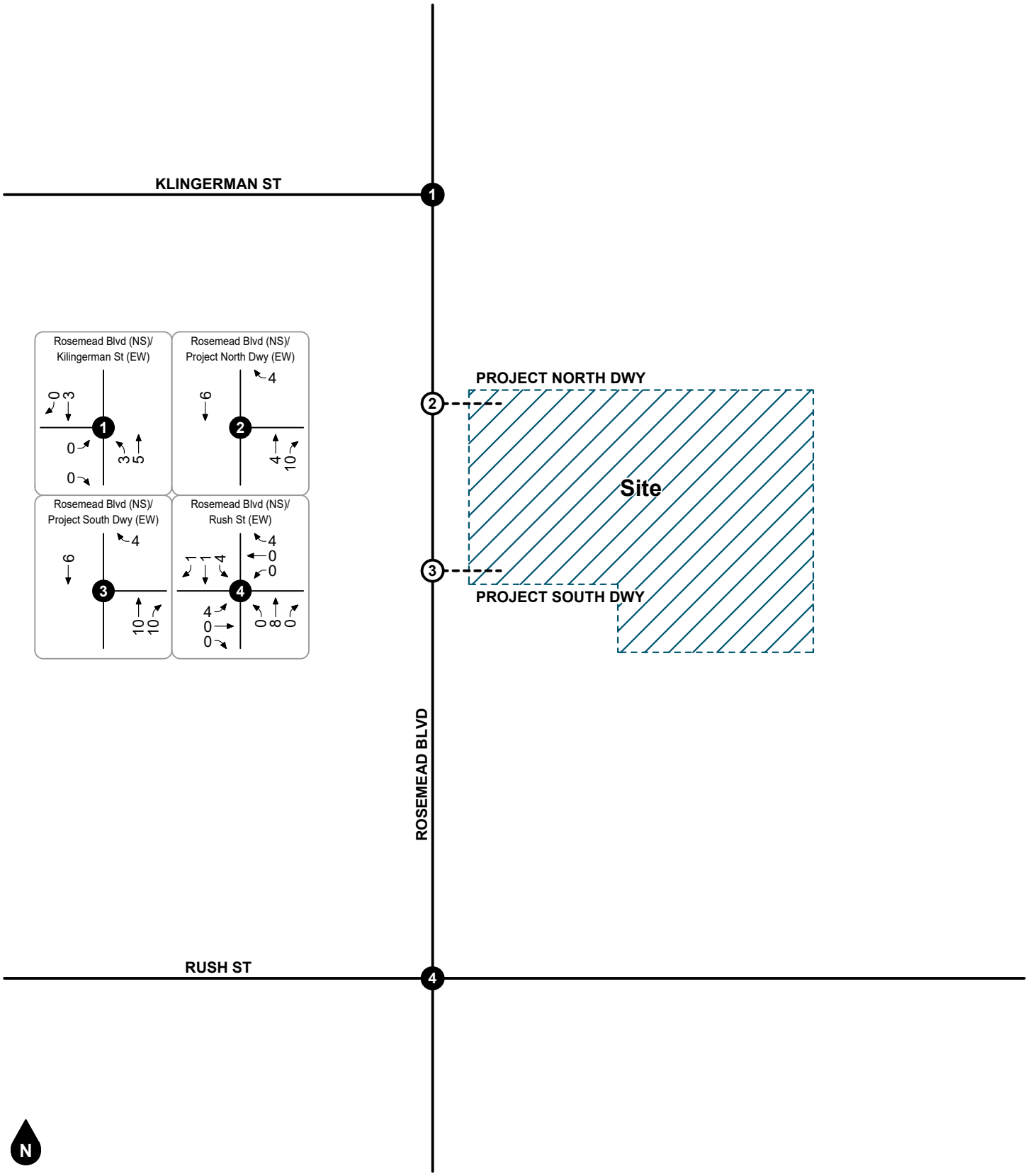


Figure 15
Project AM Peak Hour Intersection Turning Movement Volumes

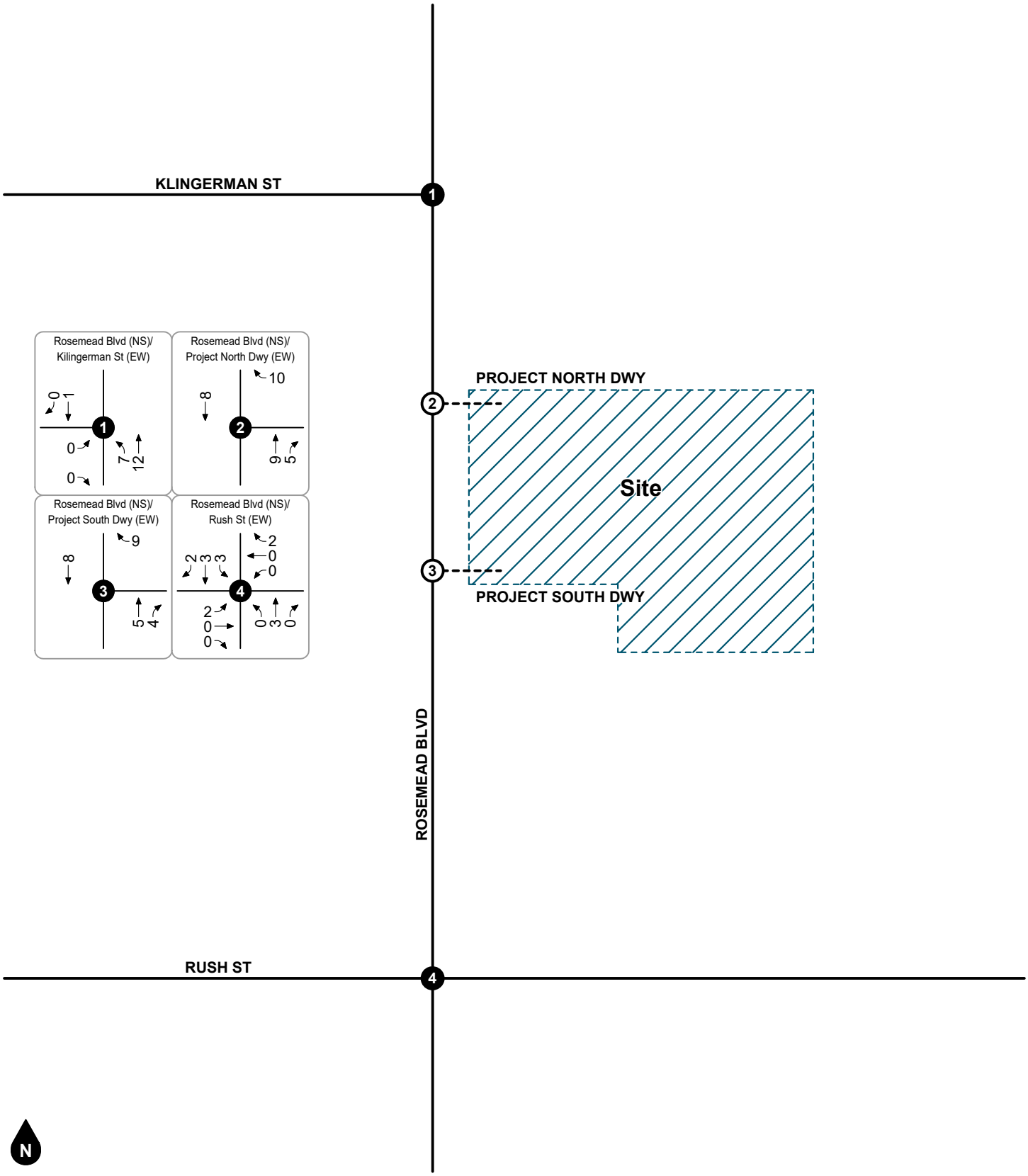


Figure 16
Project PM Peak Hour Intersection Turning Movement Volumes

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, the Opening Year (2025) roadway volume forecasts were developed by adding 2.74-percent annual growth for two years (total growth = 5.56%) over existing (2023) volumes. The 2.74-percent annual growth rate is based on the Southern California Association of Governments (SCAG) Annual Average Traffic Growth per forecast period 2020-2035.

Other Development

To account for trips generated by future development, trips generated by pending or approved other cumulative development projects in the City of South El Monte were added to the study area. Appendix E contains additional information regarding the location of other development projects with respect to the proposed project site and the project study area.

Table 4 shows the trip generation summary for other development project based on trip generation rates obtained from the ITE *Trip Generation Manual*. 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 and Figure 18 show the forecast AM and PM peak hour intersection turning movement volumes for trips generated by other development projects.

ANALYSIS SCENARIO VOLUME FORECASTS

Existing (2023) Plus Project

Existing Plus Project volume forecasts were derived by adding the project-generated trips to existing volumes. Existing Plus Project AM and PM peak hour intersection turning movement volumes are shown on Figure 19 and Figure 20.

Opening Year (2025) Without Project

To develop Opening Year (2025) Without Project volume forecasts, existing volumes were combined with ambient growth and trips generated by other developments. Opening Year (2025) Without Project AM and PM hour intersection turning movement volumes are shown Figure 21 and Figure 22.

Opening Year (2025) With Project

Opening Year (2025) With Project volume forecasts were developed by adding project generated trips to the Opening Year (2025) Without Project forecast. Opening Year (2025) With Project AM and PM peak hour intersection turning movement volumes are shown on Figure 23 and Figure 24.

Table 4
Other Development Trip Generation

Trip Generation Rates										
Project				AM Peak			PM Peak			Daily
No.	Land Use	Code[1]	Units[2]	In %	Out %	Total	In %	Out %	Total	
1	Warehousing	ITE 150	TSF	77%	23%	0.17	28%	72%	0.18	1.71
2	Single-Family Detached Housing	ITE 210	DU	26%	74%	0.70	63%	37%	0.94	9.43
3	Multifamily Housing (Low-Rise)	ITE 220	DU	24%	76%	0.40	63%	37%	0.51	6.74
4	Multifamily Housing (Mid-Rise)	ITE 221	DU	23%	77%	0.37	61%	39%	0.39	4.54
5	General Office Building	ITE 710	TSF	88%	12%	1.52	17%	83%	1.44	10.84
6	Strip Retail Plaza (<40k)	ITE 822	TSF	60%	40%	2.36	50%	50%	6.59	54.45

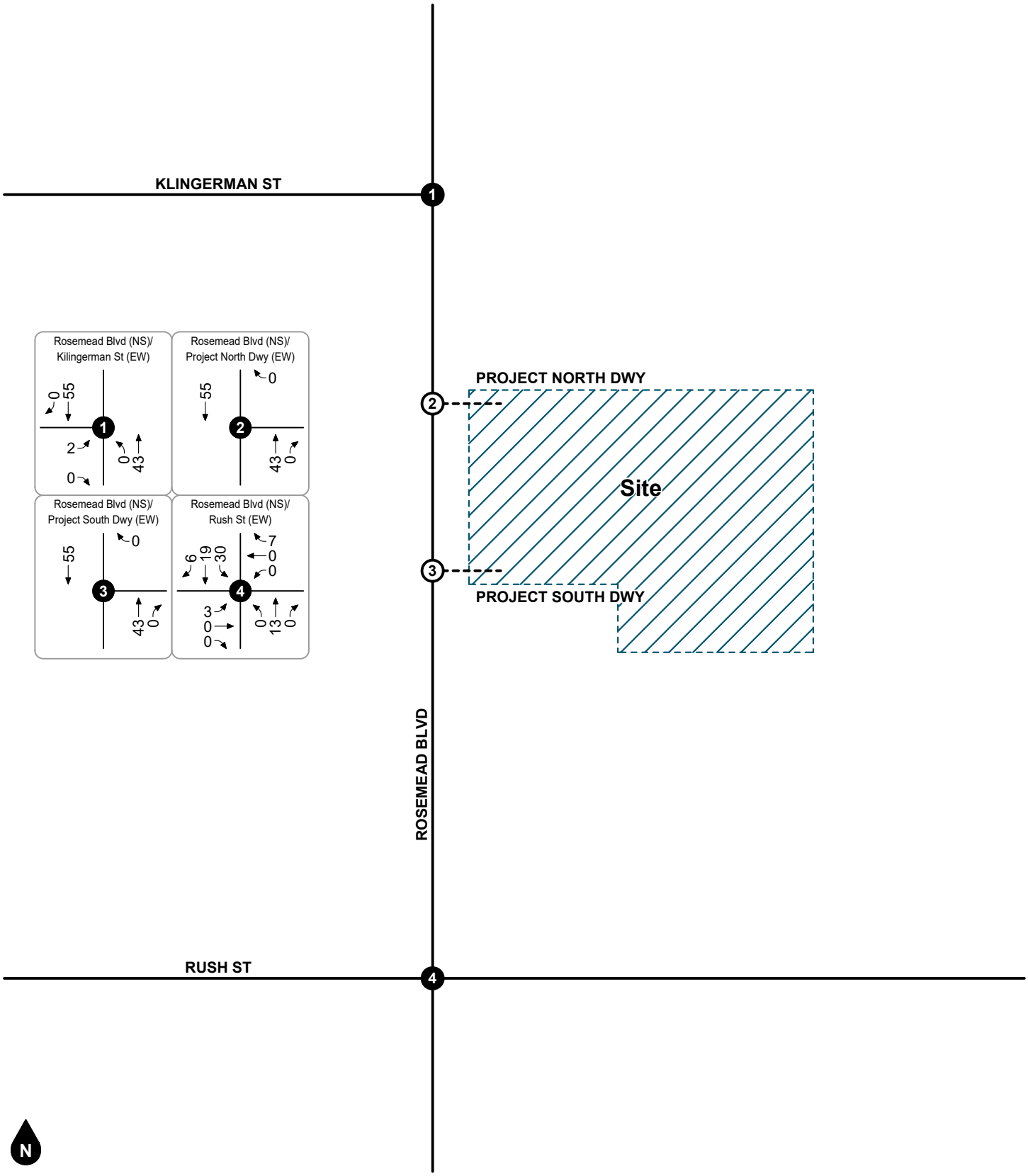
Trips Generated									
Cumulative Development			AM Peak			PM Peak			Weekday Daily
No.	Land Use	Quantity[2]	In	Out	Total	In	Out	Total	
1	Mye Plaza (2727 Rosemead Blvd)								
	Multifamily Housing (Mid-Rise)	73 DU	7	20	27	18	11	29	331
	Strip Retail Plaza (<40k)	16.800 TSF	24	16	40	55	55	110	915
	- Pass-By Trips[3] (PM/Daily)	40% [3]	0	0	0	-22	-22	-44	-366
	Total Trips	**Mixed Use**	**31**	**36**	**67**	**51**	**44**	**95**	**880**
2	2512 Rosemead Blvd								
	Warehousing	56.628 TSF	7	2	9	3	7	10	97
	Strip Retail Plaza (<40k)	8.582 TSF	12	8	20	28	28	56	467
	- Pass-By Trips[3] (PM/Daily)	40% [3]	0	0	0	-11	-11	-22	-187
	Total Trips	**65.210 TSF**	**19**	**10**	**29**	**20**	**24**	**44**	**377**
3	2540 Rosemead Blvd								
	Single-Family Detached Housing	169 DU	30	88	118	100	59	159	1,594
	Multifamily Housing (Low-Rise)	38 DU	4	11	15	12	7	19	256
	Total Trips	**207 DU**	**34**	**99**	**133**	**112**	**66**	**178**	**1,850**

Notes:

(1) ITE = Institute of Transportation Engineers, Trip Generation Manual, 11th Edition, 2021; XXX = Land Use Code

(2) DU = Dwelling Units; TSF = Thousand Square Feet

(3) Pass-By Trips: ITE, Trip Generation Manual, 11th Edition, 2021.
Land Use Code 821 - Shopping Plaza (40-150k), Average Pass-By Trip Percentage = 40%. Daily and PM Only.

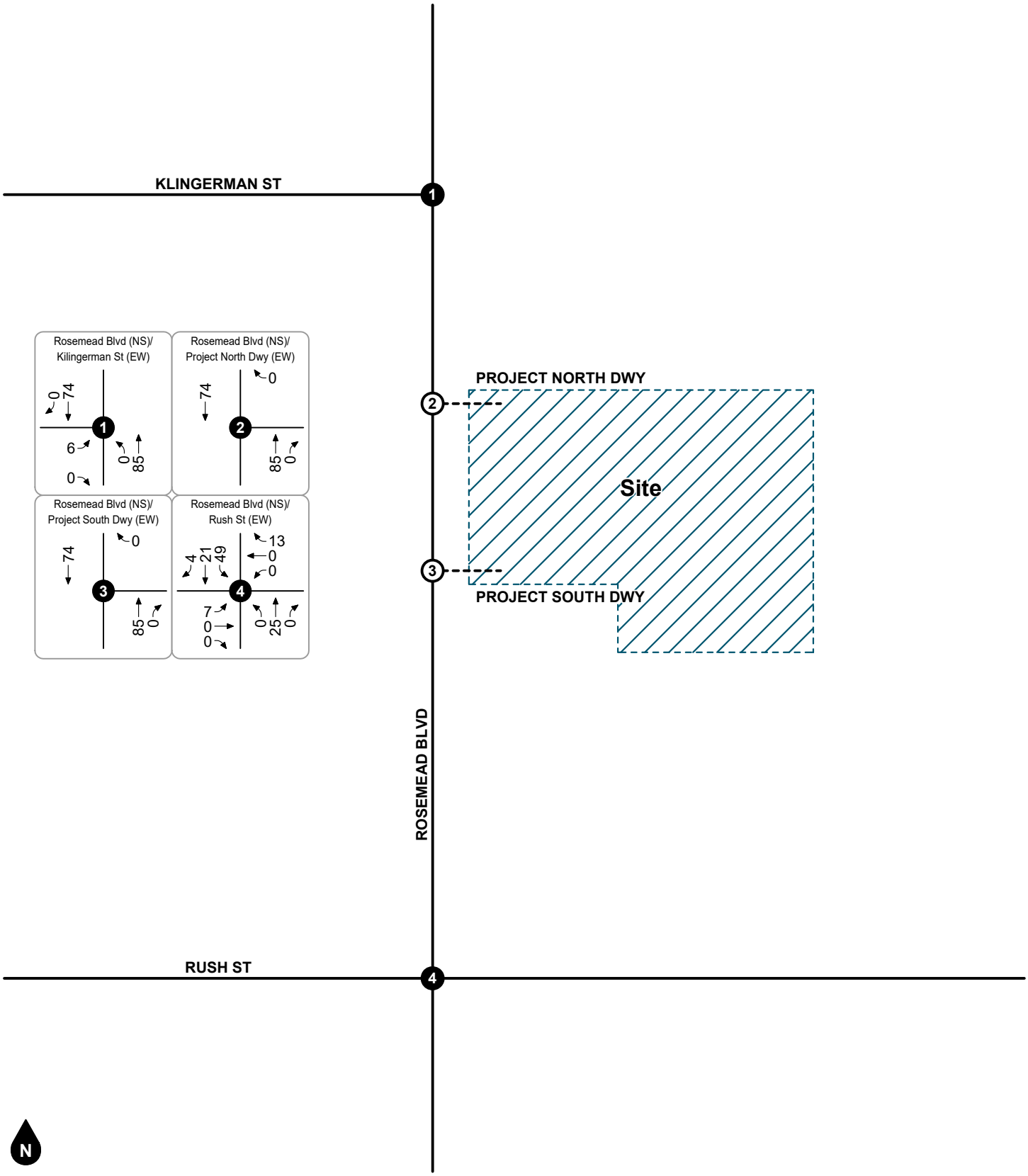


Legend

(#) Study Intersection

(#) Project Driveway

Figure 17
Other Cumulative Development
AM Peak Hour Intersection Turning Movement Volumes

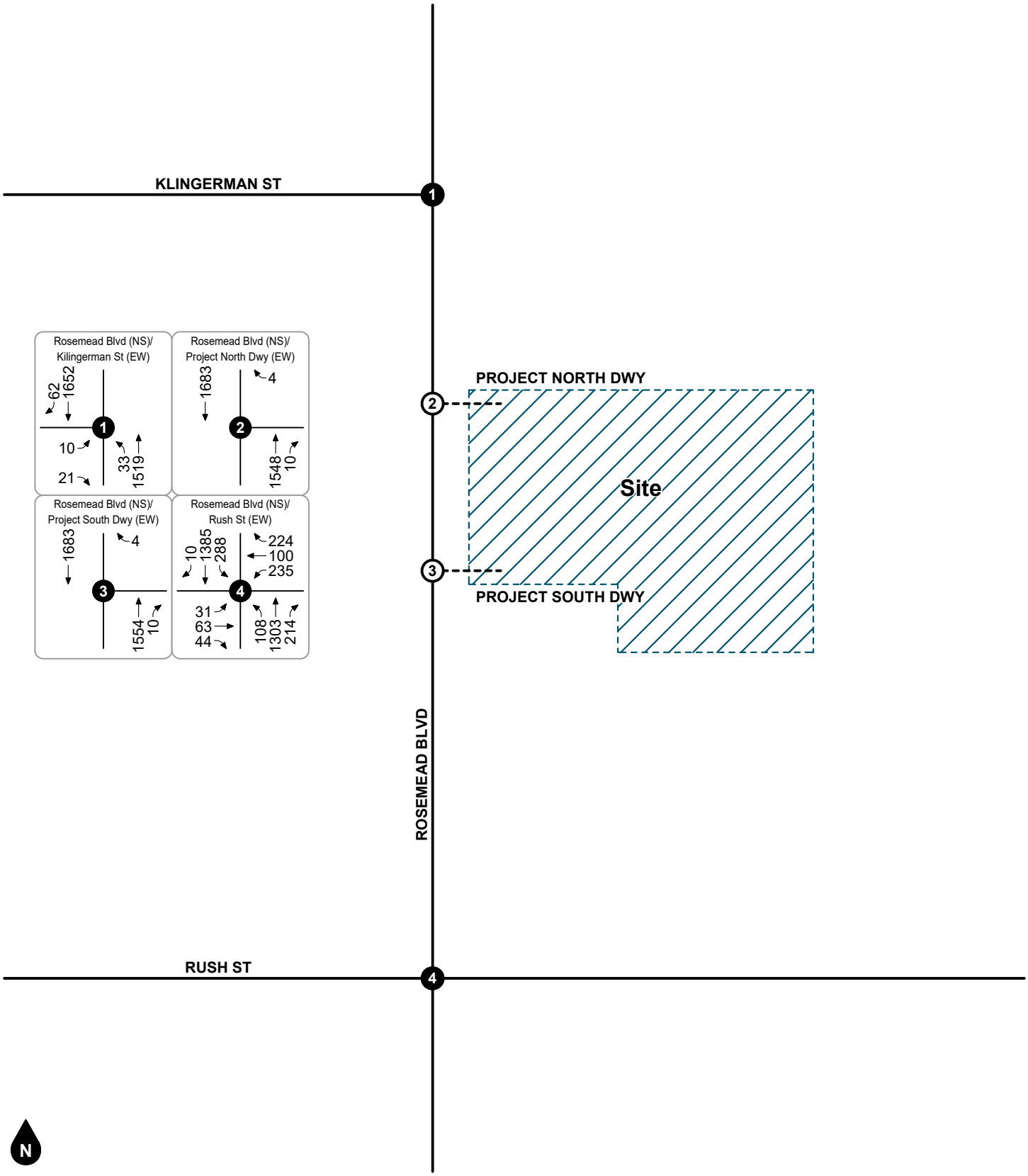


Legend

(#) Study Intersection

(#) Project Driveway

Figure 18
Other Cumulative Development
PM Peak Hour Intersection Turning Movement Volumes

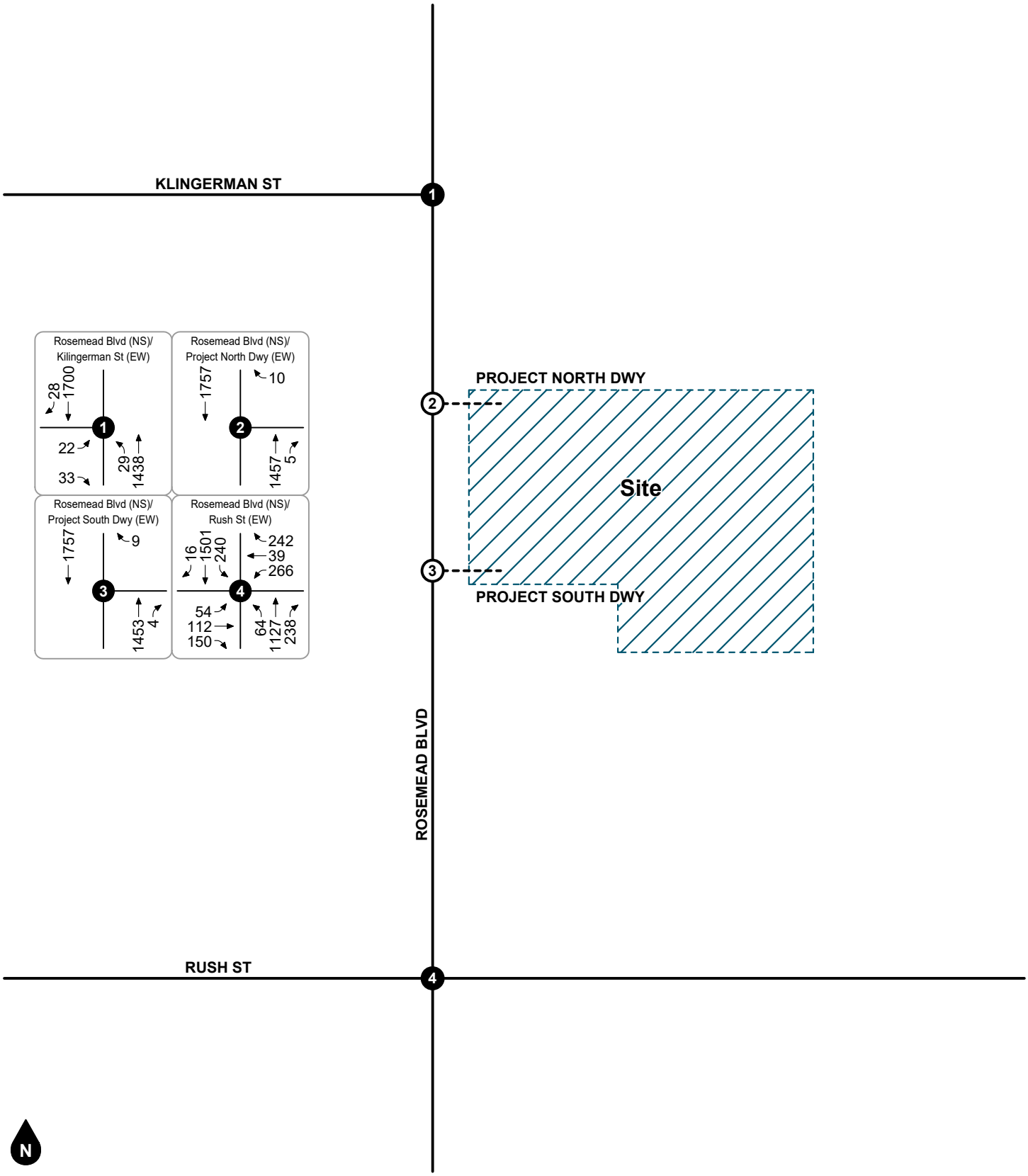


Legend

(#) Study Intersection

(#) Project Driveway

Figure 19
Existing Plus Project
AM Peak Hour Intersection Turning Movement Volumes

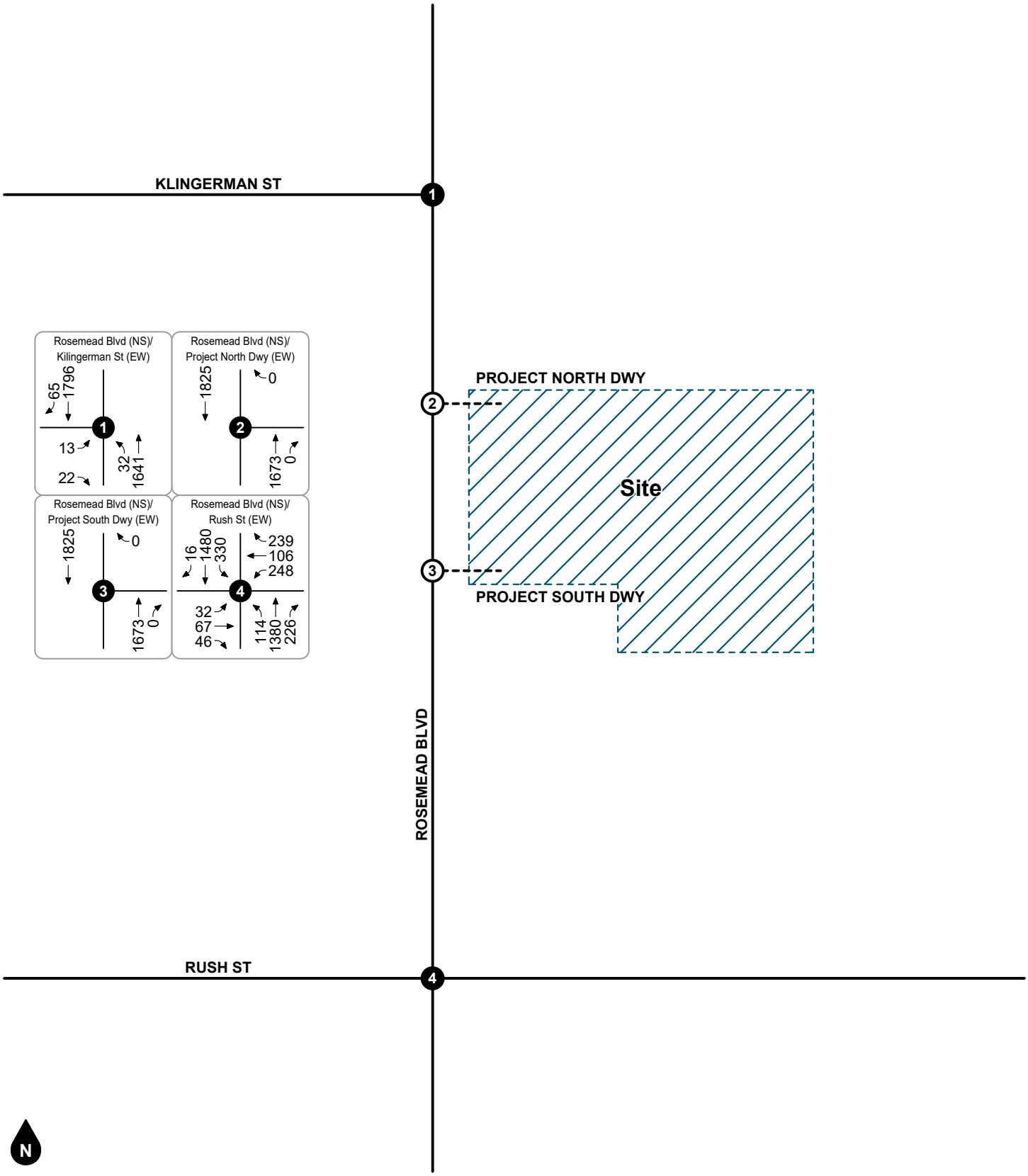


Legend

(#) Study Intersection

(#) Project Driveway

Figure 20
Existing Plus Project
PM Peak Hour Intersection Turning Movement Volumes

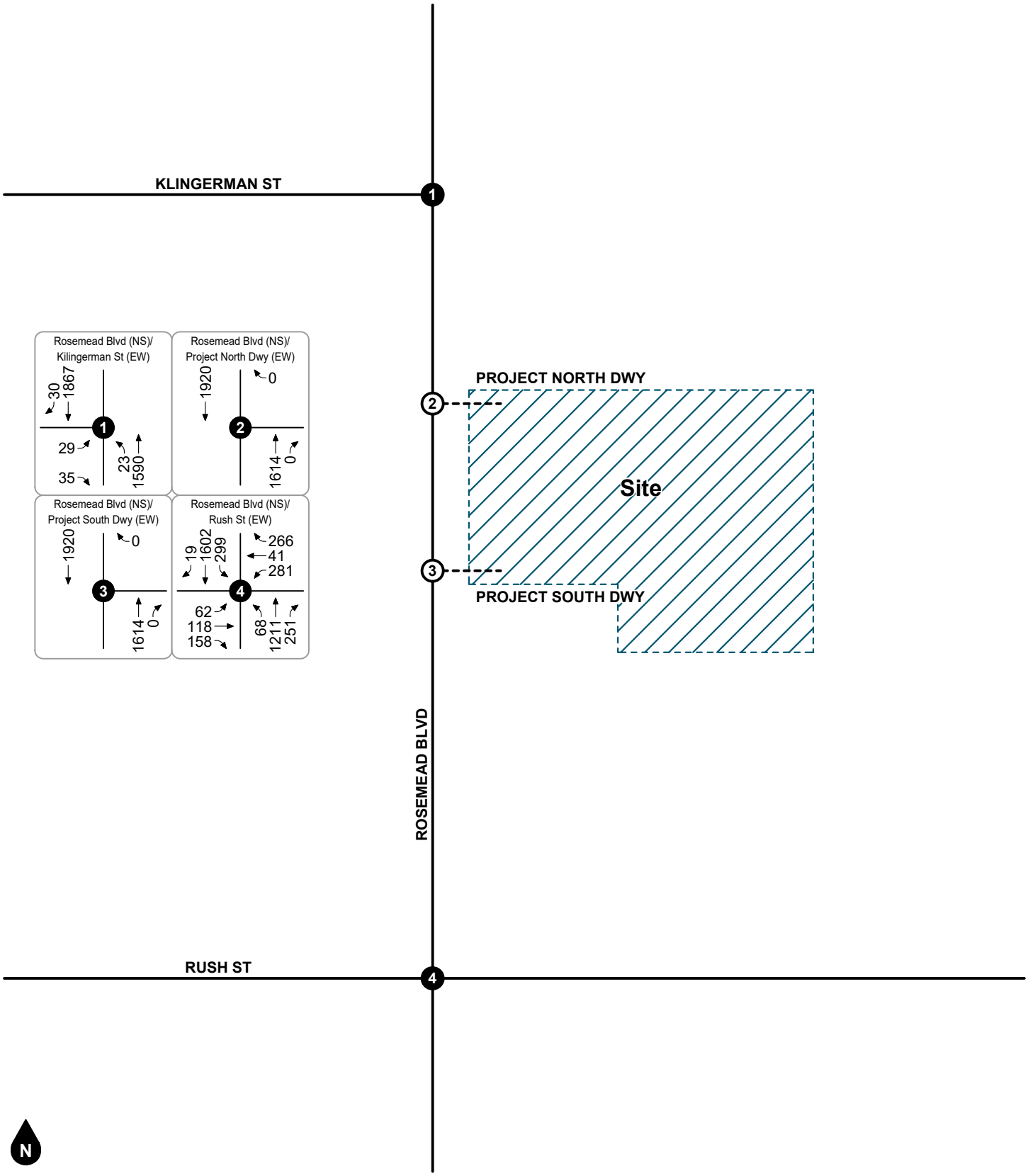


Legend

Study Intersection

Project Driveway

Figure 21
Opening Year (2025) Without Project
AM Peak Hour Intersection Turning Movement Volumes



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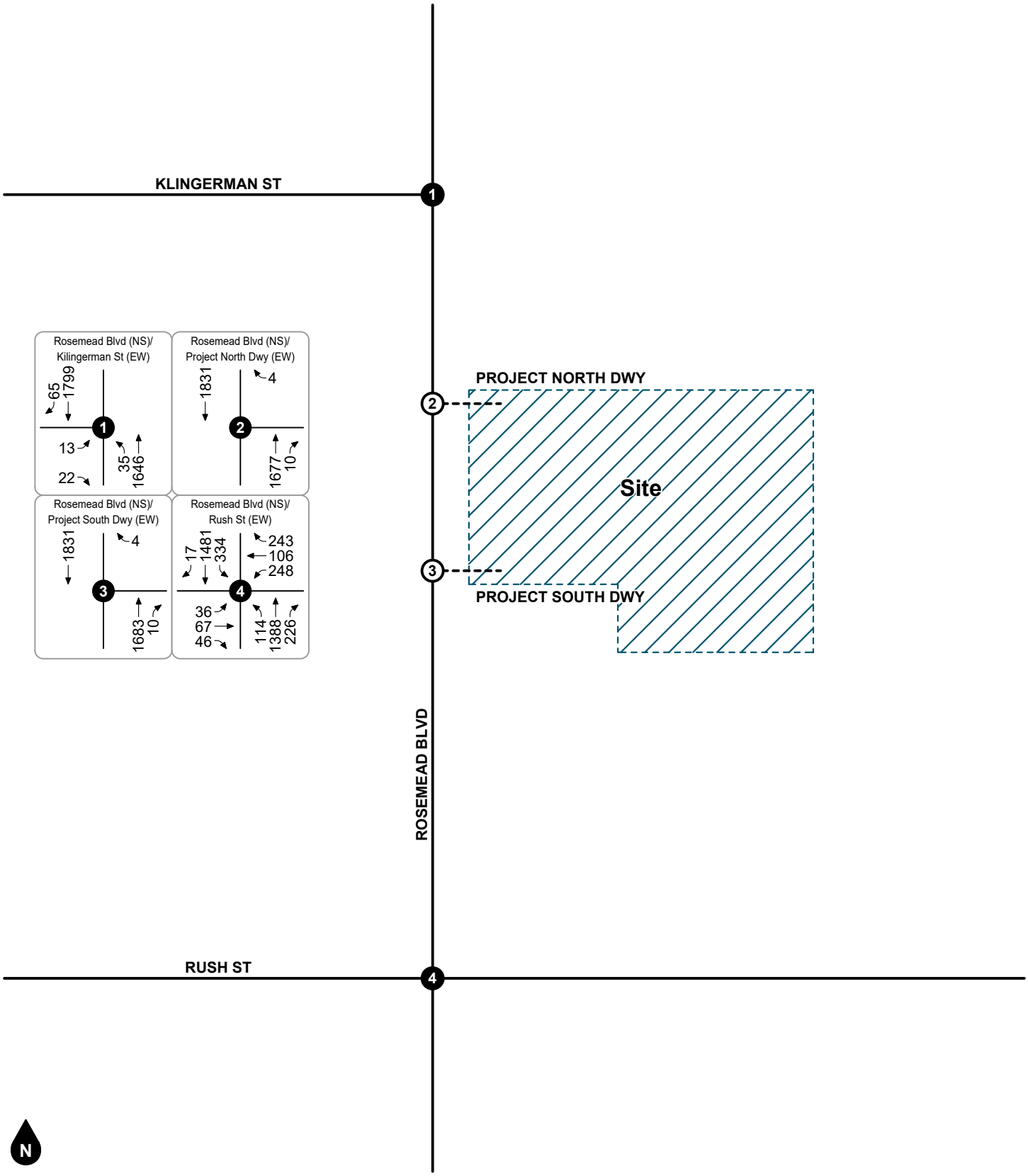
Study Intersection

Project Driveway

Figure 22
Opening Year (2025) Without Project
PM Peak Hour Intersection Turning Movement Volumes

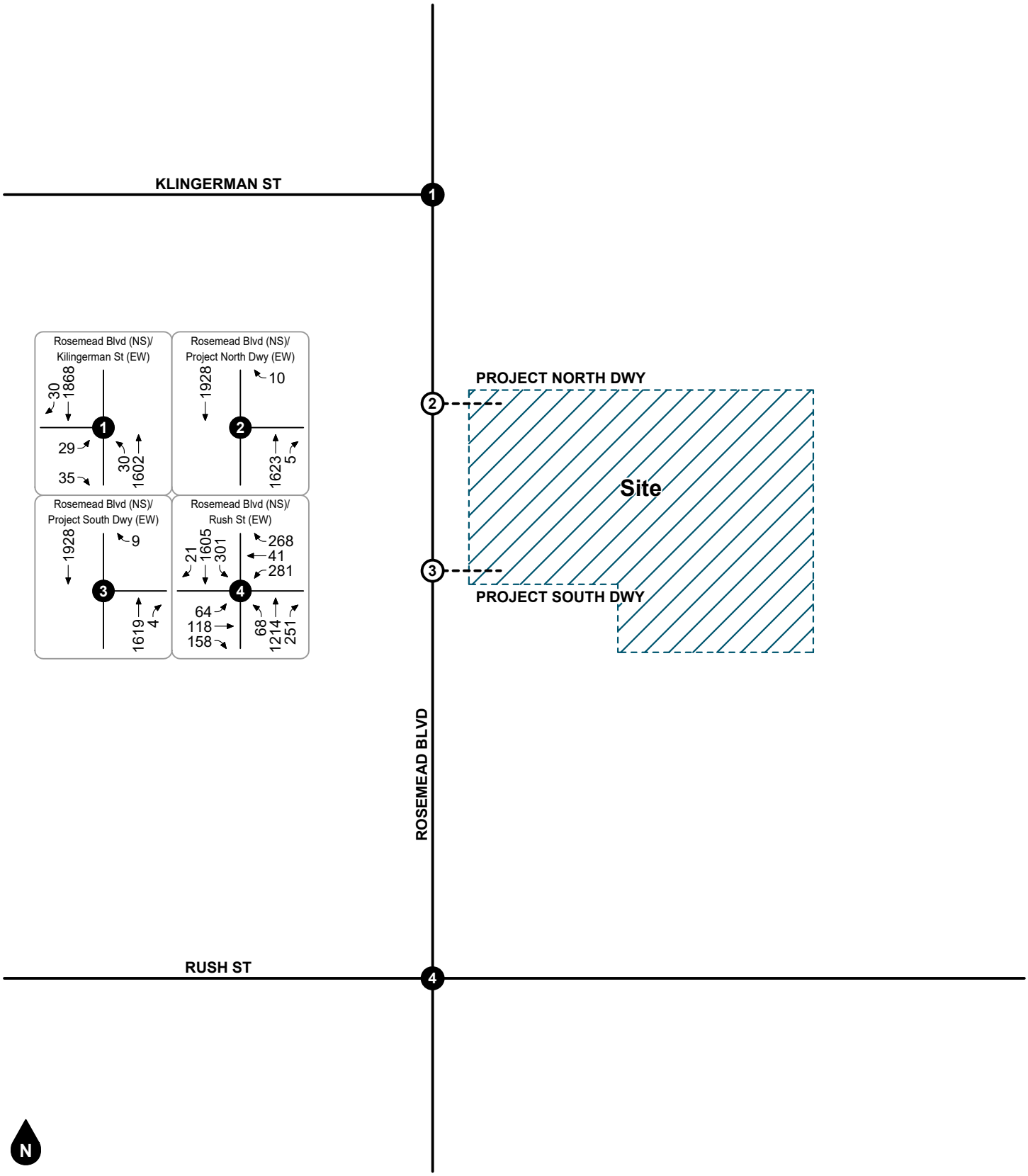


Legend

Study Intersection

Project Driveway

Figure 23
Opening Year (2025) With Project
AM Peak Hour Intersection Turning Movement Volumes



Legend

(#) Study Intersection

(#) Project Driveway

Figure 24
Opening Year (2025) 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 2023 PLUS PROJECT

The Levels of Service for Existing Plus 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 Existing Plus Project conditions, except for the following intersection that is forecast to continue operating at deficient Levels of Service:

- Rosemead Boulevard/Klingerman Street – #1 (LOS F, AM & PM peak hours)

As also shown in Table 5, the proposed project is forecast to result in no Level of Service impacts at the study intersections for Existing Plus Project conditions based on the City-established standards. The intersection does not meet peak hour signal warrants and the project contributes less than two percent (2%) of the total future traffic at the intersection. Additionally, the Level of Service deficiency relates to existing eastbound left turn movements to which the project is not forecast to contribute any trips. Therefore, the project is not responsible for improvements to address this pre-existing deficiency.

Table 6 shows the project traffic contribution at the intersection of Rosemead Boulevard and Klingerman Street [#1]. Appendix F shows the peak hour signal warrant is not satisfied for the intersection of Rosemead Boulevard and Klingerman Street [#1].

OPENING YEAR (2025) WITHOUT PROJECT

The Levels of Service for Opening Year (2025) Without Project conditions are shown in Table 7. As shown in Table 7, the study intersection is forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Opening Year (2025) Without Project conditions, except for the following intersection that is forecast to operate at deficient Levels of Service:

- Rosemead Boulevard/Klingerman Street – #1 (LOS F, AM & PM peak hours)

OPENING YEAR (2025) WITH PROJECT

The Levels of Service for Opening Year (2025) With Project conditions are shown in Table 8. As shown in Table 8, the study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Opening Year (2025) With Project conditions, except for the following intersection that is forecast to continue operating at deficient Levels of Service:

- Rosemead Boulevard/Klingerman Street – #1 (LOS F, AM & PM peak hours)

As also shown in Table 8, the proposed project is forecast to result in no Level of Service impacts at the study intersections for Opening Year (2025) With Project conditions based on the City-established standards The intersection does not meet peak hour signal warrants and the project contributes less than two percent (2%) of the total future traffic at the intersection. Additionally, the Level of Service deficiency relates to existing eastbound left turn movements to which the project is not forecast to contribute any trips. Therefore, the project is not responsible for improvements to address this pre-existing deficiency.

Table 5
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		Project Change	Significant Impact?	Without Project		With Project		Project Change	Significant Impact?
			V/C[2] or [Delay][3]	LOS[4]	V/C[2] or [Delay][3]	LOS[4]			V/C[2] or [Delay][3]	LOS[4]	V/C[2] or [Delay][3]	LOS[4]		
1.	Rosemead Blvd at Klingerman St	CSS	[89.3]	F	[91.9]	F	+[2.6]	No[5]	[108.2]	F	[116.2]	F	+[8.0]	No[5]
2.	Rosemead Blvd at Project North Dwy	CSS	[0.0]	A	[17.6]	C	+[17.6]	No	[0.0]	A	[16.9]	C	+[16.9]	No
3.	Rosemead Blvd at Project South Dwy	CSS	[0.0]	A	[17.6]	C	+[17.6]	No	[0.0]	A	[16.8]	C	+[16.8]	No
4.	Rosemead Blvd at Rush St	TS	0.693	B	0.695	B	+0.002	No	0.738	C	0.739	C	+0.001	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

(5) The intersection does not meet peak hour signal warrants based on the California Manual on Uniform Traffic Control Devices (CAMUTCD). The project contributes less than 2% of the total future traffic at the intersection. Therefore, no improvements are required.

Table 6
Project Trip Contribution

Study Intersection	Peak Hour	Intersection Turning Movement Volumes			
		Existing (2023)	Existing Plus Project	Project	Project Percent of Total Future
1. Rosemead Blvd at Klingerman St	AM	3,286	3,297	11	0.3%
	PM	3,230	3,250	20	0.6%

Table 7
Opening Year (2025) 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.	Rosemead Blvd at Klingerman St	CSS	[141.4]	F	[222.1]	F
4.	Rosemead Blvd at Rush St	TS	0.733	C	0.756	C

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 8
Opening Year (2025) 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		Project Change	Significant Impact?	Without Project		With Project		Project Change	Significant Impact?
			V/C[2] or [Delay][3]	LOS[4]	V/C[2] or [Delay][3]	LOS[4]			V/C[2] or [Delay][3]	LOS[4]	V/C[2] or [Delay][3]	LOS[4]		
1.	Rosemead Blvd at Klingerman St	CSS	[141.4]	F	[146.4]	F	+[5.0]	No[5]	[222.1]	F	[243.8]	F	+[21.7]	No[5]
2.	Rosemead Blvd at Project North Dwy	CSS	[0.0]	A	[18.9]	C	+[18.9]	No	[0.0]	A	[18.6]	C	+[18.6]	No
3.	Rosemead Blvd at Project South Dwy	CSS	[0.0]	A	[18.9]	C	+[18.9]	No	[0.0]	A	[18.6]	C	+[18.6]	No
4.	Rosemead Blvd at Rush St	TS	0.733	C	0.735	C	+0.002	No	0.756	C	0.758	C	+0.002	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

(5) The intersection does not meet peak hour signal warrants based on the California Manual on Uniform Traffic Control Devices (CAMUTCD). The project contributes less than 2% of the total future traffic at the intersection. Therefore, no improvements are required.

7. PARKING ANALYSIS

The parking analysis for the proposed Rosemead and Rush Industrial Project is performed based on the City of South El Monte Municipal Code.

VEHICLE PARKING

Table 9 shows the vehicle parking requirement based on City of South El Monte Municipal Code. For the warehouse-associated office area, the required parking rate is based on the warehouse parking rate of one space per 1,000 square feet. As shown in Table 2, the standard City of South El Monte Municipal Code off-street parking rates require a total of 176 parking spaces for the proposed Project. As shown on the site plan, the project will provide a total of 181 parking stalls for passenger cars. Therefore, there is a parking surplus of 5 parking spaces.

BICYCLE PARKING

The project is providing five (5) long-term bicycle parking spaces for tenants and four (4) short-term bicycle parking spaces for visitors, for a total of nine (9) bicycle parking spaces. The bicycle parking requirement is based on five percent (5%) of tenant parking and five percent (5%) of visitor parking.

Table 9
Parking Requirement Based on City of South El Monte Municipal Code

Parking Rate Source	Proposed Use	Component	Quantity	Units[1]	Parking Requirement	Parking Spaces
City Municipal Parking Code[2]	Warehousing	Gross Floor Area	128,770	SF	1.0 Space : 1,000 SF	129
	Warehouse-Associated Office	Gross Floor Area	19,994	SF	1.0 Space : 1,000 SF	20
	General retail or services	Gross Floor Area	8,235	SF	1.0 Space : 300 SF	27
Total Required Parking Spaces Based on City Municipal Code						176
Provided Parking Supply [see Figure 2]						181
Parking Surplus (+) / Deficit (-) for the Proposed Project						+5

Notes:

(1) SF = Square Feet

(2) City of South El Monte Municipal Code, 17.60.020

8. VEHICLE TURNING TEMPLATES

The purpose of the vehicle turning template exhibits is to verify that existing roadway geometry and the two proposed project driveways can accommodate the vehicle turning movements that will be used to access the project site. Truck turning templates were illustrated at the two project driveways to show that the proposed inbound and outbound turning movements are feasible for WB-50 and WB-55 trucks to access the project site. Passenger car turning templates were illustrated at the two adjacent intersections on Rosemead Boulevard to shows that the northbound U-turn movement at Klingerman Street [Intersection #1] and the southbound U-turn movement at Rush Street [Intersection #4] are feasible for passenger cars to maneuver.

TRUCK TURNING TEMPLATES AT THE PROJECT DRIVEWAYS

Appendix G shows the truck turning templates at the two project driveways. The project south driveway is for vans, passenger cars and bobtail trucks only. Trucks larger than a bobtail must enter and exit the site from the project north driveway.

Appendix G1 shows the inbound and outbound truck turning movements for a WB-50 truck in and out of the project driveways on Rosemead Boulevard and the loading dock. It is anticipated that most of the truck traffic will be WB-50 trucks or smaller size vehicles. As shown in Attachment B1, the currently proposed driveway design and site plan is adequate for the truck maneuvering movements of the WB-50 design vehicle.

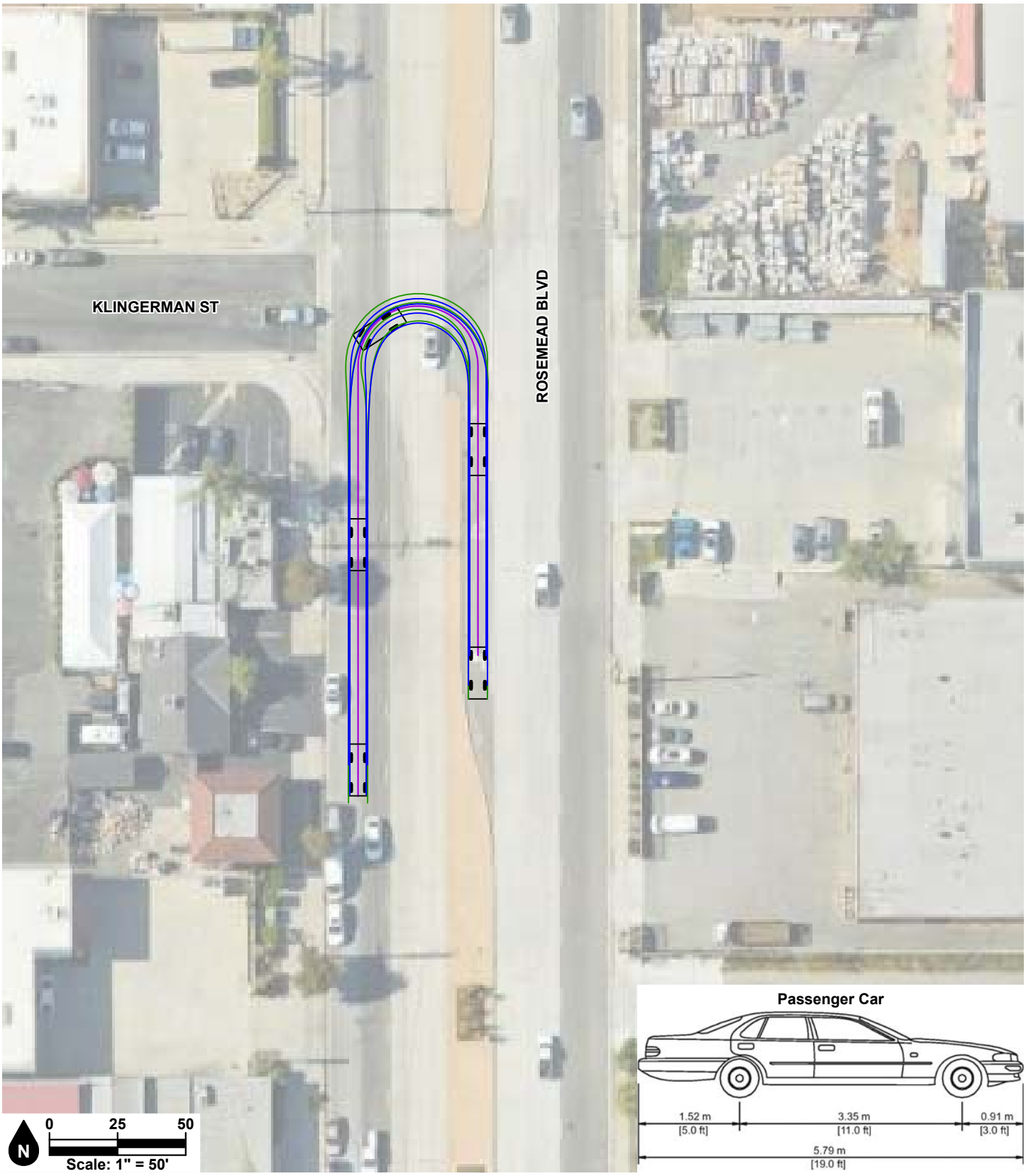
Appendix G2 shows the truck turning template for a larger WB-55 truck maneuvering the project driveways on Rosemead Boulevard and the loading dock. The applicant is anticipating that the larger WB-55 trucks will be rarely used. In the event when a larger WB-55 truck is used, a parking management plan will be implemented to keep clear the parking stalls along the southerly boundary to accommodate the truck turning movements. When a WB-55 truck is entering the site through the Project North Driveway [Intersection #2], it will stay in the curb lane on Rosemead Boulevard and the front portion of the truck (bobtail) may perform a wide right turn by swinging left toward the middle lane just before it makes a northbound right turn movement while the rear portion of the truck (cargo trailer) will continue to occupy in the curb lane. Since other vehicles behind the truck could see that the curb lane is still occupied by the truck trailer, these other vehicles are unlikely to attempt to pass the truck on the right side. The driver will be required to turn on its emergency flashing lights to provide warning for the northbound vehicles on Rosemead Boulevard.

PASSENGER TURNING TEMPLATES AT THE ADJACENT INTERSECTIONS

Figure 25 shows the passenger car turning templates for the northbound U-turn movement at the intersection of Rosemead Boulevard and Klingerman Street [#1].

Figure 26 shows the passenger car turning templates for the southbound U-turn movement at the intersection of Rosemead Boulevard and Rush Street [#4].

As shown in Figure 25 and Figure 26, the existing intersection geometry on Rosemead Boulevard at the two adjacent intersections at Klingerman Street [#1] and at Rush Street [#4] are feasible for passenger cars to maneuver the U-turn movements.



Legend
- Vehicle Wheel Path
- Vehicle Overhang
- Vehicle Centerline

Figure 25
Passenger Car Turning Template at Roasemead Boulevard/Klingerman Street (Intersection #1) - Northbound U-Turn Outbound

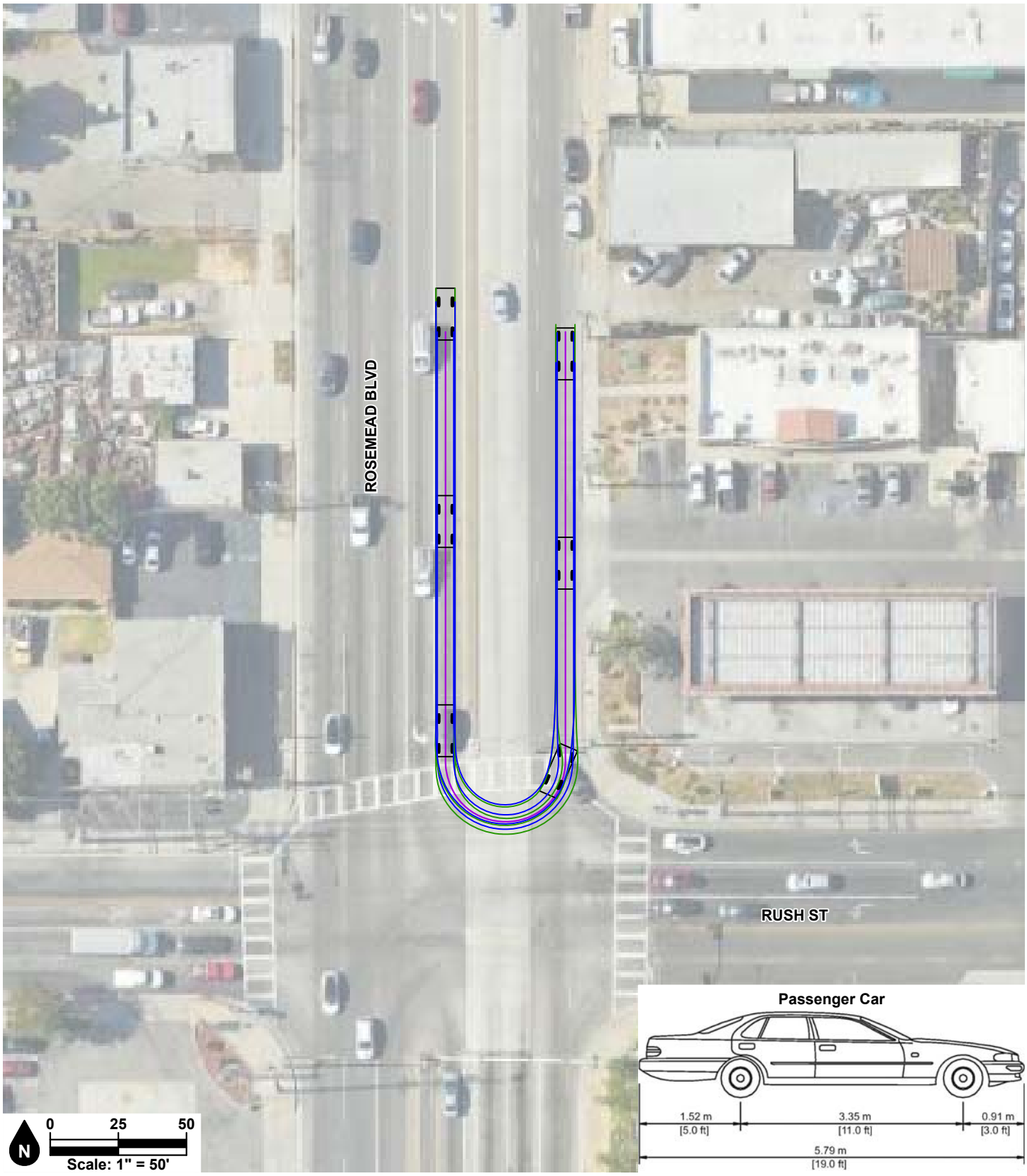


Figure 26
Passenger Car Turning Template at Roasemead Boulevard/Rush Street (Intersection #4) - Southbound U-Turn Inbound

9. TRUCK TRAFFIC MANAGEMENT

Truck staging area has been identified on site and management strategies will be implemented to ensure that trucks will not stage on City streets due to any delays entering the site, issues at the entry gate, or for any reasons.

TRUCK QUEUING

The project site is designed to accommodate WB-50 or WB-55 trucks. As shown on the site plan, there is approximately 304 feet of stacking distance for vehicles to queue between the proposed security gate and the Project North Driveway [#2]. The stacking distance may serve as an on-site truck staging area to accommodate approximately five (5) WB-55 trucks before the vehicles enter the security gate to the loading docks.

For the Project South Driveway [#3], there is approximately 204 feet of stacking distance for vehicles to queue between the proposed security gate and the Project South Driveway. The stacking distance may serve as an on-site truck staging area to accommodate approximately three (3) WB-55 trucks before the vehicles enter the security gate to the loading docks.

Table 10 summarizes the results of a gate access queuing analysis was performed using the methodology prescribed in the *Entrance-Exit Design and Control for Major Parking Facilities* (Robert Crommelin and Associates, October 1972). Based on the gate stacking analysis and average calculated queue length of less than one vehicle as shown in Table 10, the project should provide a minimum storage length of one vehicle or 55 feet to accommodate one WB-50 or WB-55 truck outside the proposed security gate for the inbound trucks. Therefore, adequate gate stacking distance is anticipated to be provided since sufficient on-site stacking distances would be provided to accommodate approximately three to five WB-50 or WB-55 trucks at the Project North Driveway and Project South Driveway.

TRUCK MANAGEMENT STRATEGIES

Although trucks to and from the project site are neither anticipated to queue, stage, or park on Rosemead Boulevard nor block any driveways along Rosemead Boulevard or other adjacent public streets, the operator of the site shall work with City staff to address unforeseen truck issues in public right-of-way in a mutually agreeable manner. If necessary, potential management measures may include, but are not limited to, the following:

- Modifications to the on-site circulation plan, including on-site and off-site signage for routing trucks to the appropriate circulation path.
- Provide all drivers with an access code to the gate for immediate access to the yard upon arrival.
- Implement a remote driver check-in process via phone application technology to quickly process inbound trucks.
- Dedicate an employee to monitor the gate and driveway and communicate with drivers upon arrival for immediate processing.
- Distribute notices and provide signage on site informing truck vendors and carriers that trucks may not park, stack, or stage on public streets or block driveways, and that violations may be subject to fines/penalties.
- Relocate the dock access gates farther into the site or keep the inbound gate open during hours of operation.

PARKING MANAGEMENT PLAN FOR WB-55 TRUCKS

Figure 27 shows the parking management plan to accommodate dock access for a larger WB-55 truck within the dock area/parking lot. The applicant is anticipating that the larger WB-55 trucks will be rarely used. In the event a larger WB-55 truck is used, a parking management plan can be implemented to keep clear the parking stalls along the southerly boundary to accommodate the truck turning movements in and out of the loading docks. The parking management plan includes the following provisions:

- Designate all the 34 parking stalls along the southern project boundary as "employee parking only" so that parked vehicles could be relocated if there is ever a need to keep this parking area clear.

- Prior to a larger WB-55 truck is due to arrive, "no parking" signage and traffic cones will be placed to block off the 34 employee parking stalls along the southern project boundary to keep that parking area clear.

- While a larger WB-55 truck is accessing loading dock, any parked vehicles within the "no parking" and employee only parking" area shall be relocated to keep this parking area clear.

Table 10
Gate Stacking Analysis

Analysis Location	Peak Hour	Service Rate[1]	Arrival Rate[2]	Traffic Intensity[3]	Reservoir Behind Service Position[4] (Vehicles)	Reservoir Required[4] (feet)	Average Queue Length[5]	Available Vehicle Stacking[6]	Adequate Stacking Length
2. Project North Dwy	AM	195	17	0.09	1.0	55'	0.008	5	Yes
	PM	195	13	0.07	1.0	55'	0.005	5	Yes
3. Project South Dwy	AM	195	15	0.08	1.0	55'	0.006	3	Yes
	PM	195	12	0.06	1.0	55'	0.004	3	Yes

Notes:

(1) Source: Entrance-Exit Design and Control for Major Parking Facilities, Robert Crommelin and Associates, October 5, 1972. Table 4 - Parking Control Service Rate. Design service rate for entering cashier [guard gate] with direction & info needed = 195 vehicles per hour.

(2) Inbound traffic on Project North Driveway: AM peak hour = 17 vehicles per hour; PM peak hour = 13 vehicles per hour. See Table 2.
Inbound traffic on Project North Driveway: AM peak hour = 15 vehicles per hour; PM peak hour = 12 vehicles per hour. See Table 2.

(3) Traffic Intensity = Average Arrival Rate / Average Service Rate

(4) Source: Entrance-Exit Design and Control for Major Parking Facilities, Robert Crommelin and Associates, October 5, 1972. Graph 1 - Reservoir Needs vs Traffic Intensity. Reservoir required in number of vehicles. One WB-55 truck is approximately 55 feet.

(5) Average Queue Length = $q = i^2 / (1-i)$; which "i" is Traffic Intensity.

(6) Site plan shows available stack length for 5 trucks from the security gate to the project north driveway on Rosemead Boulevard [#2].
Site plan shows available stack length for 3 trucks from the security gate to the project south driveway on Rosemead Boulevard [#3].

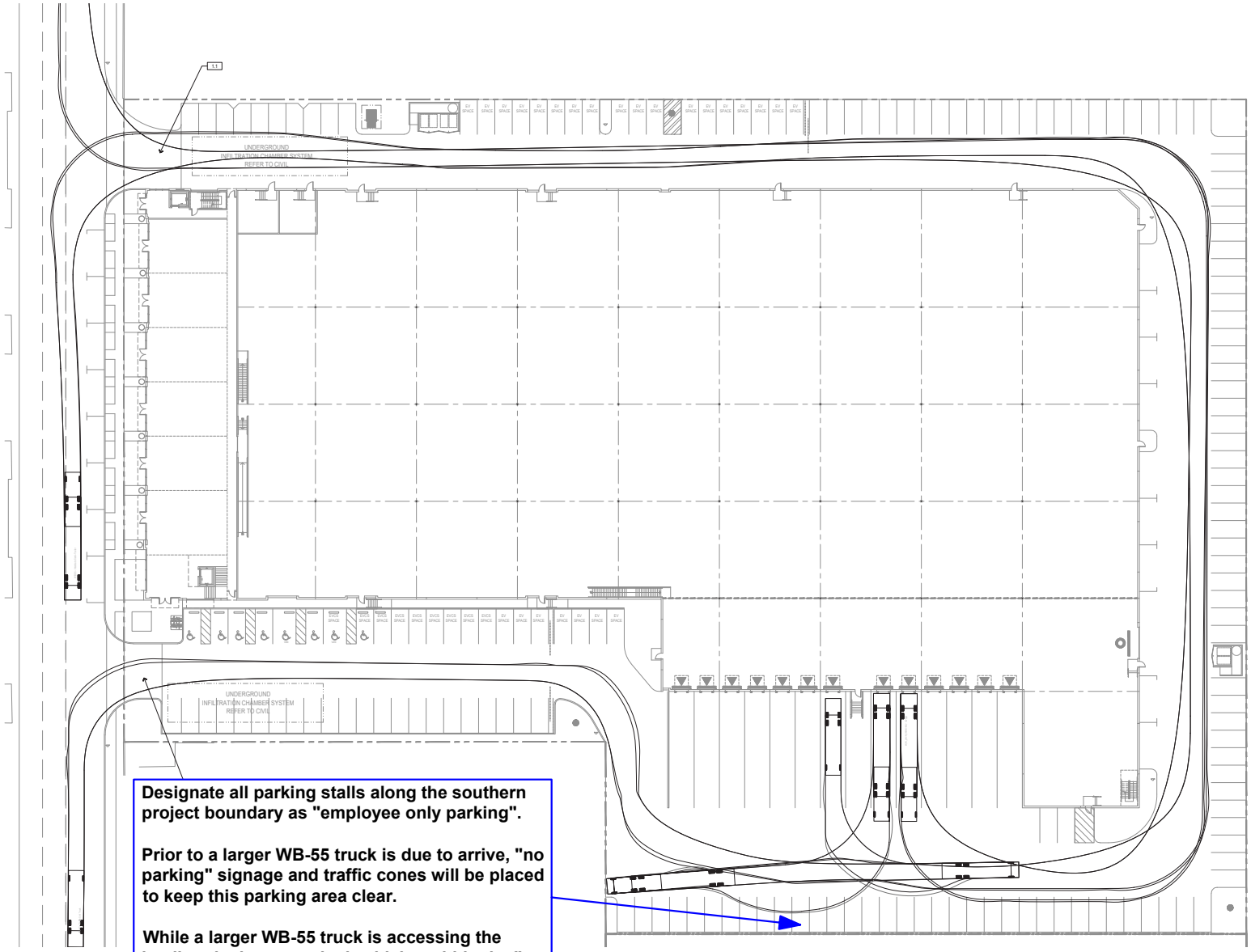


Figure 27
Parking Management Plan

10. SIGHT DISTANCE ANALYSIS

This section describes the sight distance analysis prepared for the project driveways.

BACKGROUND

Roadways are designed to provide sufficient stopping sight distance continuously along each roadway so that drivers have a view of the roadway ahead. If the available sight distance equals or exceeds the appropriate stopping sight distance for the major road, sufficient sight distance is provided to anticipate and avoid collisions. In some cases, however, vehicles traveling on the major road may need to substantially slow down or stop to accommodate vehicles entering or crossing from the minor road. Therefore, to enhance traffic operations at uncontrolled or minor street stop-controlled intersections, it is desirable to provide intersection sight distances that exceed the stopping sight distances along the major road.

The sight distance analysis was prepared based on the sight distance guidelines specified in the American Association of State Highway and Transportation Officials (AASHTO) *A Policy on Geometric Design of Highways and Street (7th Edition, 2018)* ["*AASHTO Greenbook*"]. Both stopping sight distance and intersection sight distance were evaluated. The stopping sight distances are based on passenger car operation and do not explicitly consider design for truck operations. While trucks typically require longer braking distances, they generally travel slower and truck drivers are more experienced than the average passenger car driver; therefore, separate stopping distances for trucks and passenger cars are not generally used in highway design. For intersection sight distance, AASHTO notes that the minor road design vehicle can usually be assumed to be a passenger car, except in cases where substantial volumes of heavy vehicles enter the major road, such as ramp terminals.

Assuming level major street roadways (less than three percent grade), stopping sight distance is determined by the following formula:

Stopping Sight Distance = $1.47\ Vt + 1.075\ (V^2 / a)$
where:
V = design speed (miles per hour)
t = brake reaction time, 2.5 seconds
a = deceleration rate (feet / second^2), 11.2 feet/second^2

The intersection sight distance was determined based on "Case B – Intersections with stop control on the minor road." For Case B conditions, the intersection sight distance along the major road is determined by the following formula:

Intersection Sight Distance = $1.47\ V_{major}\ t_g$
where:
V_{major} = design speed of the major road (miles per hour)
t_g = time gap for minor road vehicle to enter the major road (seconds)

Time gaps are determined based on the design vehicle, number of lanes crossed, median widths, minor road approach grade, design vehicle, and turning movement from the minor road.

SIGHT DISTANCE EVALUATION

The design speed along Rosemead Boulevard in the project vicinity is 50 miles per hour. Since the project driveways will be restricted to right turns in/out only, intersection sight distance at the project driveways was calculated for Case B2, right turn from stop. For sight distance looking to the left at approaching northbound traffic, a 10.5-second time gap was used for combination trucks and 6.5-seconds was used for cars. Based on

the sight distance formulas, a sight distance of 772 feet is desirable for trucks, 480 feet is desirable for passenger cars, and a minimum stopping sight distance of 430 feet should be provided for both cars and trucks.

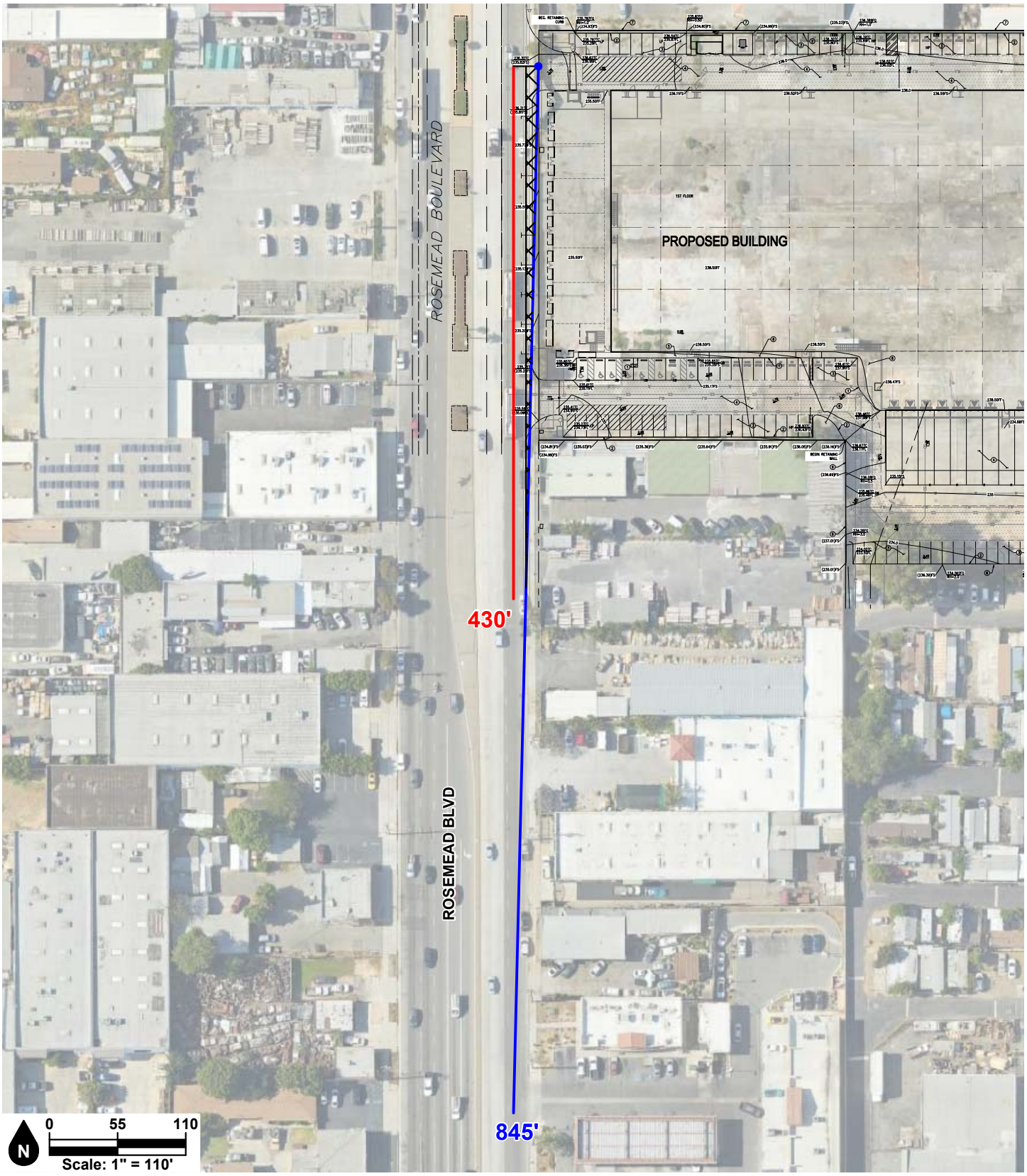
Figure 28 illustrates the intersection and stopping sight distances for the project north driveway on Rosemead Boulevard [#2]. Figure 29 illustrates the intersection and stopping sight distances for the project south driveway on Rosemead Boulevard [#3].

As shown on Figure 28 and Figure 29, the desirable intersection sight distance of 772 feet for trucks and minimum stopping sight distance of 430 for both cars and trucks would be provided for the right turns exiting the proposed project driveway, as long as any landscaping near the southeast corner of the curb returns at the project driveways on Rosemead Boulevard do not obstruct drivers views.

It is noted that the sight distance standards described above apply to public road intersections and roadways. As noted in the California Department of Transportation (Caltrans) Highway Design Manual (7th Edition, May 2022), Section 405.1(2)(d): *"corner sight distance requirements as described above are not applied to urban driveways unless signalized. See Index 405.1(2)(b) underlined standard. If parking is allowed on the major road, parking should be prohibited on both sides of the driveway per the California MUTCD, 3B.19."*

The California Manual on Uniform Traffic Control Devices (CA MUTCD), 3B.19 states: *"At all intersections, one stall length on each side measured from the crosswalk or end of curb return should have parking prohibited. A clearance of 6 feet measured from the curb return should be provided at alleys and driveways."*

In accordance with Highway Design Manual and CA MUTCD standards, on-street parking on Rosemead Boulevard should be prohibited on each side of the project driveways for a clearance of six feet measured from the curb return.



Legend

- Intersection Sight Distance
- Stopping Sight Distance
- Restricted Use Area
- Driver's Eye (10 foot setback from curbline extension and 3 feet right of centerline)

Major Road Design Speed (Vm = 50 MPH)
Stopping Sight Distance = 430 Feet
Corner Sight Distance = 1.47 x Vm xTg
Time Gap For Trucks (Tg=10.5s' Right Turn and 11.5s' Left Turn)
CSD Right = 772 Feet
CSD Left = 845 Feet

Figure 28
North Project Driveway Sight Distance Analysis

Legend

- Intersection Sight Distance
- Stopping Sight Distance
- Restricted Use Area
- Driver's Eye (10 foot setback from curbline extension and 3 feet right of centerline)

Major Road Design Speed (Vm = 50 MPH)
Stopping Sight Distance = 430 Feet
Corner Sight Distance = 1.47 x Vm xTg
Time Gap For Trucks (Tg=10.5s' Right Turn and 11.5s' Left Turn)
CSD Right = 772 Feet
CSD Left = 845 Feet

Figure 29
South Project Driveway Sight Distance Analysis

11. VEHICLE MILES TRAVELED (VMT) ASSESSMENT

California Senate Bill 743 (SB 743) directs the State Office of Planning and Research (OPR) to amend the California Environmental Quality Act (CEQA) Guidelines for evaluating transportation impacts to provide alternatives to Level of Service that "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." In December 2018, the California Natural Resources Agency certified and adopted the updated CEQA Guidelines package. The amended CEQA Guidelines, specifically Section 15064.3, recommend the use of Vehicle Miles Travelled (VMT) as the primary metric for the evaluation of transportation impacts associated with land use and transportation projects. In general terms, VMT quantifies the amount and distance of automobile travel attributable to a project or region. Agencies may currently opt-in to applying the updated CEQA guidelines for VMT analysis and implementation is required State-wide by July 1, 2020.

VMT Assessment

The VMT assessment is performed using the San Gabriel Valley Council of Governments (SGVCOG) VMT Evaluation Tool based on screening criteria and thresholds adopted by City of South El Monte. As the project use is predominantly industrial, VMT was calculated for home-based work VMT per employee. The VMT Evaluation Tool report in included in Appendix H. As established in the City's Transportation Study Guidelines, a project would result in a significant impact if the project VMT exceeds 15 below the baseline SGVCOG average value 18.62 VMT per worker, resulting in a threshold of 15.83 VMT per worker.

Accounting for the proposed bicycle parking as part of the project design, the project is forecast to generate 16.4 VMT per worker, which exceeds the City-established threshold of 15.83 VMT per worker. Therefore, the following additional VMT reduction measure was identified as mitigation to reduce the project's VMT impact to a less than significant level:

Mitigation Measure TRA-1
Implement a Commute Trip Reduction Marketing/Education Program: Implement marketing campaign targeting all project employees and visitors that encourages the use of transit, shared rides, and active modes. Marketing strategies may include new employee orientation on alternative commute options, event promotions, and publications. Providing information and encouragement to use transit, share ride modes, and active modes, reducing drive-alone trips and thereby reducing VMT.

With implementation of Mitigation Measure TRA-1 (approximately 3.7% VMT reduction), the project is forecast to generate 15.8 VMT per worker, which does not exceed the City-established threshold of 15.83 VMT per worker. The project would result in a less than significant VMT impact with mitigation incorporated.

12. CONCLUSIONS

This section summarizes the findings, operational improvements (if any), and recommendations identified and described in previous sections of this study.

PROJECT TRIP GENERATION

The proposed project is forecast to generate approximately 661 net daily trips, including 48 net trips during the AM peak hour and 60 net trips during the PM peak hour.

LEVEL OF SERVICE ANALYSIS

The study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Existing Plus Project and Opening Year (2025) With Project conditions, except for the following intersection that currently operates at deficient Levels of Service:

- Rosemead Boulevard/Klingerman Street – #1 (LOS F, AM & PM peak hours)

The proposed project is forecast to result in no Level of Service impacts at the study intersections for Existing Plus Project or Opening Year (2025) With Project conditions based on the City-established standards. The intersection does not meet peak hour signal warrants and the project contributes less than two percent (2%) of the total future traffic at the intersection. Additionally, the Level of Service deficiency relates to existing eastbound left turn movements to which the project is not forecast to contribute any trips. Therefore, the project is not responsible for improvements to address this pre-existing deficiency.

TRUCK TRAFFIC MANAGEMENT

The project should provide a minimum storage length of one vehicle or 55 feet to accommodate one WB-50 or WB-55 truck outside the proposed security gate for the inbound trucks. Therefore, adequate gate stacking distance is anticipated to be provided since sufficient on-site stacking distances would be provided to accommodate approximately three to five WB-50 or WB-55 trucks at the Project North Driveway and Project South Driveway.

Although trucks to and from the project site are neither anticipated to queue, stage, or park on Rosemead Boulevard nor block any driveways along Rosemead Boulevard or other adjacent public streets, the operator of the site shall work with City staff to address unforeseen truck issues in public right-of-way in a mutually agreeable manner.

PARKING MANAGEMENT PLAN WITH WB-55 TRUCKS

The applicant is anticipating that the larger WB-55 trucks will be rarely used. In the event when a larger WB-55 truck is used, a parking management plan will be implemented to keep clear the parking stalls along the southerly boundary to accommodate the truck turning movements in and out of the loading docks. The parking management plan includes the following provisions:

- Designate all the 34 parking stalls along the southern project boundary as “employee parking only” so that parked vehicles could be relocated if there is ever a need to keep this parking area clear.

- Prior to a larger WB-55 truck is due to arrive, “no parking” signage and traffic cones will be placed to block off the 34 employee parking stalls along the southern project boundary to keep that parking area clear.

- While a larger WB-55 truck is accessing loading dock, any parked vehicles within the "no parking" and employee only parking" area shall be relocated to keep this parking area clear.

SIGHT DISTANCE ANALYSIS

The desirable intersection sight distance of 772 feet for trucks and minimum stopping sight distance of 430 for both cars and trucks would be provided for the right turns exiting the proposed project driveway, as long as any landscaping near the southeast corner of the curb returns at the project driveways on Rosemead Boulevard do not obstruct drivers views.

On-street parking may partially obstruct line of sight at the project driveway depending on the level of utilization. If appropriate, the City may elect to prohibit on-street parking along the northbound side of Rosemead Boulevard from the driveways to approximately 430 south; however, this may result in the loss of substantial on-street parking near adjacent properties. At a minimum, the California Manual on Uniform Traffic Control Devices (CA MUTCD; Figure 3B-21) guidance recommends 20 feet of no parking on either side of unsignalized intersections/driveways.

VMT ASSESSMENT

The project is forecast to generate 16.4 VMT per worker, which exceeds the City-established threshold of 15.83 VMT per worker. Therefore, the following additional VMT reduction measure was identified as mitigation to reduce the project's VMT impact to a less than significant level:

Mitigation Measure TRA-1
Implement a Commute Trip Reduction Marketing/Education Program: Implement marketing campaign targeting all project employees and visitors that encourages the use of transit, shared rides, and active modes. Marketing strategies may include new employee orientation on alternative commute options, event promotions, and publications. Providing information and encouragement to use transit, share ride modes, and active modes, reducing drive-alone trips and thereby reducing VMT.

With implementation of Mitigation Measure TRA-1, the project is forecast to generate 15.8 VMT per worker, which does not exceed the City-established threshold of 15.83 VMT per worker. The project would result in a less than significant VMT impact with mitigation incorporated.

APPENDICES

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

TRANSPORTATION IMPACT ANALYSIS SCOPE OF WORK

TO: Guillermo Arreola | CITY OF SOUTH EL MONTE

FROM: Tom Huang | GANDDINI GROUP, INC.

DATE: April 13, 2023

SUBJECT: Rosemead and Rush Industrial Project Transportation Impact Analysis Scope of Work

INTRODUCTION

The purpose of this scoping document is to outline the proposed transportation impact analysis parameters and assumptions for review/concurrence by City of South El Monte staff.

PROJECT DESCRIPTION

The project site is located east of Rosemead Boulevard and north of Rush Street at 2222 Rosemead Boulevard in the City of South El Monte, California. The project location map is shown in Figure 1.

The 5.14-acre project site is currently vacant with the previous buildings already demolished. The project is proposed to be developed as a warehouse project with 113,525 square feet of warehouse use plus 19,994 square feet of accessory warehouse office use and 15,245 square feet of accessory warehouse storage with another 8,235 square feet of retail/show room use for a total of 156,999 square feet of building area. There are 13 loading docks for WB-50 trucks located along the southern side of the building. The project site plan is shown on Figure 2. Attachment A also shows the site plan.

Two stop-controlled right-in/right-out only access are proposed on Rosemead Boulevard, and these two driveways will be restricted right-in/right-out only because of the existing raised center median along Rosemead Boulevard. The width of the project north driveway is 30 feet and the width of the south driveway is 28 feet. The project south driveway is for vans, passenger cars and bobtail trucks only. Trucks larger than a bobtail must enter and exit the site from the project north driveway.

The hours of operation would be determined by the lessee, but at this time the hours are proposed to be seven days a week, 24-hours a day. The project does not propose to allow any refrigeration as part of the warehouse operations.

The proposed project is anticipated to be constructed and fully operational by year 2025.

PROJECT TRIP GENERATION

Table 1 shows the overall project trip generation summary based upon rates obtained from the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021). Based on review of the proposed project land uses and ITE land use descriptions, trip generation rates for warehousing (Land Use Code 150) and strip retail plaza (Land Use Code 822) were determined to most closely represent the proposed project land uses and were selected for the analysis.

For this analysis, a total of 148,764 square feet of warehouse use is assumed for the trip generation calculation combining the square footages for the accessory office use and the accessory warehouse storage use. Table 2 shows the trip generation for the warehouse portion of project. The project warehouse trip generation is calculated in terms of Passenger Car Equivalent (PCE) trips. The percentage of truck trips was obtained from the ITE Trip Generation Manual (11th Edition, 2021). The truck mix by axle type was determined based on South Coast Air Quality Management District (SCAQMD) recommendations for warehousing facilities. Truck trips were converted to PCE trips based on the following factors: 1.5 for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for trucks with four or more axles.

Land uses such as retail use and strip retail plaza will often locate next to busy roadways to attract motorists already on the street. Since the trip generation rates contained in the ITE Trip Generation Manual represent vehicles entering and exiting at the site driveways, it is appropriate to reduce the initial trip generation forecast by the applicable pass-by trip rate when calculating the net new trips that will be added to the surrounding street system. This analysis applies a 40% pass-by trip reduction for the retail/show room use based upon the rates from the ITE Trip Generation Manual (11th Edition, 2021).

As shown in Table 1, the proposed project is forecast to generate approximately 661 net daily trips, including 48 net trips during the AM peak hour and 60 net trips during the PM peak hour.

PROJECT TRIP DISTRIBUTION

Figure 3 and Figure 4 shows the project passenger car inbound and outbound distribution patterns. Figure 5 and Figure 6 shows the project truck inbound and outbound distribution patterns. Rush Street is identified as a designated truck route on the City of South El Monte Truck Routes map. Regional access for the project includes the SR-60 Freeway approximately one mile to the south and the I-10 Freeway approximately one mile to the north.

STUDY AREA

Based on the City of South El Monte Transportation Study Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment (2020), intersections identified for analysis typically include signalized intersections at which a project is forecast to contribute 50 or more trips during the AM or PM peak hours. The study area is proposed to consist of the following four (3) study intersections, even if the project may not contribute 50 or more trips during either the AM or PM peak hours, but are the adjacent or primary intersections impacted by the proposed project.

Study Intersections (Figure 1)

1. Rosemead Boulevard (NS) at Klingerman Street (EW)
2. Rosemead Avenue (NS) at Project North Driveway (EW)
3. Rosemead Avenue (NS) at Project South Driveway (EW)
4. Rosemead Avenue (NS) at Rush Street (EW)

TRAFFIC COUNTS

Intersection turning movement counts will be used at the study intersections during the AM peak period (7:00 AM – 9:00 AM) and PM peak period (4:00 PM – 6:00 PM) on a typical weekday (Tuesday, Wednesday, or Thursday). Traffic counts will not be conducted during the week of any holidays or school breaks. 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.

ANALYSIS SCENARIOS

The traffic study shall evaluate the following analysis scenarios for weekday AM and PM peak hour conditions:

- Existing (2023)
- Existing Plus Project
- Opening Year (2025) Without Project
- Opening Year (2025) With Project

FORECASTING METHODOLOGY

To account for ambient growth, the Opening Year 2025 will included a 2.74% annual growth for 2 years (total growth = 5.56%) over the 2023 traffic count volumes. The 2.74% annual growth rate is SCAG's Annual Average Traffic Growth per forecast period 2020-2035.

In addition, a list of pending and approved other development projects shall be requested from the City of South El Monte. Trip forecasts for other development projects within the project study area shall be determined based on the Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition, 2021 and will be added to existing roadway volumes for the applicable analysis scenarios.

ANALYSIS METHODOLOGY

Signalized Intersection – Intersection Capacity Utilization (ICU) Method

Analysis of signalized intersections within the City of South El Monte 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 (LOS) based on the following thresholds:

Level of Service	Volume/Capacity Ratio
A	≤ 0.60
B	0.61 to 0.70
C	0.71 to 0.80
D	0.81 to 0.90
E	0.91 to 1.00
F	> 1.00

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 South El Monte guidelines, the ICU analysis utilizes the following parameters: 1,800 vehicles per hour per lane for through and single turn lanes, and a total clearance adjustment of 10 percent (i.e., 0.10 added to critical Volume/Capacity). Lane capacities of 3,240 vehicles per hour per lane are used for dual turn lanes.

If the paved lane width of a shared through/right turn lane is wide enough to permit a separate right turn, it is common practice for a right turn lane to be considered "de facto." To function as a de facto right turn lane there must be sufficient width for right turning vehicles to travel outside the through lane. The City of Irvine considers a 19-foot wide shared through/right turn lane to include a de facto right turn lane. Additionally, a de facto right turn lane was only considered where on-street parking is prohibited near the intersection approach.

Unsignalized Intersection – Highway Capacity Manual (HCM) Method

To assess the performance of an unsignalized intersection, the analysis will use the intersection delay method based on procedures contained in the Highway Capacity Manual (Transportation Research Board, 7th 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:

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 (7th 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 Level of Service analysis shall be performed using the Vistro software.

PERFORMANCE STANDARDS

City of South El Monte

The City of South El Monte has established Level of Service D as the target Level of Service standard. Any intersection operating at a LOS of E or F is considered deficient. If the Project contributes 2% or more of the total traffic at an intersection that is expected to be deficient, improvements should be considered.

THRESHOLDS OF SIGNIFICANCE

City of South El Monte

Based on the established performance standards for the City of South El Monte, a potentially significant transportation impact is defined to occur if:

Signalized Intersection

- The addition of project traffic to an intersection results in the degradation of intersection operations from LOS D or better operations to LOS E or F and will increase the V/C by .01 or more.

Unsignalized Intersection

- The addition of project traffic to an intersection results in the degradation of any individual movement at the intersection from LOS D or better to LOS E or F), and

- The intersection meets peak hour signal warrants either caused by project volumes, or project volumes are added at an intersection that meets peak hour signal warrants in the baseline scenario(s). Peak hour signal warrants should be determined based on one or more of the latest California Manual on Uniform Traffic Control Devices (CA MUTCD).

The fair share cost for the proposed improvements in the cumulative condition should also be calculated.

TRUCK TURNING TEMPLATES

Attachment B shows the truck turning templates.

Attachment B1 shows the inbound and outbound truck turning movements for a WB-50 truck in and out of the project driveways on Rosemead Boulevard and the loading dock. It is anticipated that most of the truck traffic will be WB-50 trucks or smaller size vehicles. As shown in Attachment B1, the currently proposed driveway design and site plan is adequate for the truck maneuvering movements of the WB-50 design vehicle.

Attachment B2 shows the truck turning template for a larger WB-55 truck maneuvering the project driveways on Rosemead Boulevard and the loading dock. The applicant is anticipating that the larger WB-55 trucks will be rarely used. In the event when the larger WB-55 trucks are used, a parking management plan will be implemented to keep clear the parking stalls along the southerly boundary to accommodate the truck turning movements.

LINE OF SIGHT ANALYSIS

The line of sight analysis has been evaluated based on sight distance guidelines specified in the American Association of State Highway and Transportation Officials (AASHTO) A Policy on Geometric Design of Highways and Street (7th Edition, 2018) ["AASHTO Greenbook"]. As shown on Figure 7 and Figure 8, adequate sight distances can be provided as long as any landscaping near the northeast and southeast corners of the curb returns at the driveways on Rosemead Boulevard do not obstruct drivers' views with a 365 feet of red curb south of the driveways.

For relatively level major street roadways (i.e., less than three percent grade), stopping sight distance was determined by the following formula:

Stopping Sight Distance = 1.47 Vt + 1.075 (V^2 / a)
where:
V = design speed (miles per hour)
t = brake reaction time, 2.5 seconds
a = deceleration rate (feet / second^2), 11.2 feet/second^2

The intersection sight distance was determined based on "Case F – Left Turns from the Major Road." For Case F conditions, the intersection sight distance is the same as left turns by a stopped vehicle, which was determined by the following formula:

Intersection Sight Distance = 1.47 Vmajor tg
where:
Vmajor = design speed of the major road (miles per hour)
tg = time gap for minor road vehicle to enter the major road (seconds)

For Case F, left turn from the major road, AASHTO recommends a time gap of 5.5 seconds for passenger cars, plus 0.5 seconds for each additional lane and/or median width lane equivalent that must be crossed in excess of one lane. Therefore, a time gap of 7.0 seconds was used since the left turn movement would cross three through lanes and one turn lane after project frontage improvements. A design speed of 45 miles per hour was used based on the speed limit. Based on the sight distance formulas, an intersection sight distance of 695 feet is desirable with a minimum stopping sight distance of 360 feet.

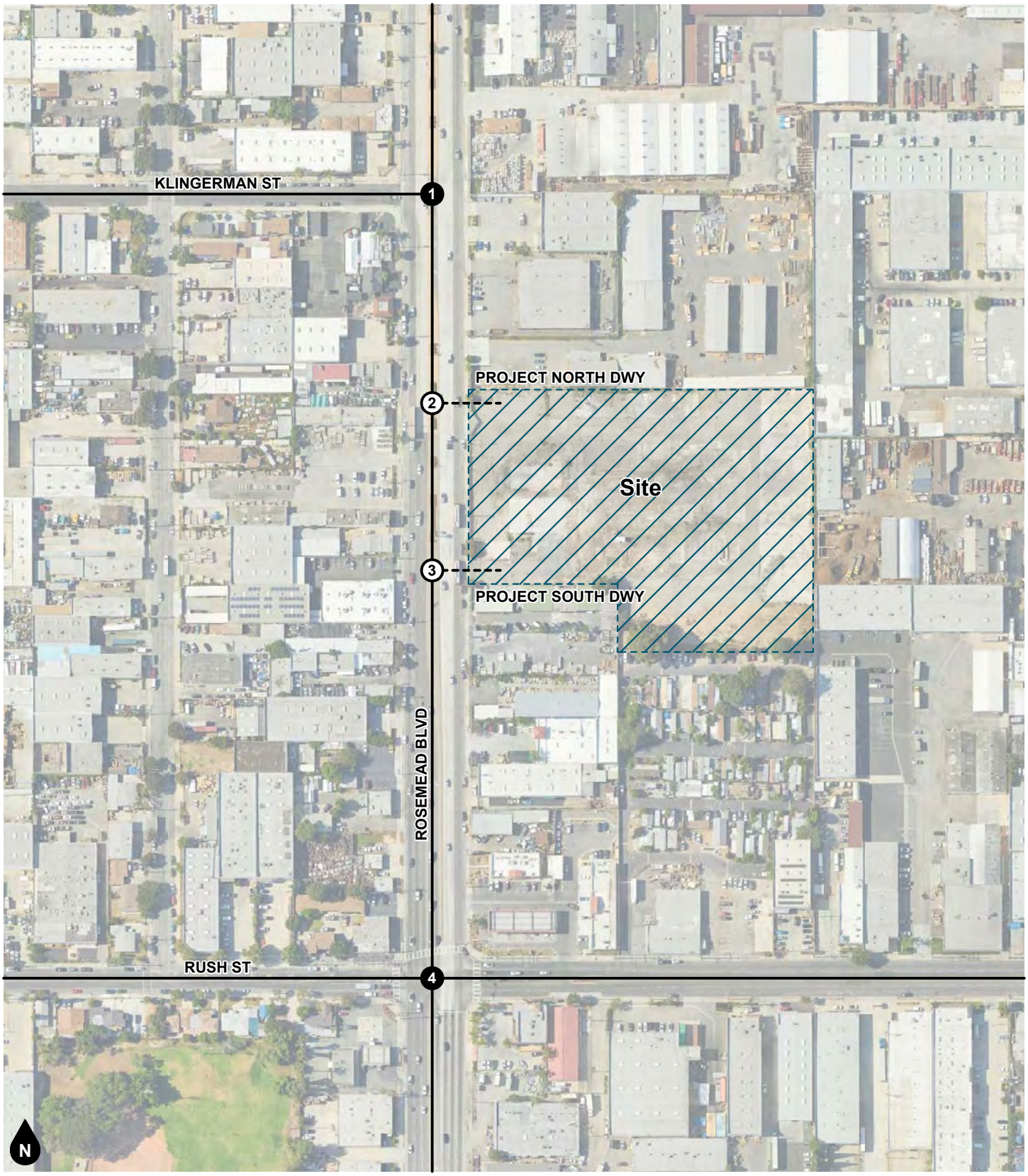
VEHICLES MILES TRAVELED (VMT) SCREENING

California Senate Bill 743 (SB 743) directs the State Office of Planning and Research (OPR) to amend the California Environmental Quality Act (CEQA) Guidelines for evaluating transportation impacts to provide alternatives to Level of Service that "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." In December 2018, the California Natural Resources Agency certified and adopted the updated CEQA Guidelines package. The amended CEQA Guidelines, specifically Section 15064.3, recommend the use of Vehicle Miles Travelled (VMT) as the primary metric for the evaluation of transportation impacts associated with land use and transportation projects. In general terms, VMT quantifies the amount and distance of automobile travel attributable to a project or region. Agencies may currently opt-in to applying the updated CEQA guidelines for VMT analysis and implementation is required State-wide by July 1, 2020.

Based on screening criteria and thresholds adopted by City of South El Monte using the San Gabriel Valley Council of Governments (SGVCOG) VMT Evaluation Tool, the proposed project is anticipated to exceed recommended screening criteria; therefore, a VMT assessment will be prepared and VMT reduction mitigation measures are anticipated to be required (see Attachment C).

CONCLUSION

We appreciate the opportunity to provide this scoping document for your review. Should you have any questions or comments regarding the proposed scope, please contact Tom Huang at (714) 795-3100 x 102 or tom@ganddini.com.



Legend

(#) Study Intersection

(#) Project Driveway

Figure 1
Project Location Map

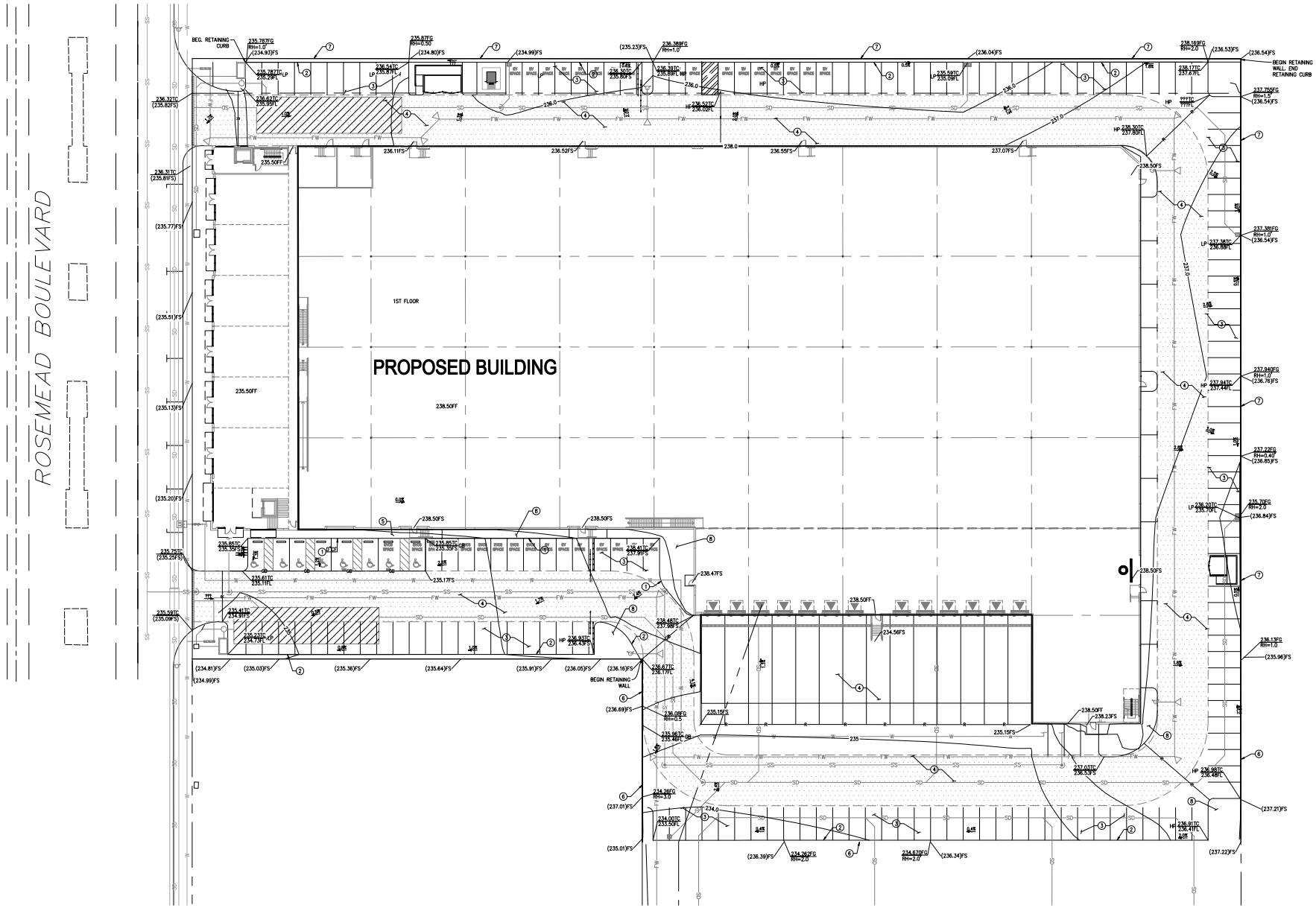


Figure 2
Site Plan

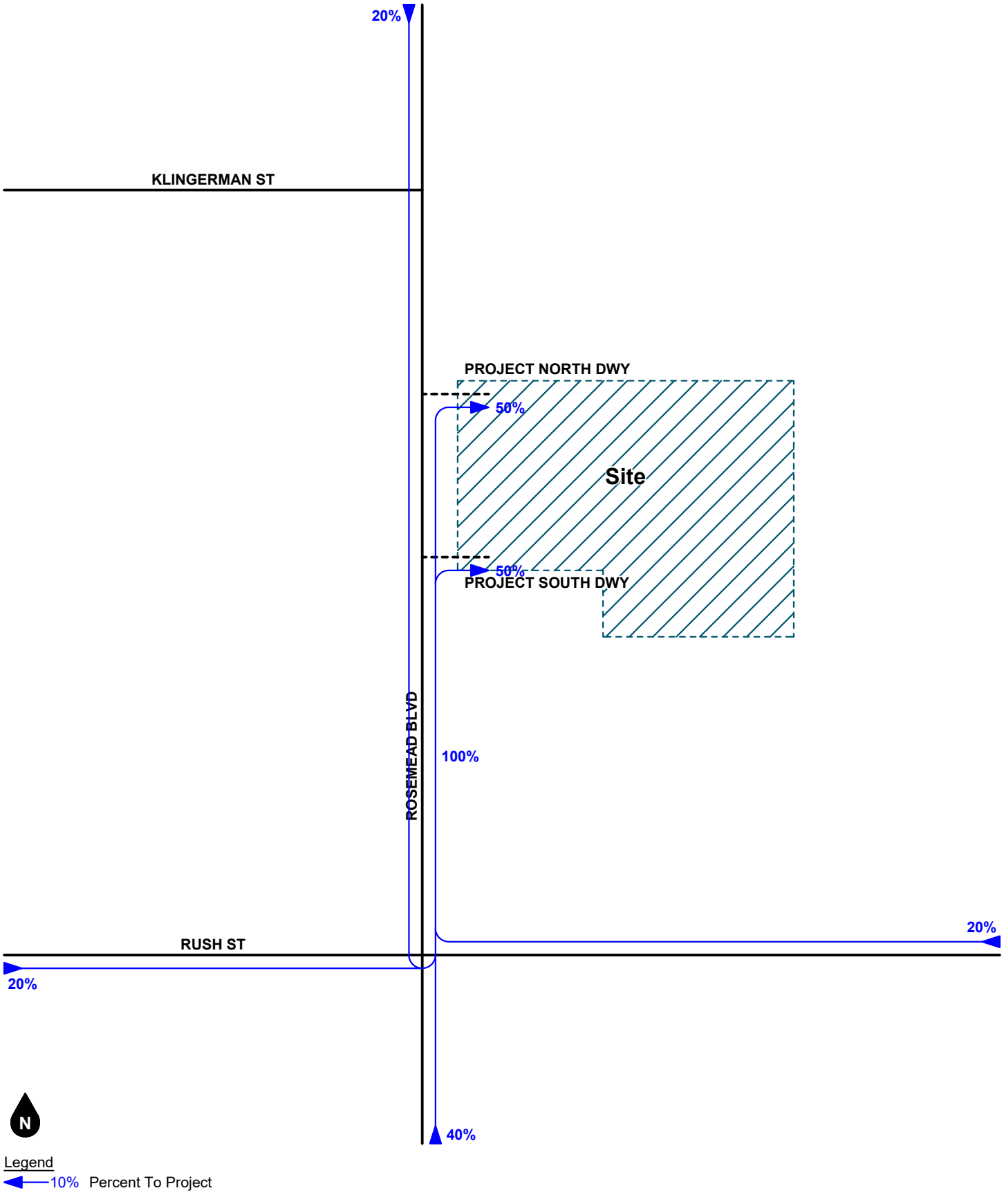


Figure 3
Project Passenger Car Inbound Trip Distribution

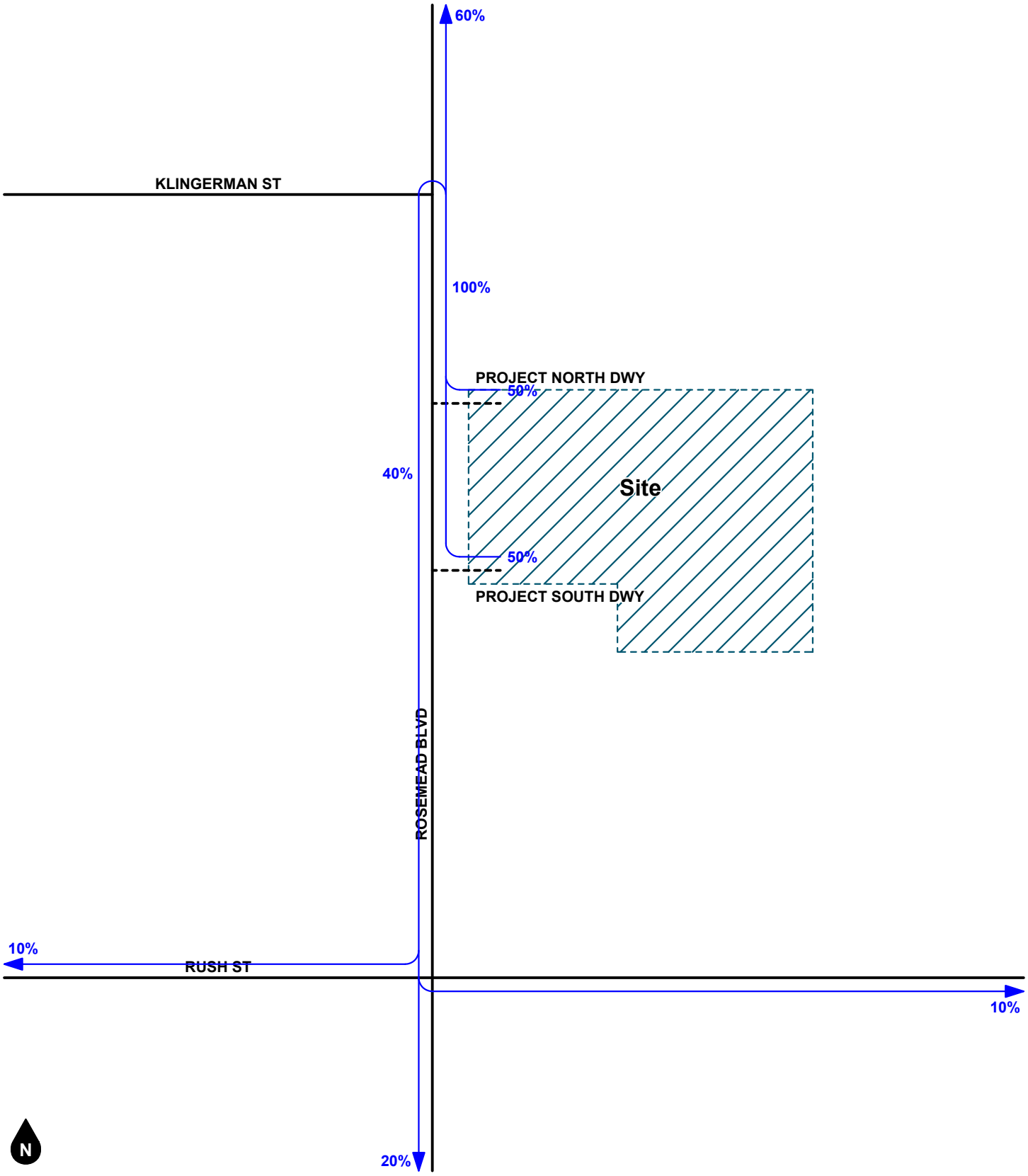


Figure 4
Project Passenger Car Outbound Trip Distribution

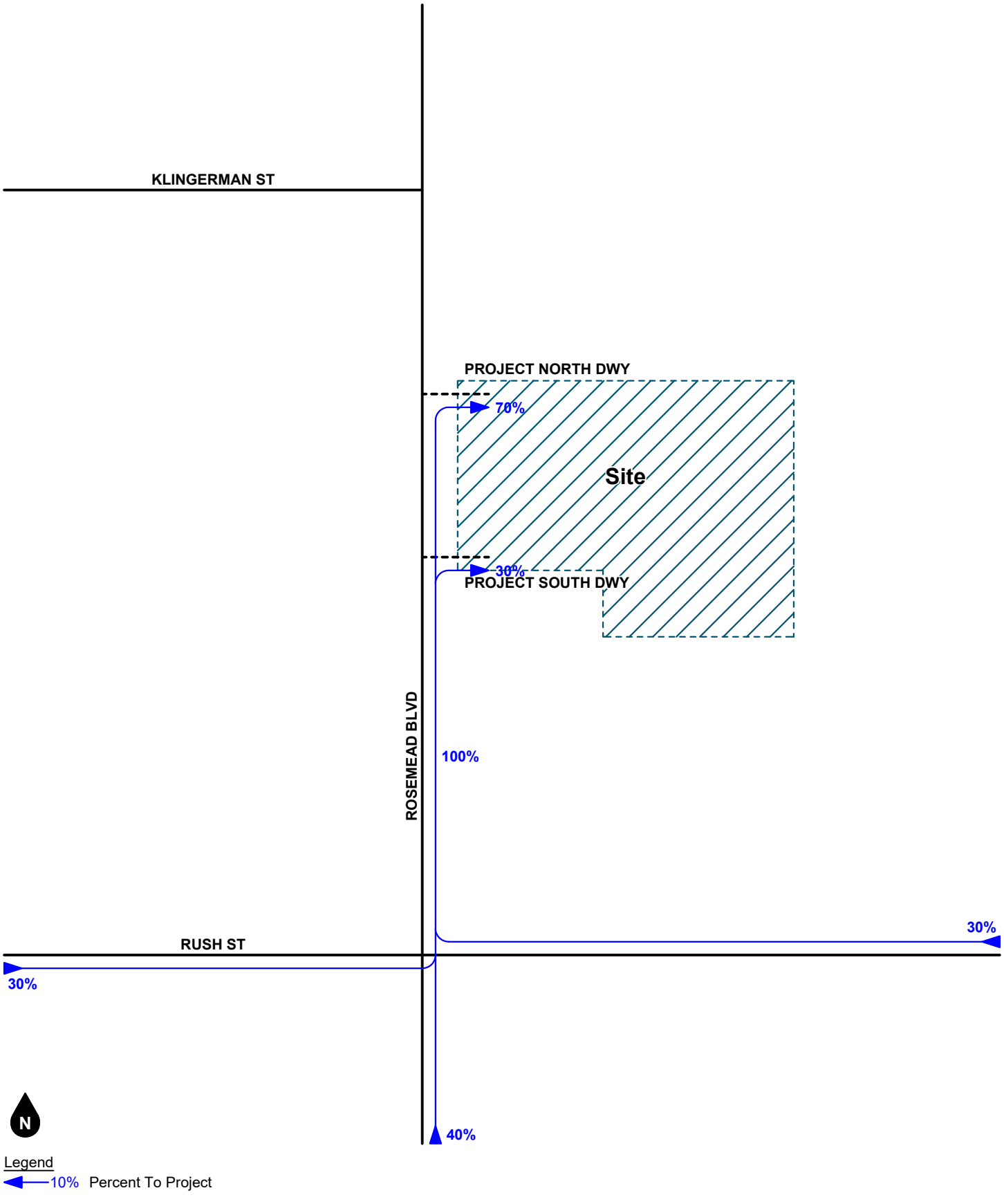


Figure 5
Project Truck Inbound Trip Distribution

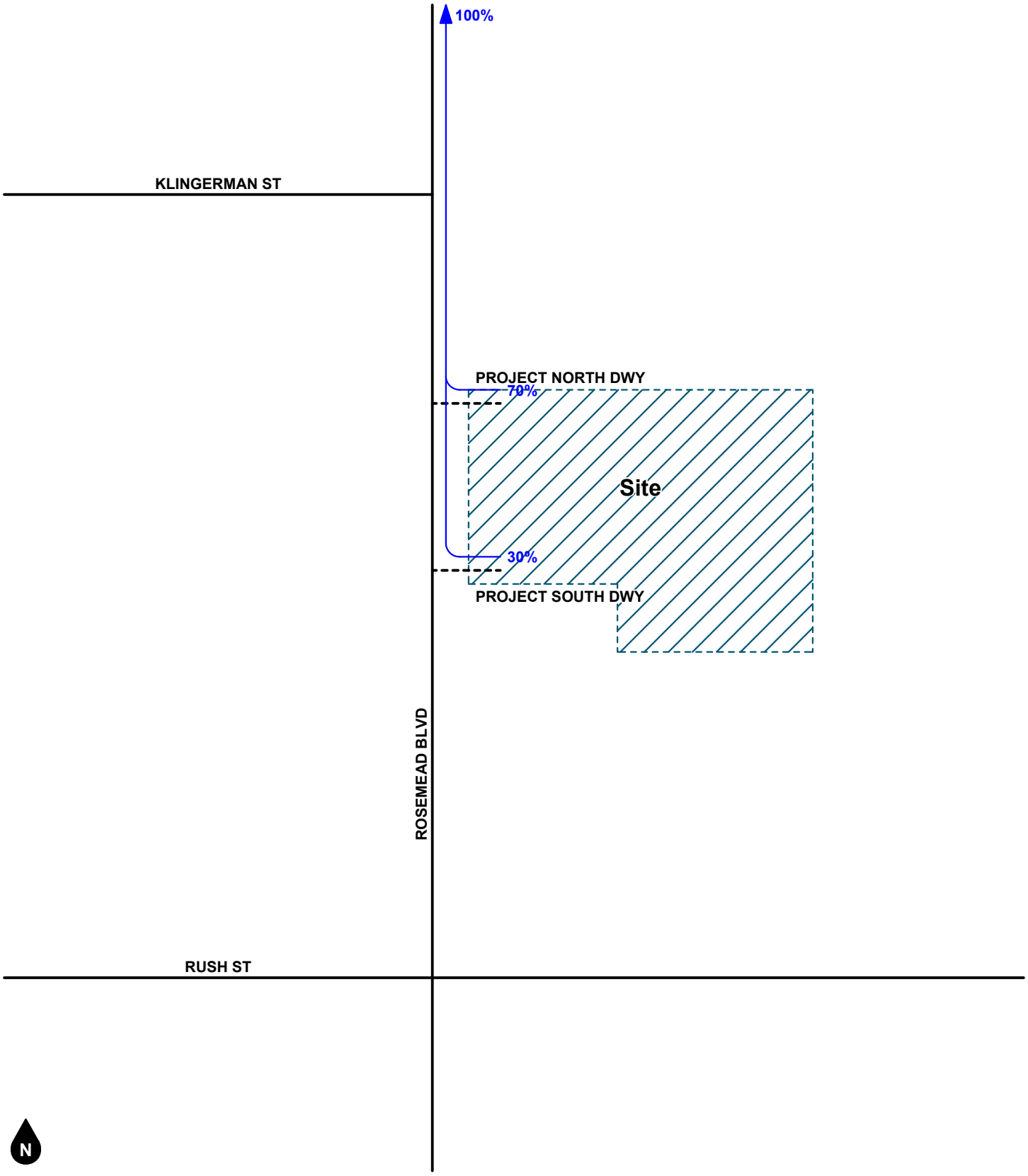
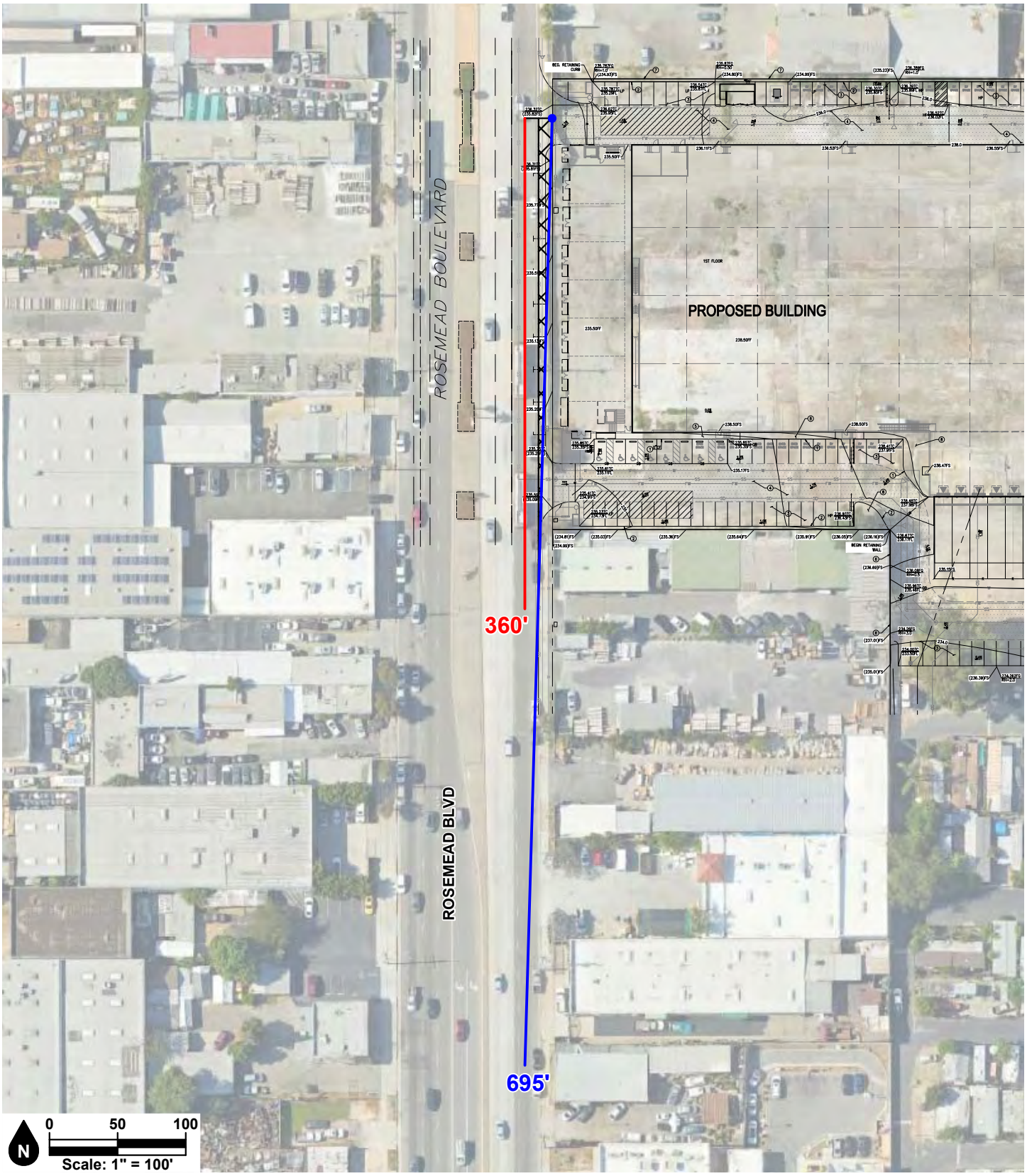


Figure 6
Project Truck Outbound Trip Distribution

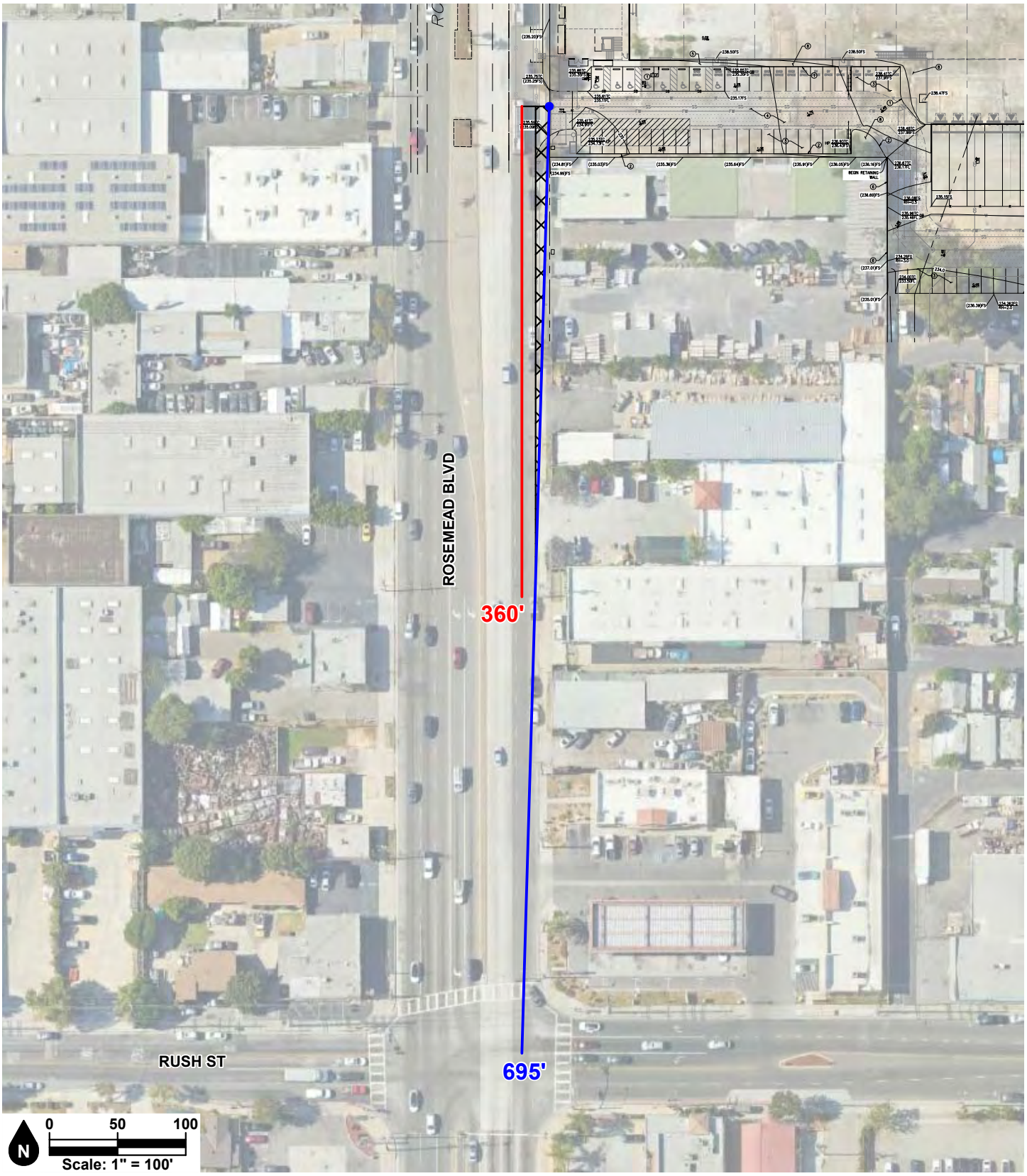


Legend

- Intersection Sight Distance
- Stopping Sight Distance
- Restricted Use Area
- Driver's Eye (10 foot setback from curbline extension and 3 feet right of centerline)

Major Road Design Speed (Vm = 45 MPH)
Stopping Sight Distance = 360 Feet
Corner Sight Distance = 1.47 x Vm xTg
Time Gap For Trucks (Tg=10.5s' Right Turn and 11.5s' Left Turn)
CSD Right = 695 Feet
CSD Left = 761 Feet

Figure 7
North Project Driveway Sight Distance Analysis



Legend

- Intersection Sight Distance
- Stopping Sight Distance
- Restricted Use Area
- Driver's Eye (10 foot setback from curbline extension and 3 feet right of centerline)

Major Road Design Speed (Vm = 45 MPH)
Stopping Sight Distance = 360 Feet
Corner Sight Distance = 1.47 x Vm xTg
Time Gap For Trucks (Tg=10.5s' Right Turn and 11.5s' Left Turn)
CSD Right = 695 Feet
CSD Left = 761 Feet

Figure 8
South Project Driveway Sight Distance Analysis

Table 1
Overall Project Trip Generation Summary

Trip Generation Rates									
Land Use	Source[1]	Land Use Variable[2]	AM Peak Hour			PM Peak Hour			Daily Rate
			% In	% Out	Rate	% In	% Out	Rate	
Strip Retail Plaza (<40k)	ITE 822	TSF	60%	40%	2.36	50%	50%	6.59	54.45
Warehousing	ITE 150	TSF	77%	23%	0.17	28%	72%	0.18	1.71

Trips Generated									
Land Use	Source	Quantity	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Strip Retail Plaza (<40k)	ITE 822	8.235 TSF	12	8	20	27	27	54	448
- Pass-By Trips[3] (PM/Daily)		40% [3]	0	0	0	-11	-11	-22	-179
Retail Net Trips			12	8	20	16	16	32	269
Warehousing Passenger Car Trips[4]	ITE 150	148.764 TSF	17	5	22	6	16	22	165
Warehousing Truck Trips[4]			3	3	6	3	3	6	227
TOTAL NET TRIPS GENERATED			**32**	**16**	**48**	**25**	**35**	**60**	**661**
Project Passenger Car Trips			29	13	42	22	32	54	434
Project Truck Trips			3	3	6	3	3	6	227

Notes:

(1) ITE = Institute of Transportation Engineers *Trip Generation Manual* (11th Edition, 2021); ### = Land Use Code. All rates based on General Urban/Suburban setting unless otherwise noted.

(2) TSF = Thousand Square Feet

(3) Pass-By Trips: ITE, Trip Generation Manual, 11th Edition, 2021. Land Use Code 821 - Shopping Plaza (40-150k), Average Pass-By Trip Percentage = 40%. Daily and PM Only.

(4) Project warehouse trip generation; see Table 2

Table 2
Project Warehouse Trip Generation

Land Use: Warehousing
Size: 148.764 TSF

TRIP GENERATION RATES PER TSF[1]								
		AM Peak Hour			PM Peak Hour			
Vehicle Type	Source[2]	In	Out	Rate	In	Out	Rate	Daily Rate
All Vehicles	ITE 150	77%	23%	0.170	28%	72%	0.180	1.710
Trucks Only	ITE 150	52%	48%	0.020	52%	48%	0.030	0.600
Passenger Car (88.2% AM, 83.3% PM, 64.9% Daily)		0.116	0.035	0.151	0.042	0.108	0.150	1.110
Truck (11.8% AM, 16.7% PM, 35.1% Daily)		0.010	0.010	0.020	0.016	0.014	0.030	0.600
Truck Mix:	SCAQMD							
2-Axle Trucks (16.7%)		0.002	0.002	0.004	0.003	0.002	0.005	0.100
3-Axle Trucks (20.7%)		0.002	0.002	0.004	0.003	0.003	0.006	0.124
4+ Axle Trucks (62.6%)		0.007	0.006	0.013	0.010	0.009	0.019	0.376

VEHICLE TRIPS GENERATED							
	AM Peak Hour			PM Peak Hour			
Vehicle Type	In	Out	Total	In	Out	Total	Daily
Passenger Car	17	5	22	6	16	22	165
Trucks							
2-Axle Trucks	0	0	0	0	0	0	15
3-Axle Trucks	0	0	0	0	0	0	18
4+ Axle Trucks	1	1	2	1	1	2	56
Subtotal	1	1	2	1	1	2	89
Total Vehicle Trips Generated	**18**	**6**	**24**	**7**	**17**	**24**	**254**

PCE[3] TRIPS GENERATED								
		AM Peak Hour			PM Peak Hour			
Vehicle Type	PCE Factor[4]	In	Out	Total	In	Out	Total	Daily
Passenger Car	1.0	17	5	22	6	16	22	165
Trucks								
2-Axle Trucks	1.5	0	0	0	0	0	0	23
3-Axle Trucks	2.0	0	0	0	0	0	0	36
4+ Axle Trucks	3.0	3	3	6	3	3	6	168
Subtotal		3	3	6	3	3	6	227
Total PCE Trips Generated		**20**	**8**	**28**	**9**	**19**	**28**	**392**

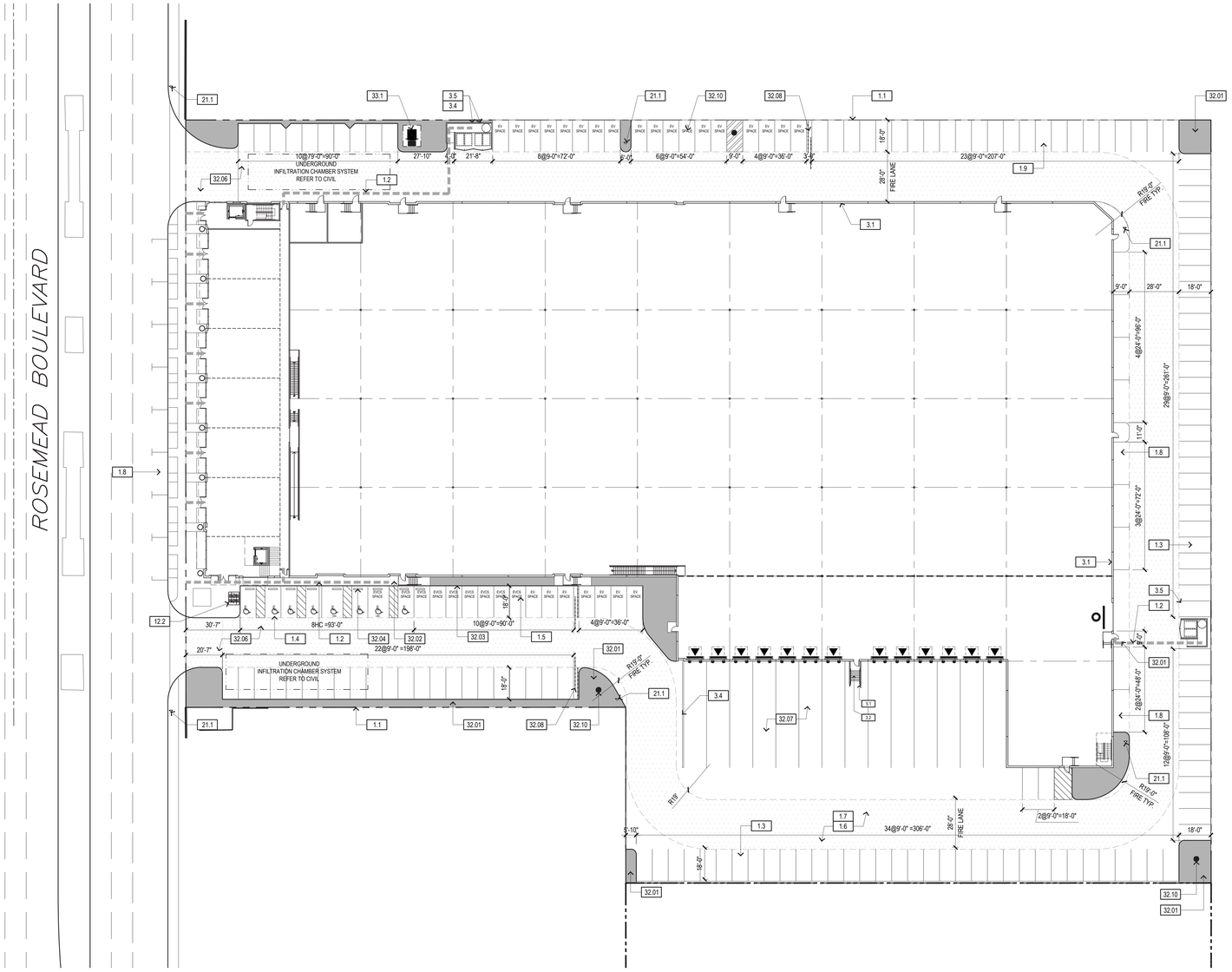
Notes:
(1) TSF = Thousand Square Feet

(2) ITE = Institute of Transportation Engineers *Trip Generation Manual* (11th Edition, 2021); ### = ITE Land Use Code.
SCAQMD = South Coast Air Quality Management District recommendations for non-cold storage high-cube warehouse.

(3) PCE = Passenger Car Equivalent

Appendix A

Site Plan



PROJECT TABULATIONS

SITE AREA		
SF		223,987
ACRES		5.14
BUILDING AREA		
Warehouse		113,525
Retail		8,235
Accessory Warehouse Office		1,604
TOTAL BUILDING FOOTPRINT		**123,364**
2ND FLOOR AND MEZZANINE		
Accessory Warehouse Office		8,925
WH Storage		15,245
TOTAL 2ND FLOOR AND MEZZANINE		**24,170**
3RD FLOOR		
Accessory Warehouse Office		9,465
TOTAL 2ND FLOOR AND MEZZANINE		**9,465**
TOTAL BUILDING AREA		**156,999**
COVERAGE		**55%**
FAR		**70%**
PARKING REQUIRED		
Office	1/1000	20
Retail	1/300	27
Warehouse	1/1000	129
TOTAL PARKING REQUIRED*		**176**
PARKING PROVIDED		
Full Size Stalls	9'-0" x 18'-0"	175
Parallel Stalls	9'-0" x 24'-0"	10
TOTAL PARKING PROVIDED		**181**
PARKING RATIO		1.16/1000

EV PARKING	Required	Provided
EV - 20% of Total Required Parking	35	35
EVCS - 5% of Total Required Parking	9	9
BYCICLE PARKING		
Long Term - 5% of Tenant parking	5	5
Short term - 5% of Visitor parking	4	4
DOCK DOORS		13
GRADE DOORS		1

LANDSCAPE	%	Area (S.F.)
Total Parking Lot Area		75,235
Required - 5% of Parking Lot Area	5.00%	3,762
Total Landscape Area Provided	5.18%	3,898

KEYNOTES

1.0 GENERAL
- 1.1 PROPERTY LINE/ R.O.W. - REFER TO CIVIL DRAWINGS
- 1.2 ACCESSIBLE PATH OF TRAVEL
- 1.3 STANDARD PARKING STALL(S) - TYP.
- 1.4 ADA—ACCESSIBLE PARKING STALL(S)
- 1.5 EV PARKING STALL(S) PER CALGREEN 5.106.5.3
- 1.6 2—WAY DRIVE AISLE: 26'W MIN.
- 1.7 FIRE DEPT. ACCESS DRIVE: 28'W MIN.
- 1.8 PARALLEL PARKING STALL(S) - TYP.
- 1.9 COMPACT PARKING STALL(S) - TYP.

3.0 CONCRETE
- 3.1 TILT—UP CONCRETE BUILDING WALL
- 3.2 CONCRETE STAIR W/ HANDRAIL & 42" GUARDRAIL
- 3.3 CONCRETE STAIR W/ HANDRAIL
- 3.4 TILT—UP CONCRETE SCREEN WALL, PTD.
- 3.5 TILT—UP CONCRETE TRASH ENCLOSURE, 6' TALL TYP.

5.0 METAL FABRICATIONS
- 5.1 STEEL PIPE BOLLARD

12.0 FURNISHINGS
- 12.1 BICYCLE RACK PER CAL GREEN; LONG—TERM 5% OF EMPLOYEE PARKING - REFER TO TABULATIONS
- 12.2 BICYCLE RACK PER CAL GREEN; SHORT—TERM 5% OF VSITOR PARKING — REFER TO TABULATIONS

21.0 FIRE SUPPRESSION
- 21.1 PROPOSED FIRE HYDRANT

32.0 EXTERIOR IMPROVEMENT — REFER TO CIVIL AND LANDSCAPE U.N.0.
- 32.01 LANDSCAPE PLANTING AREA
- 32.02 CONCRETE WALKWAY
- 32.03 CONCRETE CURB, TYP.
- 32.04 PRECAST CONCRETE WHEEL STOP
- 32.05 VEHICULAR PAVING
- 32.06 CONCRETE COMMERCIAL DRIVEWAY
- 32.07 CONCRETE TRUCK DOCK APRON
- 32.08 ROLLING GATE WITH KNOX PADLOCK
- 32.09 MANUAL SWING GATE WITH KNOX PADLOCK
- 32.10 PROPOSED WELL LOCATION

33.0 UTILITIES — REFER TO CIVIL AND ELECTRICAL
- 33.1 ELECTRICAL TRANSFORMER

SITE PLAN - LEGEND

- ACCESSIBLE PATH OF TRAVEL – 4' WIDE MINIMUM – 1:20 MAX RUNNING SLOPE (U.N.O.), AND 1 :48 MAX CROSS SLOPE
- ACCESSIBLE PARKING STALL(S), TYP.
- EV SPACE — PARKING STALL MARKING PER CALGREEN EV, TYP.
- EVCS SPACE — PARKING STALL MARKING PER CALGREEN EV CHARGING STATION
- LANDSCAPE AREA, REFER TO LANDSCAPE DRAWINGS
- FIRE LANE – PER FIRE DEPARTMENT REQUIREMENTS
- DOCK DOOR
- GRADE DOOR

SITE INFORMATION

A.P.N.
8102-059-29, 030, 031, 035

LAND USE / ZONING:

EXISTING/PROPOSED GENERAL PLAN:	COMMERCIAL MANUFACTURING
EXISTING/PROPOSED ZONING:	C—M COMMERCIAL MANUFACTURING

UTILITIES:

WATER:	SAN GABRIEL VALLEY WATER COMPANY
SEWER:	CONSOLIDATED SEWER MAINTENANCE DISTRICT (SCMD)
GAS:	SOUTHERN CALIFORNIA GAS COMPANY
ELECTRIC:	SOUTHERN CALIFORNIA EDISON
T.V.:	SPECTRUM, AT&T, DIRECT TV, DISH

CODE ANALYSIS:
2019 CBC CODE

BUILDING OCCUPANCY:	S—1; B
CONSTRUCTION TYPE:	III—B
FIRE SPRINKLERS (AUTOMATIC):	YES
STORIES:	3

ZONING ANALYSIS:

MAX COVERAGE/FAR:	N/A
REC. LANDSCAPING:	5' OF PARKING AREA
MAX. BLDG HEIGHT:	N/A

PARKING/LOADING

STANDARD STALL:	9'x18'
PARALLEL STALL:	9'x24'
MIN. AISLE:	26'; 28' FIRE DEPARTMENT ACCESS LANES

SITE PLAN & CITY NOTES

NOTES:
- THE PROPERTY IS NOT WITHIN A SPECIFIC PLAN.
- THIS AREA IS NOT SUBJECT TO LIQUEFACTION OR OTHER GEOLOGIC HAZARDS WITHIN A SPECIAL STUDIES ZONE.
- THIS PROPERTY IS NOT SUBJECT TO OVERFLOW, INUNDATION, OR FLOOD HAZARD.
- SUBSURFACE SEPTIC SEWAGE IS NOT INTENDED FOR THIS SITE.
- THE PROPERTY DOES NOT CONTAIN ANY FLAMMABLE/COMBUSTIBLE MATERIALS OR WASTE.
- THE PROPERTY'S WATER QUALITY FEATURES ARE SHOWN AS PART OF THE CIVIL PACKAGE.
- LOADING SPACES WILL BE PAVED WITH CONCRETE.
- SERVICE GATES WILL BE MANUALLY OPERATED \Y/KNOX PAD LOCK.
- SIGN PROGRAM WILL BE UNDER SEPARATED PERMIT.
- NO ABOVE/UNDERGROUND TANKS ARE PROVIDED.
- SITE PLAN SHALL MEET ALL ENGINEERING & NPDES REQUIREMENTS.

FIRE DEPARTMENT NOTES:
- FIRE DEPARTMENT ACCESS SHALL COMPLY WITH FIRE DEPARTMENT FIRE PROTECTION STANDARDS.

CALGREEN NOTES:
- PROJECT SITE IS LARGER THAN ONE ACRE — A STORM WATER POLLUTION PLAN IS REQUIRED (CG 5.106.1).
- VISITOR BICYCLE PARKING RACKS SHALL BE PROVIDED WITHIN 200 FEET OF BUILDING ENTRANCES, FOR A MINIMUM OF 5% NEW VISITOR VEHICULAR PARKING (CG 5.106.4.1.1).
- IN BUILDINGS WITH OVER 10 TENANTS—OCCUPANTS, SECURE, LONG—TERM BICYCLE ENCLOSURES OR LOCKERS SHALL BE PROVIDED ON—SITE, FOR A MINIMUM OF 5% NEW TENANT VEHICULAR PARKING (CG 5.106.4.1.2). COMPLIANCE WITH THIS SECTION WILL BE PROVIDED IN EACH PERMIT FOR TENANT IMPROVEMENT INDOORS IN AMOUNTS PROPORTIONAL TO THE PARKING REQUIRED FOR EACH TENANT IMPROVEMENT.
- ELECTRIC VEHICLE CHARGING SHALL BE PROVIDED ON FOR A MINIMUM NUMBER OF SPACES PROPORTIONAL TO REQUIRED VEHICLE PARKING PER CALGREEN TABLE (CG5.106.5.3).
- LIGHTING DESIGN SHALL LIMIT GLARE AND UPLIGHT AND COMPLY WITH LOCAL CODES AND CALGREEN (CG 5.106.8)
- THIS PROJECT'S PLUMBING FIXTURES SHALL BE WATER—CONSERVING (CG 5.303.3&4). BEING A SHELL BUILDING, COMPLIANCE WITH THIS SECTION WILL BE PROVIDED IN EACH PERMIT FOR TENANT IMPROVEMENT.
- A CONSTRUCTION WASTE MANAGEMENT PLAN SHALL BE DEVELOPED, DEMONSTRATING A MINIMUM OF 65% RECYCLING AND/OR SALVAGING OF NON—HAZARDOUS CONSTRUCTION WASTE AND COMPLYING WITH CALGREEN REQUIREMENTS (CG 5.408.1).
- 100% OF LAND—CLEARED SOILS AND VEGETATION SHALL BE REUSED OR RECYCLED (CG 5.408.3).
- PER SECTION 5.410.2, EXCEPTIONS 1 & 2, COMMISSIONING IS NOT REQUIRED FOR DRY STORAGE WAREHOUSES OR AREAS USED FOR OFFICES LESS THAN 10,000 SF IN DRY STORAGE WAREHOUSES. (CG 5.410.2).
- ALL CONSTRUCTION MATERIALS TO COMPLY WITH THE VOC AND TOXIN LIMITS LISTED
- (CG 5.504).
- SMOKING SHALL BE PROHIBITED WITHIN 25 FEET OF BUILDING ENTRIES, AIR INTAKES, AND OPERABLE WINDOWS (CG 5.504.7).

GENERAL NOTES

1. GUARDS SHALL BE LOCATED ALONG OPEN SIDE OF WALKING SURFACES, STAIRS, RAMPS AND LANDINGS THAT ARE LOCATED MORE THAN 30 INCHES MEASURED VERTICALLY TO THE FLOOR OR GRADE BELOW AT ANY POINT \WITHIN 36 INCHES HORIZONTALLY TO THE EDGE OF THE OPEN SIDE. GUARDS ARE NOT REQUIRED ON THE LOADING SIDE OF LOADING DOCKS (CBC 1015.2).
2. THE RUNNING SLOPE OF WALKING SURFACE SHALL NOT BE STEEPER THAN 1:20 (5%). THE CROSS SLOPE OF WALKING SURFACE SHALL NOT BE STEEPER THAN 1:48 (CBC 11B-403.3, ADA 403.3).
3. THE CLEAR WIDTH FOR SIDEWALKS AND WALKS SHALL BE 48 INCHES MINIMUM. (CBC 11B-403.5.1)
4. THE WASTE STORAGE AREA SHALL BE GRADED SO THAT STORAGE CONTAINERS REMAIN AT REST WITHOUT AUXILIARY RESTRAINING DEVICES. (CCR TITLE 14, DIV. 7)

Xebec Building Company
CONCEPT • DESIGN • BUILD

2222 ROSEMEAD BLVD

2222 Rosemead Boulevard, South El Monte, CA 91733

SITE PLAN, NOTES, AND PROJECT TABULATIONS

0 30' 60'

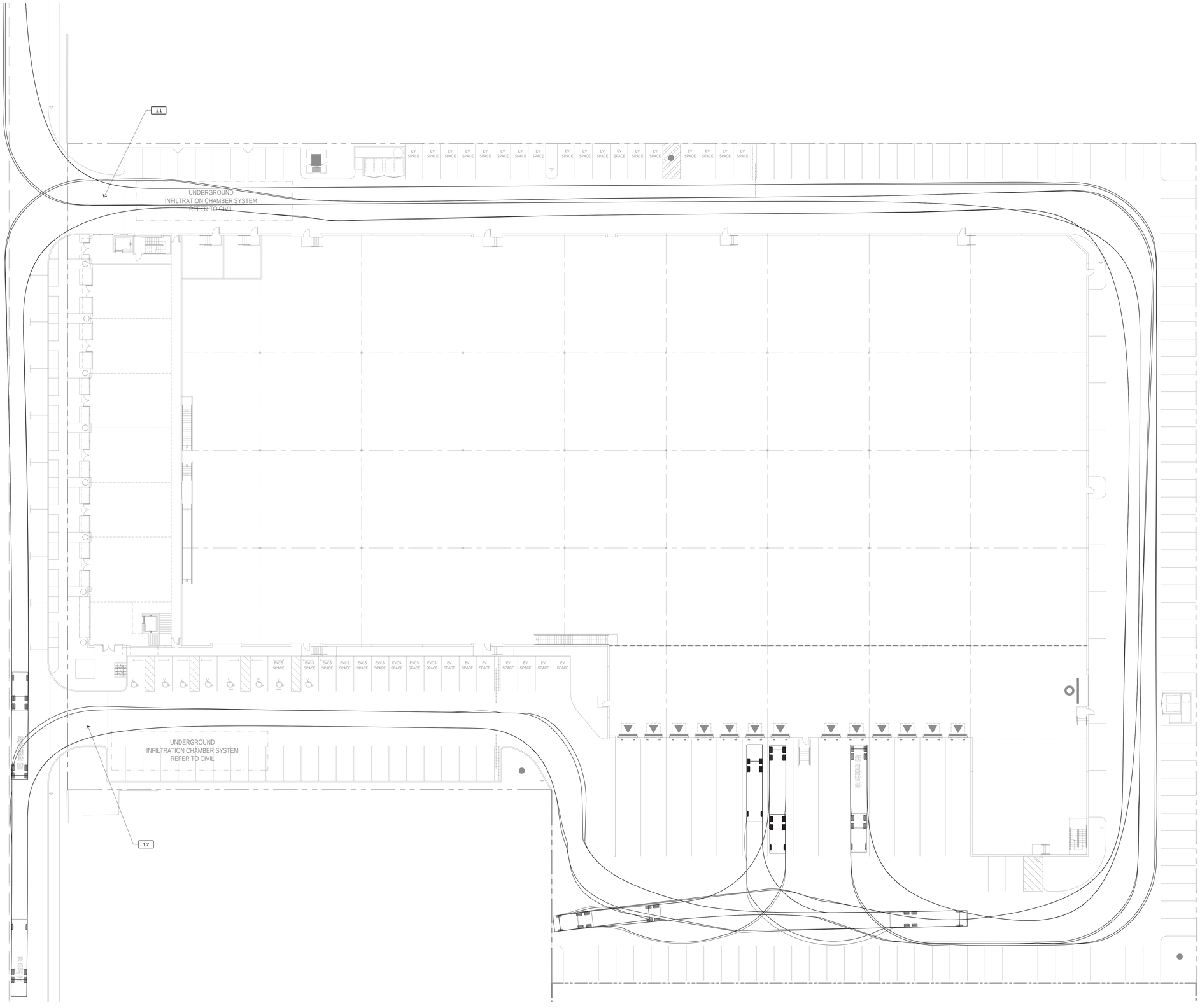
Architecture. Design. Relationships.

A1.1

Scale 1"=30'-0"
Job No. 2022-392
Date 2023-02-28

Appendix B

Truck Turning Template



KEYNOTES

1.0 GENERAL

- **1.1 TRUCKS WITH TRAILERS ENTRANCE/EXIT**
- **1.2 BOX TRUCKS AND VANS ENTRANCE/EXIT**

Xebec Building Company
CONCEPT • DESIGN • BUILD

2222 ROSEMEAD BLVD

2222 Rosemead Boulevard, South El Monte, CA 91733

Attachment B1: WB-50 Trucks

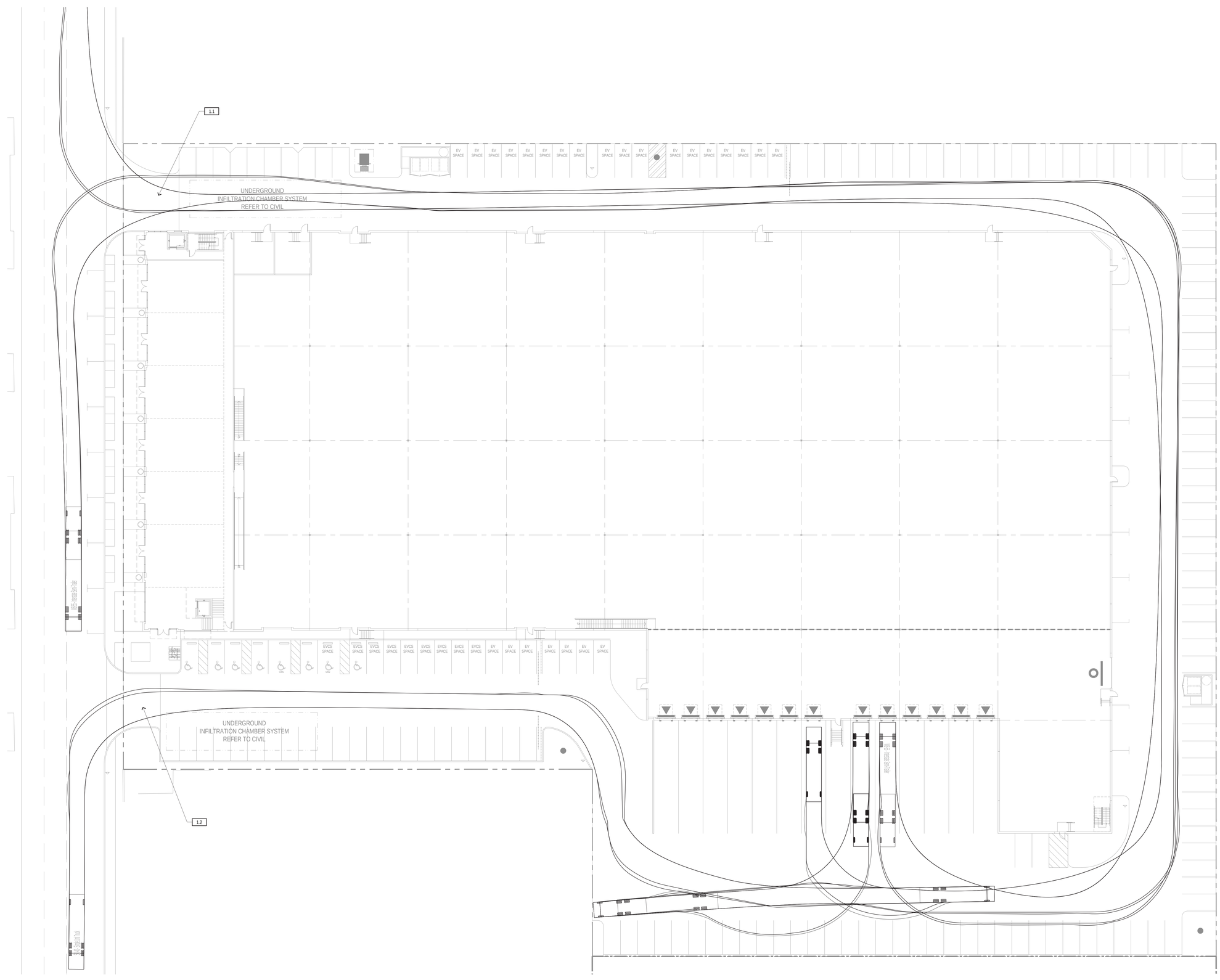
SITE PLAN - TRUCK TEMPLATE

0 20' 40'

Architecture. Design. Relationships.

EX1

Scale 1"=20'-0"
Job No. 2022-392
Date 2023-03-17



KEYNOTES

1.0 GENERAL

- **1.1 TRUCKS WITH TRAILERS ENTRANCE/EXIT**
- **1.2 BOX TRUCKS AND VANS ENTRANCE/EXIT**

Attachment B2: WB-55 Trucks

SITE PLAN - TRUCK TEMPLATE

0 20' 40'

2222 ROSEMEAD BLVD

2222 Rosemead Boulevard, South El Monte, CA 91733

Xebec Building Company
CONCEPT+DESIGN+BUILD

Architecture. Design. Relationships.

EX1

Scale	1"=20'-0"
Job No.	2022-392
Date	2023-02-21

Appendix C

Vehicle Miles Traveled (VMT) Screening

SGVCOG VMT Evaluation Tool Report

Project Details

Timestamp of Analysis: March 01, 2023, 03:24:15 PM

Project Name: 2222 Rosemead Blvd

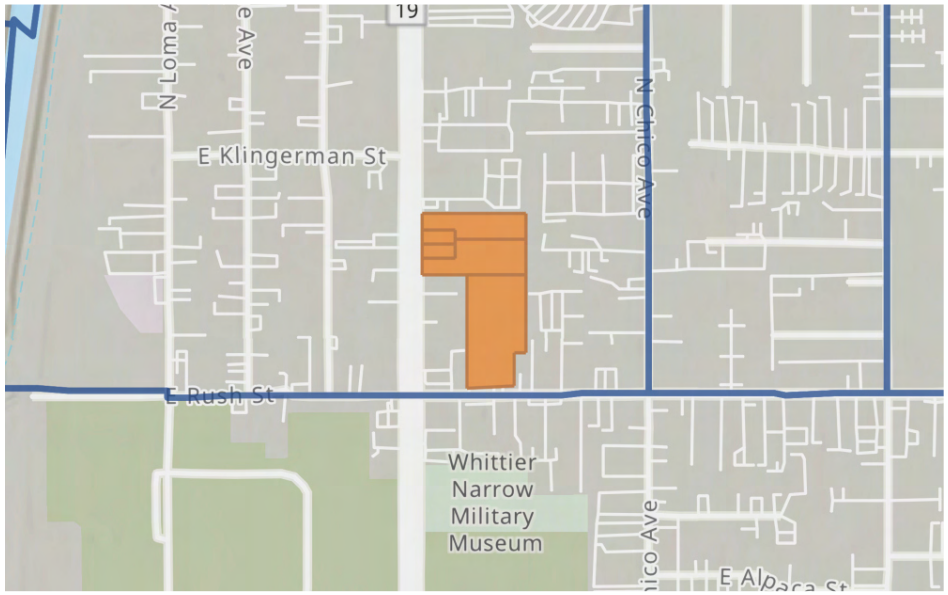
Project Description: Industrial

Project Location

jurisdiction:
South El Monte

apn	TAZ	8102-039-029	22195100	8102-039-030	22195100
8102-039-031	22195100	8102-039-035	22195100	8102-040-011	22195100

Inside a TPA?
No (Fail)



Analysis Details

Data Version: SCAG Regional Travel Demand Model
2016 RTP Base Year 2012

Analysis Methodology: TAZ

Baseline Year: 2023

Project Land Use

Residential:

Single Family DU:

Multifamily DU:

Total DUs: 0

Non-Residential:

Office KSF:

Local Serving Retail KSF:

Industrial KSF:

Residential Affordability (percent of all units):

Extremely Low Income: 0 %

Very Low Income: 0 %

Low Income: 0 %

Parking:

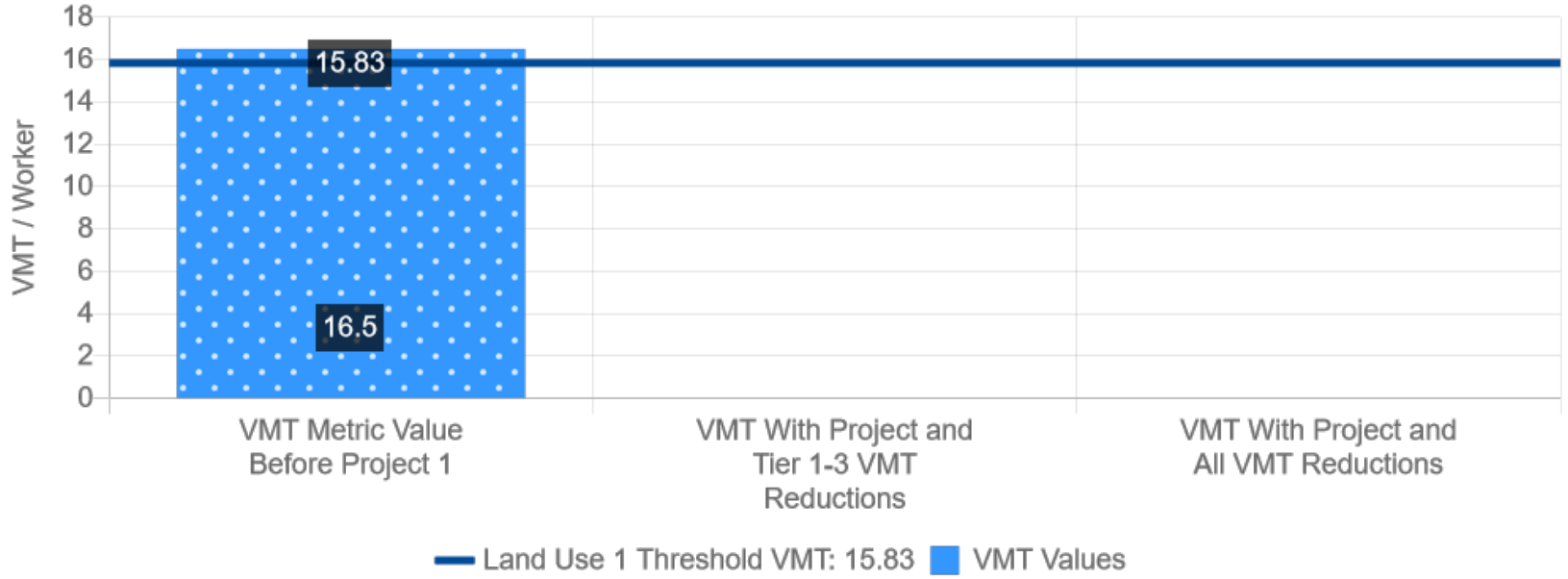
Motor Vehicle Parking:

Bicycle Parking:

Industrial Vehicle Miles Traveled (VMT) Screening Results

Land Use Type 1:	Industrial
VMT Without Project 1:	Home-based Work VMT per Worker
VMT Baseline Description 1:	SGVCOG Average
VMT Baseline Value 1:	18.62
VMT Threshold Description 1:	-15%
Land Use 1 has been Pre-Screened by the Local Jurisdiction:	N/A

	Without Project	With Project & Tier 1-3 VMT Reductions	With Project & All VMT Reductions
Project Generated Vehicle Miles Traveled (VMT) Rate	16.5	null	null
Low VMT Screening Analysis	No (Fail)	null	null



APPENDIX C

VOLUME COUNT DATA SHEETS

INTERSECTION TURNING MOVEMENT COUNTS

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

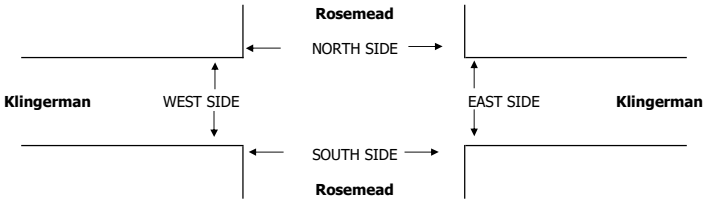
DATE:	LOCATION:	Rosemead	PROJECT #:	SC3947
Wed, Apr 19, 23	NORTH & SOUTH:	Rosemead	LOCATION #:	1
	EAST & WEST:	Klingerman	CONTROL:	STOP E

NOTES:

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

☐ Add U-Turns to Left Turns

		NORTHBOUND Rosemead			SOUTHBOUND Rosemead			EASTBOUND Klingerman			WESTBOUND Klingerman				U-TURNS				
	LANES:	NL 1	NT 3	NR X	SL X	ST 3	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	381	0	0	260	11	3	0	3	0	0	0	672	0	1	0	0	1
	7:15 AM	3	399	0	0	332	10	1	0	5	0	0	0	750	7	0	0	0	7
	7:30 AM	5	396	0	0	411	15	5	0	3	0	0	0	835	8	0	0	0	8
	7:45 AM	8	403	0	0	454	17	1	0	7	0	0	0	890	5	1	0	0	6
	8:00 AM	10	364	0	0	392	20	1	0	4	0	0	0	791	7	3	0	0	10
	8:15 AM	7	351	0	0	392	10	3	0	7	0	0	0	770	8	0	0	0	8
	8:30 AM	5	378	0	0	406	10	1	0	3	0	0	0	803	7	3	0	0	10
	8:45 AM	10	375	0	0	417	13	3	0	5	0	0	0	823	7	1	0	0	8
	VOLUMES	62	3,047	0	0	3,064	106	18	0	37	0	0	0	6,392	49	9	0	0	58
	APPROACH %	2%	96%	0%	0%	96%	3%	33%	0%	67%	0%	0%	0%						
	APP/DEPART	3,158	/	3,074	3,179	/	3,150	55	/	0	0	/	168	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	30	1,514	0	0	1,649	62	10	0	21	0	0	0	3,318					
	APPROACH %	2%	96%	0%	0%	96%	4%	32%	0%	68%	0%	0%	0%						
	PEAK HR FACTOR		0.945			0.908			0.775			0.000		0.926					
	APP/DEPART	1,572	/	1,528	1,715	/	1,698	31	/	0	0	/	92	0					
PM	4:00 PM	4	309	0	0	405	8	3	0	6	0	0	0	735	5	1	0	0	6
	4:15 PM	7	313	0	0	399	12	10	0	11	0	0	0	752	7	0	0	0	7
	4:30 PM	6	363	0	0	383	4	6	0	11	0	0	0	773	4	1	0	0	5
	4:45 PM	4	324	0	0	388	8	9	0	3	0	0	0	736	4	0	0	0	4
	5:00 PM	5	368	0	0	434	10	7	0	13	0	0	0	837	8	2	0	0	10
	5:15 PM	4	353	0	0	444	3	3	0	7	0	0	0	814	3	1	0	0	4
	5:30 PM	7	337	0	0	434	7	3	0	9	0	0	0	797	2	0	0	0	2
	5:45 PM	6	368	0	0	387	8	9	0	4	0	0	0	782	2	0	0	0	2
	VOLUMES	43	2,735	0	0	3,274	60	50	0	64	0	0	0	6,266	35	5	0	0	40
	APPROACH %	2%	97%	0%	0%	98%	2%	44%	0%	56%	0%	0%	0%						
	APP/DEPART	2,813	/	2,790	3,339	/	3,373	114	/	0	0	/	103	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	22	1,426	0	0	1,699	28	22	0	33	0	0	0	3,248					
	APPROACH %	2%	97%	0%	0%	98%	2%	40%	0%	60%	0%	0%	0%						
	PEAK HR FACTOR		0.960			0.965			0.688			0.000		0.959					
	APP/DEPART	1,463	/	1,451	1,730	/	1,747	55	/	0	0	/	50	0					



INTERSECTION TURNING MOVEMENT COUNTS

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

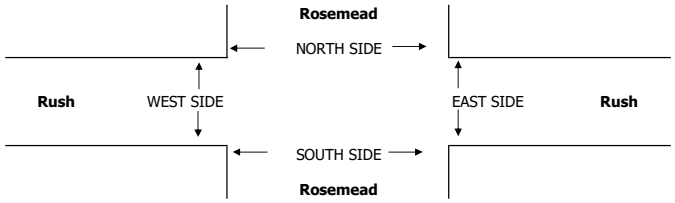
DATE:	LOCATION:	Rosemead	PROJECT #:	SC3947
Wed, Apr 19, 23	NORTH & SOUTH:	Rosemead	LOCATION #:	2
	EAST & WEST:	Rush	CONTROL:	SIGNAL

NOTES:

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

☑ Add U-Turns to Left Turns

		NORTHBOUND Rosemead			SOUTHBOUND Rosemead			EASTBOUND Rush			WESTBOUND Rush				U-TURNS				
	LANES:	NL 1	NT 3	NR 0	SL 2	ST 3	SR 0	EL 1	ET 2	ER 0	WL 1	WT 1	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	28	366	53	40	221	1	6	8	14	36	10	43	826	2	10	0	0	12
	7:15 AM	15	341	31	48	240	4	4	12	9	55	10	42	811	3	7	0	0	10
	7:30 AM	13	350	41	45	362	3	2	17	11	51	17	47	959	0	7	0	0	7
	7:45 AM	27	342	63	77	393	3	8	16	8	53	36	58	1,084	2	19	0	0	21
	8:00 AM	32	308	61	92	308	2	12	18	10	73	29	62	1,007	2	28	0	0	30
	8:15 AM	36	295	49	70	321	1	5	12	15	58	18	53	933	4	18	0	0	22
	8:30 AM	16	318	61	65	303	6	11	18	11	54	11	44	918	1	15	0	0	16
	8:45 AM	31	326	45	84	346	11	3	14	12	64	20	50	1,006	3	17	0	0	20
	VOLUMES	198	2,646	404	521	2,494	31	51	115	90	444	151	399	7,544	17	121	0	0	138
	APPROACH %	6%	81%	12%	17%	82%	1%	20%	45%	35%	45%	15%	40%						
	APP/DEPART	3,248	/	3,217	3,046	/	3,045	256	/	919	994	/	363	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	108	1,295	214	284	1,384	9	27	63	44	235	100	220	3,983					
	APPROACH %	7%	80%	13%	17%	83%	1%	20%	47%	33%	42%	18%	40%						
	PEAK HR FACTOR		0.936			0.886			0.838			0.846		0.919					
	APP/DEPART	1,617	/	1,614	1,677	/	1,671	134	/	489	555	/	209	0					
PM	4:00 PM	18	224	53	55	324	3	7	19	23	77	18	48	869	7	10	0	0	17
	4:15 PM	20	252	66	54	375	8	13	31	15	60	17	47	958	4	7	0	0	11
	4:30 PM	18	271	64	50	351	6	13	41	37	63	18	80	1,012	4	10	0	0	14
	4:45 PM	9	258	59	63	334	5	7	19	34	65	20	61	934	1	13	0	0	14
	5:00 PM	21	256	60	65	381	4	16	33	52	82	15	79	1,064	4	16	0	1	21
	5:15 PM	17	269	63	57	381	5	13	25	45	61	7	56	999	3	5	0	0	8
	5:30 PM	14	272	49	58	387	4	15	34	35	66	11	57	1,002	5	8	0	0	13
	5:45 PM	12	327	66	57	349	1	8	20	18	57	6	48	969	0	12	0	0	12
	VOLUMES	129	2,129	480	459	2,882	36	92	222	259	531	112	476	7,807	28	81	0	1	110
	APPROACH %	5%	78%	18%	14%	85%	1%	16%	39%	45%	47%	10%	43%						
	APP/DEPART	2,738	/	2,778	3,377	/	3,699	573	/	1,081	1,119	/	249	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	64	1,124	238	237	1,498	14	52	112	150	266	39	240	4,034					
	APPROACH %	4%	79%	17%	14%	86%	1%	17%	36%	48%	49%	7%	44%						
	PEAK HR FACTOR		0.880			0.972			0.777			0.774		0.948					
	APP/DEPART	1,426	/	1,457	1,749	/	1,925	314	/	547	545	/	105	0					



APPENDIX D

LEVEL OF SERVICE WORKSHEETS

Existing

Intersection Level Of Service Report
Intersection 1: Rosemead Blvd (NS) at Klingerman St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	89.3
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.191

Intersection Setup

Name	Rosemead Blvd			Rosemead Blvd		Klingerman St	
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 Entry Pocket	1	0	0	0	1	0	1
Entry Pocket Length [ft]	120.00	100.00	100.00	100.00	80.00	100.00	80.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00		30.00	
Grade [%]	0.00			0.00		0.00	
Crosswalk	No			No		No	

Volumes

Name	Rosemead Blvd			Rosemead Blvd		Klingerman St	
Base Volume Input [veh/h]	0	30	1514	1649	62	10	21
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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	30	1514	1649	62	10	21
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	8	379	412	16	3	5
Total Analysis Volume [veh/h]	0	30	1514	1649	62	10	21
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	0.17	0.02	0.02	0.00	0.19	0.08
d_M, Delay for Movement [s/veh]	20.75	29.79	0.00	0.00	0.00	89.33	19.39
Movement LOS	C	D	A	A	A	F	C
95th-Percentile Queue Length [veh/ln]	0.60	0.60	0.00	0.00	0.00	0.63	0.25
95th-Percentile Queue Length [ft/ln]	15.03	15.03	0.00	0.00	0.00	15.82	6.24
d_A, Approach Delay [s/veh]	0.58			0.00		41.95	
Approach LOS	A			A		E	
d_I, Intersection Delay [s/veh]	0.67						
Intersection LOS	F						

Intersection Level Of Service Report
Intersection 4: Rosemead Blvd (NS) at Rush St (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.693

Intersection Setup

Name	Rosemead Blvd			Rosemead Blvd				Rush St			Rush St		
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 Entry Pocket	1	0	0	2	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	280.00	100.00	100.00	385.0	100.0	100.0	100.0	105.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00				30.00			35.00		
Grade [%]	0.00			0.00				0.00			0.00		
Crosswalk	No			Yes				Yes			Yes		

Volumes

Name	Rosemead Blvd			Rosemead Blvd				Rush St			Rush St		
Base Volume Input [veh/h]	108	1295	214	0	284	1384	9	27	63	44	235	100	220
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 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
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]	108	1295	214	0	284	1384	9	27	63	44	235	100	220
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]	27	324	54	0	71	346	2	7	16	11	59	25	55
Total Analysis Volume [veh/h]	108	1295	214	0	284	1384	9	27	63	44	235	100	220
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	Permi	Prote	Permi	Permi	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	0	5	2	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	0.31	0.31	0.00	0.10	0.32	0.32	0.02	0.03	0.03	0.15	0.06	0.14
Intersection LOS	B												
Intersection V/C	0.693												

Intersection Level Of Service Report
Intersection 1: Rosemead Blvd (NS) at Klingerman St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	108.2
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.399

Intersection Setup

Name	Rosemead Blvd			Rosemead Blvd		Klingerman St	
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 Entry Pocket	1	0	0	0	1	0	1
Entry Pocket Length [ft]	120.00	100.00	100.00	100.00	80.00	100.00	80.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00		30.00	
Grade [%]	0.00			0.00		0.00	
Crosswalk	No			No		No	

Volumes

Name	Rosemead Blvd			Rosemead Blvd		Klingerman St	
Base Volume Input [veh/h]	0	22	1426	1699	28	22	33
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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	22	1426	1699	28	22	33
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	6	357	425	7	6	8
Total Analysis Volume [veh/h]	0	22	1426	1699	28	22	33
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

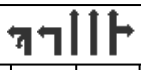
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.13	0.01	0.02	0.00	0.40	0.13
d_M, Delay for Movement [s/veh]	20.82	29.02	0.00	0.00	0.00	108.18	20.77
Movement LOS	C	D	A	A	A	F	C
95th-Percentile Queue Length [veh/ln]	0.43	0.43	0.00	0.00	0.00	1.47	0.43
95th-Percentile Queue Length [ft/ln]	10.77	10.77	0.00	0.00	0.00	36.72	10.69
d_A, Approach Delay [s/veh]	0.44			0.00		55.74	
Approach LOS	A			A		F	
d_I, Intersection Delay [s/veh]	1.15						
Intersection LOS	F						

Intersection Level Of Service Report
Intersection 4: Rosemead Blvd (NS) at Rush St (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.738

Intersection Setup

Name	Rosemead Blvd			Rosemead Blvd				Rush St			Rush St		
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 Entry Pocket	1	0	0	2	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	280.00	100.00	100.00	385.0	100.0	100.0	100.0	105.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00				30.00			35.00		
Grade [%]	0.00			0.00				0.00			0.00		
Crosswalk	No			Yes				Yes			Yes		

Volumes

Name	Rosemead Blvd			Rosemead Blvd				Rush St			Rush St		
Base Volume Input [veh/h]	64	1124	238	0	237	1498	14	52	112	150	266	39	240
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 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
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]	64	1124	238	0	237	1498	14	52	112	150	266	39	240
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]	16	281	60	0	59	375	4	13	28	38	67	10	60
Total Analysis Volume [veh/h]	64	1124	238	0	237	1498	14	52	112	150	266	39	240
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	Permi	Prote	Permi	Permi	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups													
Lead / Lag	Lead	-	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.28	0.28	0.00	0.08	0.35	0.35	0.03	0.08	0.08	0.17	0.02	0.15
Intersection LOS	C												
Intersection V/C	0.738												

Existing Plus Project

Rosemead and Rush Industrial Project

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Scenario 2 Existing Plus Project
4/21/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Rosemead Blvd (NS) at Klingerman St (EW)	Two-way stop	HCM 7th Edition	EB Left	0.196	91.9	F
2	Rosemead Blvd (NS) at Project North Dwy (EW)	Two-way stop	HCM 7th Edition	WB Right	0.014	17.6	C
3	Rosemead Blvd (NS) at Project South Dwy (EW)	Two-way stop	HCM 7th Edition	WB Right	0.014	17.6	C
4	Rosemead Blvd (NS) at Rush St (EW)	Signalized	ICU 1	SB Thru	0.695	-	B

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: Rosemead Blvd (NS) at Klingerman St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	91.9
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.196

Intersection Setup

Name	Rosemead Blvd			Rosemead Blvd		Klingerman St	
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 Entry Pocket	1	0	0	0	1	0	1
Entry Pocket Length [ft]	120.00	100.00	100.00	100.00	80.00	100.00	80.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00		30.00	
Grade [%]	0.00			0.00		0.00	
Crosswalk	No			No		No	

Volumes

Name	Rosemead Blvd			Rosemead Blvd		Klingerman St	
Base Volume Input [veh/h]	0	30	1514	1649	62	10	21
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	0	5	3	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]	3	30	1519	1652	62	10	21
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	8	380	413	16	3	5
Total Analysis Volume [veh/h]	3	30	1519	1652	62	10	21
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	0.01	0.17	0.02	0.02	0.00	0.20	0.08
d_M, Delay for Movement [s/veh]	20.92	30.00	0.00	0.00	0.00	91.85	19.42
Movement LOS	C	D	A	A	A	F	C
95th-Percentile Queue Length [veh/ln]	0.64	0.64	0.00	0.00	0.00	0.65	0.25
95th-Percentile Queue Length [ft/ln]	16.10	16.10	0.00	0.00	0.00	16.20	6.26
d_A, Approach Delay [s/veh]	0.62			0.00		42.79	
Approach LOS	A			A		E	
d_I, Intersection Delay [s/veh]	0.69						
Intersection LOS	F						

Intersection Level Of Service Report
Intersection 2: Rosemead Blvd (NS) at Project North Dwy (EW)

Control Type:	Two-way stop	Delay (sec / veh):	17.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.014

Intersection Setup

Name	Rosemead Blvd		Rosemead Blvd		Project North Dwy	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Rosemead Blvd		Rosemead Blvd		Project North Dwy	
Base Volume Input [veh/h]	1544	0	0	1677	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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	10	0	6	0	4
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]	1548	10	0	1683	0	4
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]	387	3	0	421	0	1
Total Analysis Volume [veh/h]	1548	10	0	1683	0	4
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	0.02	0.00	0.00	0.02	0.00	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	17.56
Movement LOS	A	A		A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.04
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	1.05
d_A, Approach Delay [s/veh]	0.00		0.00		17.56	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.02					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 3: Rosemead Blvd (NS) at Project South Dwy (EW)

Control Type:	Two-way stop	Delay (sec / veh):	17.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.014

Intersection Setup

Name	Rosemead Blvd		Rosemead Blvd		Project South Dwy	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Rosemead Blvd		Rosemead Blvd		Project South Dwy	
Base Volume Input [veh/h]	1544	0	0	1677	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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	10	10	0	6	0	4
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]	1554	10	0	1683	0	4
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]	389	3	0	421	0	1
Total Analysis Volume [veh/h]	1554	10	0	1683	0	4
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

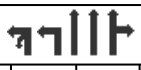
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.02	0.00	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	17.62
Movement LOS	A	A		A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.04
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	1.05
d_A, Approach Delay [s/veh]	0.00		0.00		17.62	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.02					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 4: Rosemead Blvd (NS) at Rush St (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.695

Intersection Setup

Name	Rosemead Blvd			Rosemead Blvd				Rush St			Rush St		
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 Entry Pocket	1	0	0	2	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	280.00	100.00	100.00	385.0	100.0	100.0	100.0	105.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00				30.00			35.00		
Grade [%]	0.00			0.00				0.00			0.00		
Crosswalk	No			Yes				Yes			Yes		

Volumes

Name	Rosemead Blvd			Rosemead Blvd				Rush St			Rush St		
Base Volume Input [veh/h]	108	1295	214	0	284	1384	9	27	63	44	235	100	220
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 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
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	3	1	1	1	4	0	0	0	0	4
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]	108	1303	214	3	285	1385	10	31	63	44	235	100	224
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]	27	326	54	1	71	346	3	8	16	11	59	25	56
Total Analysis Volume [veh/h]	108	1303	214	3	285	1385	10	31	63	44	235	100	224
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	Permi	Prote	Permi	Permi	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	0	5	2	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	0.32	0.32	0.00	0.10	0.32	0.32	0.02	0.03	0.03	0.15	0.06	0.14
Intersection LOS	B												
Intersection V/C	0.695												

Rosemead and Rush Industrial Project

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Scenario 2 Existing Plus Project
4/21/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Rosemead Blvd (NS) at Klingerman St (EW)	Two-way stop	HCM 7th Edition	EB Left	0.419	116.2	F
2	Rosemead Blvd (NS) at Project North Dwy (EW)	Two-way stop	HCM 7th Edition	WB Right	0.032	16.9	C
3	Rosemead Blvd (NS) at Project South Dwy (EW)	Two-way stop	HCM 7th Edition	WB Right	0.029	16.8	C
4	Rosemead Blvd (NS) at Rush St (EW)	Signalized	ICU 1	SB Thru	0.739	-	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: Rosemead Blvd (NS) at Klingerman St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	116.2
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.419

Intersection Setup

Name	Rosemead Blvd			Rosemead Blvd		Klingerman St	
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 Entry Pocket	1	0	0	0	1	0	1
Entry Pocket Length [ft]	120.00	100.00	100.00	100.00	80.00	100.00	80.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00		30.00	
Grade [%]	0.00			0.00		0.00	
Crosswalk	No			No		No	

Volumes

Name	Rosemead Blvd			Rosemead Blvd		Klingerman St	
Base Volume Input [veh/h]	0	22	1426	1699	28	22	33
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	0	12	1	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]	7	22	1438	1700	28	22	33
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]	2	6	360	425	7	6	8
Total Analysis Volume [veh/h]	7	22	1438	1700	28	22	33
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	0.02	0.13	0.01	0.02	0.00	0.42	0.13
d_M, Delay for Movement [s/veh]	21.18	29.39	0.00	0.00	0.00	116.20	20.79
Movement LOS	C	D	A	A	A	F	C
95th-Percentile Queue Length [veh/ln]	0.53	0.53	0.00	0.00	0.00	1.54	0.43
95th-Percentile Queue Length [ft/ln]	13.21	13.21	0.00	0.00	0.00	38.55	10.70
d_A, Approach Delay [s/veh]	0.54			0.00		58.95	
Approach LOS	A			A		F	
d_I, Intersection Delay [s/veh]	1.24						
Intersection LOS	F						

Intersection Level Of Service Report
Intersection 2: Rosemead Blvd (NS) at Project North Dwy (EW)

Control Type:	Two-way stop	Delay (sec / veh):	16.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.032

Intersection Setup

Name	Rosemead Blvd		Rosemead Blvd		Project North Dwy	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Rosemead Blvd		Rosemead Blvd		Project North Dwy	
Base Volume Input [veh/h]	1448	0	0	1749	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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	9	5	0	8	0	10
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]	1457	5	0	1757	0	10
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]	364	1	0	439	0	3
Total Analysis Volume [veh/h]	1457	5	0	1757	0	10
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	0.01	0.00	0.00	0.02	0.00	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	16.90
Movement LOS	A	A		A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.10
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	2.47
d_A, Approach Delay [s/veh]	0.00		0.00		16.90	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.05					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 3: Rosemead Blvd (NS) at Project South Dwy (EW)

Control Type:	Two-way stop	Delay (sec / veh):	16.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.029

Intersection Setup

Name	Rosemead Blvd		Rosemead Blvd		Project South Dwy	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Rosemead Blvd		Rosemead Blvd		Project South Dwy	
Base Volume Input [veh/h]	1448	0	0	1749	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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	4	0	8	0	9
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]	1453	4	0	1757	0	9
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]	363	1	0	439	0	2
Total Analysis Volume [veh/h]	1453	4	0	1757	0	9
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

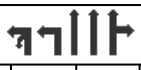
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.02	0.00	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	16.82
Movement LOS	A	A		A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.09
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	2.21
d_A, Approach Delay [s/veh]	0.00		0.00		16.82	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.05					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 4: Rosemead Blvd (NS) at Rush St (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.739

Intersection Setup

Name	Rosemead Blvd			Rosemead Blvd				Rush St			Rush St		
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 Entry Pocket	1	0	0	2	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	280.00	100.00	100.00	385.0	100.0	100.0	100.0	105.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00				30.00			35.00		
Grade [%]	0.00			0.00				0.00			0.00		
Crosswalk	No			Yes				Yes			Yes		

Volumes

Name	Rosemead Blvd			Rosemead Blvd				Rush St			Rush St		
Base Volume Input [veh/h]	64	1124	238	0	237	1498	14	52	112	150	266	39	240
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 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
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	0	1	2	3	2	2	0	0	0	0	2
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]	64	1127	238	1	239	1501	16	54	112	150	266	39	242
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]	16	282	60	0	60	375	4	14	28	38	67	10	61
Total Analysis Volume [veh/h]	64	1127	238	1	239	1501	16	54	112	150	266	39	242
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	Permi	Prote	Permi	Permi	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups													
Lead / Lag	Lead	-	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.28	0.28	0.00	0.08	0.35	0.35	0.03	0.08	0.08	0.17	0.02	0.15
Intersection LOS	C												
Intersection V/C	0.739												

Opening Year (2025) Without Project

Intersection Level Of Service Report
Intersection 1: Rosemead Blvd (NS) at Klingerman St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	141.4
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.340

Intersection Setup

Name	Rosemead Blvd			Rosemead Blvd		Klingerman St	
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 Entry Pocket	1	0	0	0	1	0	1
Entry Pocket Length [ft]	120.00	100.00	100.00	100.00	80.00	100.00	80.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00		30.00	
Grade [%]	0.00			0.00		0.00	
Crosswalk	No			No		No	

Volumes

Name	Rosemead Blvd			Rosemead Blvd		Klingerman St	
Base Volume Input [veh/h]	0	30	1514	1649	62	10	21
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 Factor	1.0556	1.0556	1.0556	1.0556	1.0556	1.0556	1.0556
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	43	55	0	2	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	32	1641	1796	65	13	22
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	8	410	449	16	3	6
Total Analysis Volume [veh/h]	0	32	1641	1796	65	13	22
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

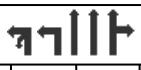
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.22	0.02	0.02	0.00	0.34	0.09
d_M, Delay for Movement [s/veh]	25.12	36.17	0.00	0.00	0.00	141.43	21.32
Movement LOS	D	E	A	A	A	F	C
95th-Percentile Queue Length [veh/ln]	0.79	0.79	0.00	0.00	0.00	1.14	0.30
95th-Percentile Queue Length [ft/ln]	19.78	19.78	0.00	0.00	0.00	28.38	7.40
d_A, Approach Delay [s/veh]	0.69			0.00		65.93	
Approach LOS	A			A		F	
d_I, Intersection Delay [s/veh]	0.97						
Intersection LOS	F						

Intersection Level Of Service Report
Intersection 4: Rosemead Blvd (NS) at Rush St (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.733

Intersection Setup

Name	Rosemead Blvd			Rosemead Blvd				Rush St			Rush St		
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 Entry Pocket	1	0	0	2	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	280.00	100.00	100.00	385.0	100.0	100.0	100.0	105.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00				30.00			35.00		
Grade [%]	0.00			0.00				0.00			0.00		
Crosswalk	No			Yes				Yes			Yes		

Volumes

Name	Rosemead Blvd			Rosemead Blvd				Rush St			Rush St		
Base Volume Input [veh/h]	108	1295	214	0	284	1384	9	27	63	44	235	100	220
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 Factor	1.0556	1.0556	1.0556	1.055	1.055	1.055	1.055	1.0556	1.0556	1.0556	1.0556	1.0556	1.0556
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	20	10	19	6	3	0	0	0	0	7
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]	114	1380	226	20	310	1480	16	32	67	46	248	106	239
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]	29	345	57	5	78	370	4	8	17	12	62	27	60
Total Analysis Volume [veh/h]	114	1380	226	20	310	1480	16	32	67	46	248	106	239
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	Permi	Prote	Permi	Permi	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	0	5	2	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	0.33	0.33	0.01	0.11	0.35	0.35	0.02	0.04	0.04	0.16	0.07	0.15
Intersection LOS	C												
Intersection V/C	0.733												

Intersection Level Of Service Report
Intersection 1: Rosemead Blvd (NS) at Klingerman St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	222.1
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.739

Intersection Setup

Name	Rosemead Blvd			Rosemead Blvd		Klingerman St	
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 Entry Pocket	1	0	0	0	1	0	1
Entry Pocket Length [ft]	120.00	100.00	100.00	100.00	80.00	100.00	80.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00		30.00	
Grade [%]	0.00			0.00		0.00	
Crosswalk	No			No		No	

Volumes

Name	Rosemead Blvd			Rosemead Blvd		Klingerman St	
Base Volume Input [veh/h]	0	22	1426	1699	28	22	33
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 Factor	1.0556	1.0556	1.0556	1.0556	1.0556	1.0556	1.0556
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	85	74	0	6	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	23	1590	1867	30	29	35
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	6	398	467	8	7	9
Total Analysis Volume [veh/h]	0	23	1590	1867	30	29	35
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

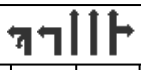
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.16	0.02	0.02	0.00	0.74	0.15
d_M, Delay for Movement [s/veh]	25.32	35.44	0.00	0.00	0.00	222.05	23.47
Movement LOS	D	E	A	A	A	F	C
95th-Percentile Queue Length [veh/ln]	0.56	0.56	0.00	0.00	0.00	2.72	0.53
95th-Percentile Queue Length [ft/ln]	14.08	14.08	0.00	0.00	0.00	67.95	13.20
d_A, Approach Delay [s/veh]	0.51			0.00		113.45	
Approach LOS	A			A		F	
d_I, Intersection Delay [s/veh]	2.26						
Intersection LOS	F						

Intersection Level Of Service Report
Intersection 4: Rosemead Blvd (NS) at Rush St (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.756

Intersection Setup

Name	Rosemead Blvd			Rosemead Blvd				Rush St			Rush St		
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 Entry Pocket	1	0	0	2	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	280.00	100.00	100.00	385.0	100.0	100.0	100.0	105.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00				30.00			35.00		
Grade [%]	0.00			0.00				0.00			0.00		
Crosswalk	No			Yes				Yes			Yes		

Volumes

Name	Rosemead Blvd			Rosemead Blvd				Rush St			Rush St		
Base Volume Input [veh/h]	64	1124	238	0	237	1498	14	52	112	150	266	39	240
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 Factor	1.0556	1.0556	1.0556	1.055	1.055	1.055	1.055	1.0556	1.0556	1.0556	1.0556	1.0556	1.0556
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	25	0	40	9	21	4	7	0	0	0	0	13
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]	68	1211	251	40	259	1602	19	62	118	158	281	41	266
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]	17	303	63	10	65	401	5	16	30	40	70	10	67
Total Analysis Volume [veh/h]	68	1211	251	40	259	1602	19	62	118	158	281	41	266
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	Permi	Prote	Permi	Permi	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups													
Lead / Lag	Lead	-	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.30	0.30	0.03	0.09	0.38	0.38	0.04	0.09	0.09	0.18	0.03	0.17
Intersection LOS	C												
Intersection V/C	0.756												

Opening Year (2025) With Project

Rosemead and Rush Industrial Project

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Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Rosemead Blvd (NS) at Klingerman St (EW)	Two-way stop	HCM 7th Edition	EB Left	0.349	146.4	F
2	Rosemead Blvd (NS) at Project North Dwy (EW)	Two-way stop	HCM 7th Edition	WB Right	0.015	18.9	C
3	Rosemead Blvd (NS) at Project South Dwy (EW)	Two-way stop	HCM 7th Edition	WB Right	0.015	18.9	C
4	Rosemead Blvd (NS) at Rush St (EW)	Signalized	ICU 1	SB Thru	0.735	-	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: Rosemead Blvd (NS) at Klingerman St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	146.4
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.349

Intersection Setup

Name	Rosemead Blvd			Rosemead Blvd		Klingerman St	
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 Entry Pocket	1	0	0	0	1	0	1
Entry Pocket Length [ft]	120.00	100.00	100.00	100.00	80.00	100.00	80.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00		30.00	
Grade [%]	0.00			0.00		0.00	
Crosswalk	No			No		No	

Volumes

Name	Rosemead Blvd			Rosemead Blvd		Klingerman St	
Base Volume Input [veh/h]	0	30	1514	1649	62	10	21
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 Factor	1.0556	1.0556	1.0556	1.0556	1.0556	1.0556	1.0556
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	0	48	58	0	2	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]	3	32	1646	1799	65	13	22
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	8	412	450	16	3	6
Total Analysis Volume [veh/h]	3	32	1646	1799	65	13	22
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	0.01	0.22	0.02	0.02	0.00	0.35	0.09
d_M, Delay for Movement [s/veh]	25.38	36.47	0.00	0.00	0.00	146.43	21.36
Movement LOS	D	E	A	A	A	F	C
95th-Percentile Queue Length [veh/ln]	0.85	0.85	0.00	0.00	0.00	1.16	0.30
95th-Percentile Queue Length [ft/ln]	21.14	21.14	0.00	0.00	0.00	29.04	7.42
d_A, Approach Delay [s/veh]	0.74			0.00		67.82	
Approach LOS	A			A		F	
d_I, Intersection Delay [s/veh]	1.01						
Intersection LOS	F						

Intersection Level Of Service Report
Intersection 2: Rosemead Blvd (NS) at Project North Dwy (EW)

Control Type:	Two-way stop	Delay (sec / veh):	18.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.015

Intersection Setup

Name	Rosemead Blvd		Rosemead Blvd		Project North Dwy	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Rosemead Blvd		Rosemead Blvd		Project North Dwy	
Base Volume Input [veh/h]	1544	0	0	1677	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 Factor	1.0556	1.0556	1.0000	1.0556	1.0000	1.0556
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	47	10	0	61	0	4
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]	1677	10	0	1831	0	4
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]	419	3	0	458	0	1
Total Analysis Volume [veh/h]	1677	10	0	1831	0	4
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	0.02	0.00	0.00	0.02	0.00	0.02
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	18.87
Movement LOS	A	A		A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.05
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	1.15
d_A, Approach Delay [s/veh]	0.00		0.00		18.87	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.02					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 3: Rosemead Blvd (NS) at Project South Dwy (EW)

Control Type:	Two-way stop	Delay (sec / veh):	18.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.015

Intersection Setup

Name	Rosemead Blvd		Rosemead Blvd		Project South Dwy	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Rosemead Blvd		Rosemead Blvd		Project South Dwy	
Base Volume Input [veh/h]	1544	0	0	1677	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 Factor	1.0556	1.0556	1.0000	1.0556	1.0000	1.0556
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	53	10	0	61	0	4
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]	1683	10	0	1831	0	4
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]	421	3	0	458	0	1
Total Analysis Volume [veh/h]	1683	10	0	1831	0	4
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

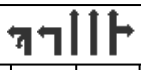
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.02	0.00	0.02
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	18.94
Movement LOS	A	A		A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.05
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	1.16
d_A, Approach Delay [s/veh]	0.00		0.00		18.94	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.02					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 4: Rosemead Blvd (NS) at Rush St (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.735

Intersection Setup

Name	Rosemead Blvd			Rosemead Blvd				Rush St			Rush St		
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 Entry Pocket	1	0	0	2	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	280.00	100.00	100.00	385.0	100.0	100.0	100.0	105.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00				30.00			35.00		
Grade [%]	0.00			0.00				0.00			0.00		
Crosswalk	No			Yes				Yes			Yes		

Volumes

Name	Rosemead Blvd			Rosemead Blvd				Rush St			Rush St		
Base Volume Input [veh/h]	108	1295	214	0	284	1384	9	27	63	44	235	100	220
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 Factor	1.0556	1.0556	1.0556	1.055	1.055	1.055	1.055	1.0556	1.0556	1.0556	1.0556	1.0556	1.0556
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	23	11	20	7	7	0	0	0	0	11
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]	114	1388	226	23	311	1481	17	36	67	46	248	106	243
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]	29	347	57	6	78	370	4	9	17	12	62	27	61
Total Analysis Volume [veh/h]	114	1388	226	23	311	1481	17	36	67	46	248	106	243
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	Permi	Prote	Permi	Permi	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	0	5	2	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	0.34	0.34	0.02	0.11	0.35	0.35	0.02	0.04	0.04	0.16	0.07	0.15
Intersection LOS	C												
Intersection V/C	0.735												

Rosemead and Rush Industrial Project

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Scenario 4 Opening Year (2025) With Project
4/21/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Rosemead Blvd (NS) at Klingerman St (EW)	Two-way stop	HCM 7th Edition	EB Left	0.781	243.8	F
2	Rosemead Blvd (NS) at Project North Dwy (EW)	Two-way stop	HCM 7th Edition	WB Right	0.036	18.6	C
3	Rosemead Blvd (NS) at Project South Dwy (EW)	Two-way stop	HCM 7th Edition	WB Right	0.033	18.5	C
4	Rosemead Blvd (NS) at Rush St (EW)	Signalized	ICU 1	SB Thru	0.758	-	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: Rosemead Blvd (NS) at Klingerman St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	243.8
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.781

Intersection Setup

Name	Rosemead Blvd			Rosemead Blvd		Klingerman St	
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 Entry Pocket	1	0	0	0	1	0	1
Entry Pocket Length [ft]	120.00	100.00	100.00	100.00	80.00	100.00	80.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00		30.00	
Grade [%]	0.00			0.00		0.00	
Crosswalk	No			No		No	

Volumes

Name	Rosemead Blvd			Rosemead Blvd		Klingerman St	
Base Volume Input [veh/h]	0	22	1426	1699	28	22	33
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 Factor	1.0556	1.0556	1.0556	1.0556	1.0556	1.0556	1.0556
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	0	97	75	0	6	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]	7	23	1602	1868	30	29	35
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]	2	6	401	467	8	7	9
Total Analysis Volume [veh/h]	7	23	1602	1868	30	29	35
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	0.03	0.16	0.02	0.02	0.00	0.78	0.15
d_M, Delay for Movement [s/veh]	25.90	36.04	0.00	0.00	0.00	243.77	23.49
Movement LOS	D	E	A	A	A	F	C
95th-Percentile Queue Length [veh/ln]	0.69	0.69	0.00	0.00	0.00	2.83	0.53
95th-Percentile Queue Length [ft/ln]	17.21	17.21	0.00	0.00	0.00	70.72	13.21
d_A, Approach Delay [s/veh]	0.62			0.00		123.30	
Approach LOS	A			A		F	
d_I, Intersection Delay [s/veh]	2.48						
Intersection LOS	F						

Intersection Level Of Service Report
Intersection 2: Rosemead Blvd (NS) at Project North Dwy (EW)

Control Type:	Two-way stop	Delay (sec / veh):	18.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.036

Intersection Setup

Name	Rosemead Blvd		Rosemead Blvd		Project North Dwy	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Rosemead Blvd		Rosemead Blvd		Project North Dwy	
Base Volume Input [veh/h]	1448	0	0	1749	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 Factor	1.0556	1.0556	1.0000	1.0556	1.0000	1.0556
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	94	5	0	82	0	10
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]	1623	5	0	1928	0	10
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]	406	1	0	482	0	3
Total Analysis Volume [veh/h]	1623	5	0	1928	0	10
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	0.02	0.00	0.00	0.02	0.00	0.04
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	18.56
Movement LOS	A	A		A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.11
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	2.81
d_A, Approach Delay [s/veh]	0.00		0.00		18.56	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.05					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 3: Rosemead Blvd (NS) at Project South Dwy (EW)

Control Type:	Two-way stop	Delay (sec / veh):	18.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.033

Intersection Setup

Name	Rosemead Blvd		Rosemead Blvd		Project South Dwy	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Rosemead Blvd		Rosemead Blvd		Project South Dwy	
Base Volume Input [veh/h]	1448	0	0	1749	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 Factor	1.0556	1.0556	1.0000	1.0556	1.0000	1.0556
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	90	4	0	82	0	9
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]	1619	4	0	1928	0	9
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]	405	1	0	482	0	2
Total Analysis Volume [veh/h]	1619	4	0	1928	0	9
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

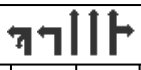
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.02	0.00	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	18.45
Movement LOS	A	A		A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.10
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	2.51
d_A, Approach Delay [s/veh]	0.00		0.00		18.45	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.05					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 4: Rosemead Blvd (NS) at Rush St (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.758

Intersection Setup

Name	Rosemead Blvd			Rosemead Blvd				Rush St			Rush St		
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 Entry Pocket	1	0	0	2	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	280.00	100.00	100.00	385.0	100.0	100.0	100.0	105.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00				30.00			35.00		
Grade [%]	0.00			0.00				0.00			0.00		
Crosswalk	No			Yes				Yes			Yes		

Volumes

Name	Rosemead Blvd			Rosemead Blvd				Rush St			Rush St		
Base Volume Input [veh/h]	64	1124	238	0	237	1498	14	52	112	150	266	39	240
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 Factor	1.0556	1.0556	1.0556	1.055	1.055	1.055	1.055	1.0556	1.0556	1.0556	1.0556	1.0556	1.0556
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	28	0	41	11	24	6	9	0	0	0	0	15
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]	68	1214	251	41	261	1605	21	64	118	158	281	41	268
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]	17	304	63	10	65	401	5	16	30	40	70	10	67
Total Analysis Volume [veh/h]	68	1214	251	41	261	1605	21	64	118	158	281	41	268
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	Permi	Prote	Permi	Permi	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups													
Lead / Lag	Lead	-	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.31	0.31	0.03	0.09	0.38	0.38	0.04	0.09	0.09	0.18	0.03	0.17
Intersection LOS	C												
Intersection V/C	0.758												

APPENDIX E

OTHER CUMULATIVE DEVELOPMENT LOCATION MAP


C1
Mye Plaza Mixed Use
Development
(2727 Rosemead Blvd)
C3
2540 Rosemead Blvd
C2
2512 Rosemead Blvd
Project
Site
N34°03'34.56"
W118°03'43.2"
N34°03'8.64"
Mabel Ave
Giovanni St
Chico Ave
Fern St
Lee Ave
Willow Ave
Kingsman St
Rush St

APPENDIX F

SIGNAL WARRANT ANALYSIS

PEAK HOUR VOLUME WARRANT
(Rural Areas)

Existing Plus Project AM

Major Street Name = Rosemead Blvd

Total of Both Approaches (VPH) = 3266

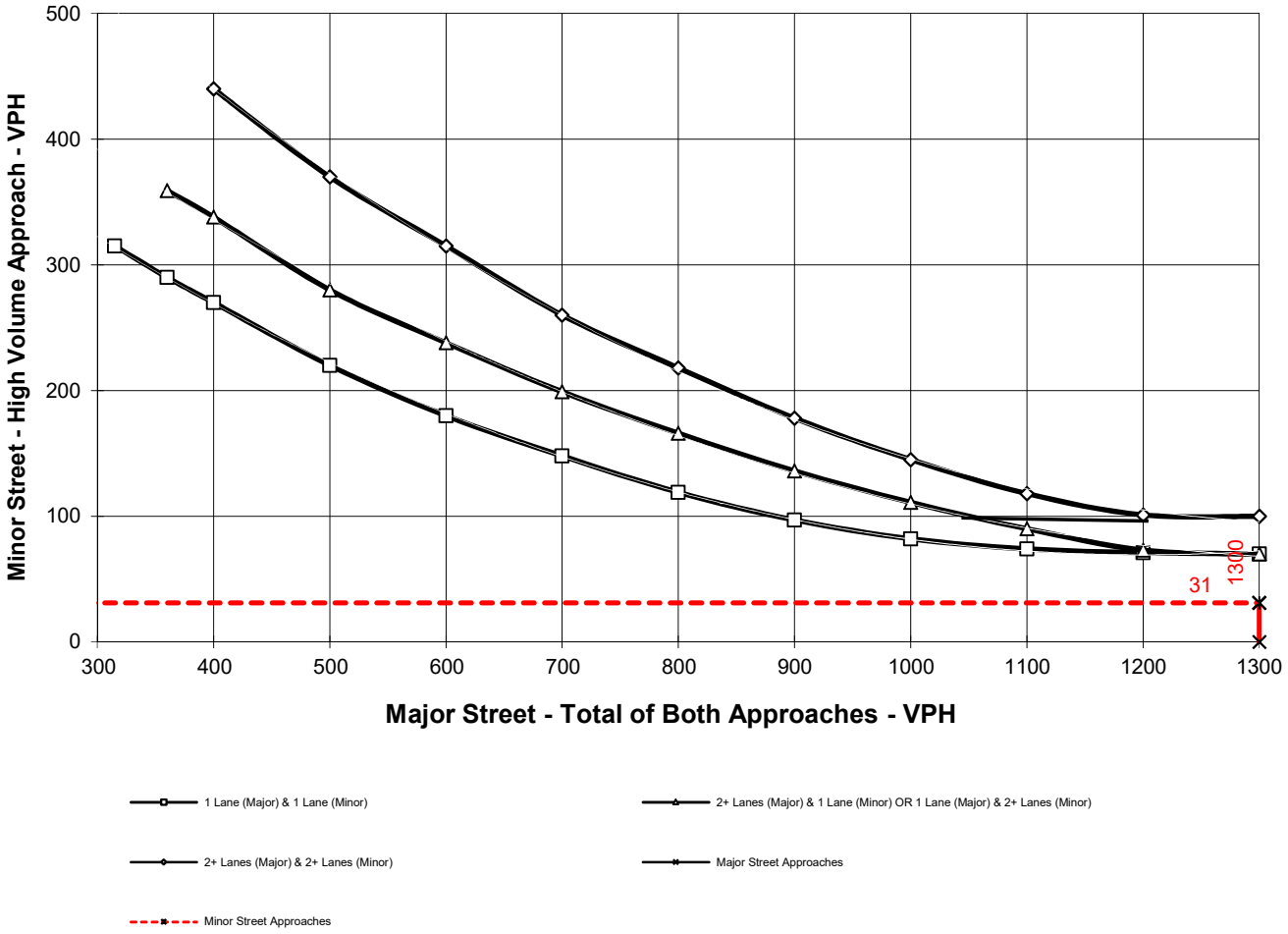
Number of Approach Lanes Major Street = 2

Minor Street Name = Klingerman St

High Volume Approach (VPH) = 31

Number of Approach Lanes Minor Street = 1

SIGNAL WARRANT NOT SATISFIED



** NOTE:
100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

PEAK HOUR VOLUME WARRANT
(Rural Areas)

Existing Plus Project PM

Major Street Name = Rosemead Blvd

Total of Both Approaches (VPH) = 3195

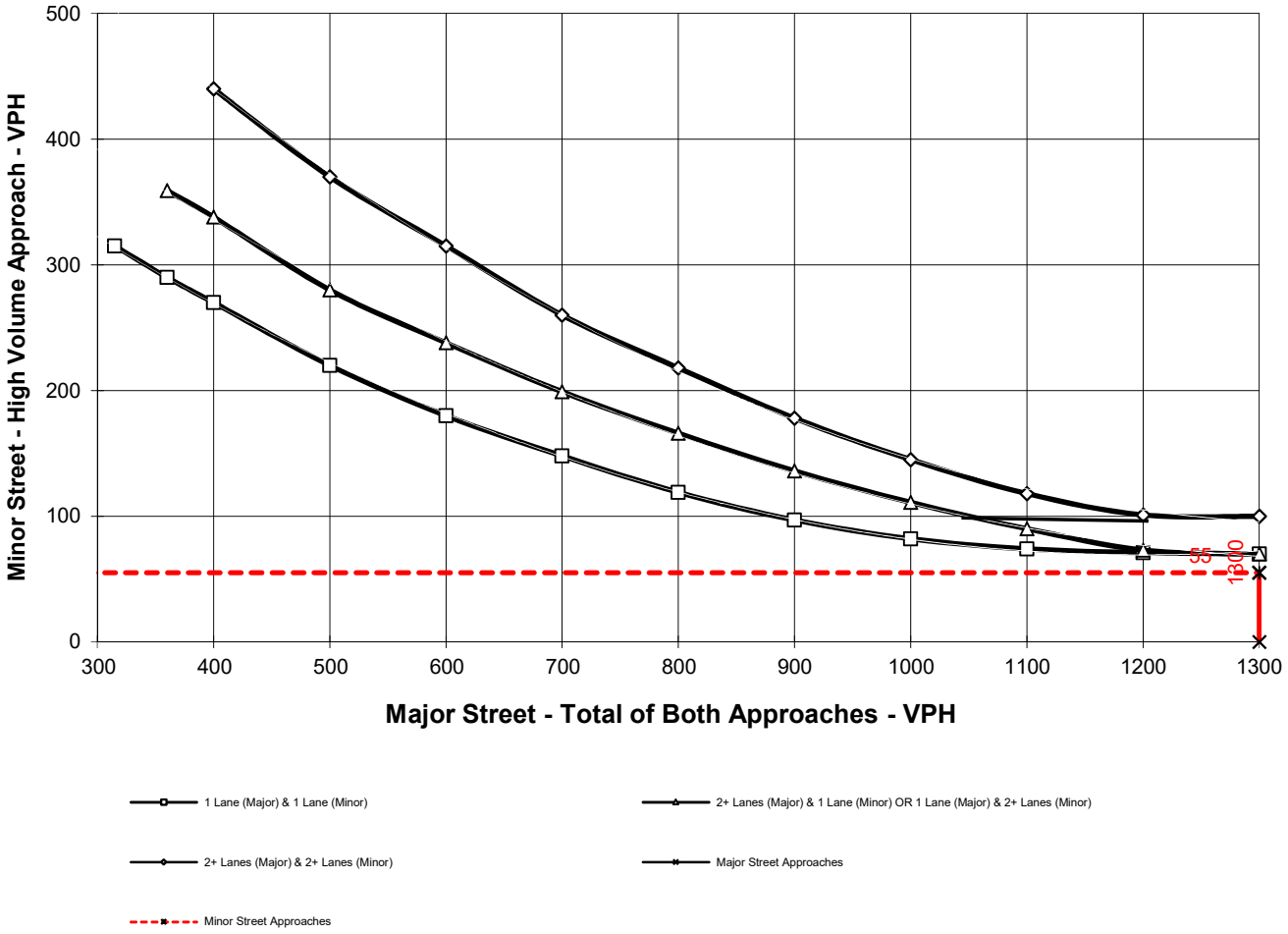
Number of Approach Lanes Major Street = 2

Minor Street Name = Klingerman St

High Volume Approach (VPH) = 55

Number of Approach Lanes Minor Street = 1

SIGNAL WARRANT NOT SATISFIED



** NOTE:
100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

PEAK HOUR VOLUME WARRANT
(Rural Areas)

Openying Year With Project AM

Major Street Name = Rosemead Blvd

Total of Both Approaches (VPH) = 3545

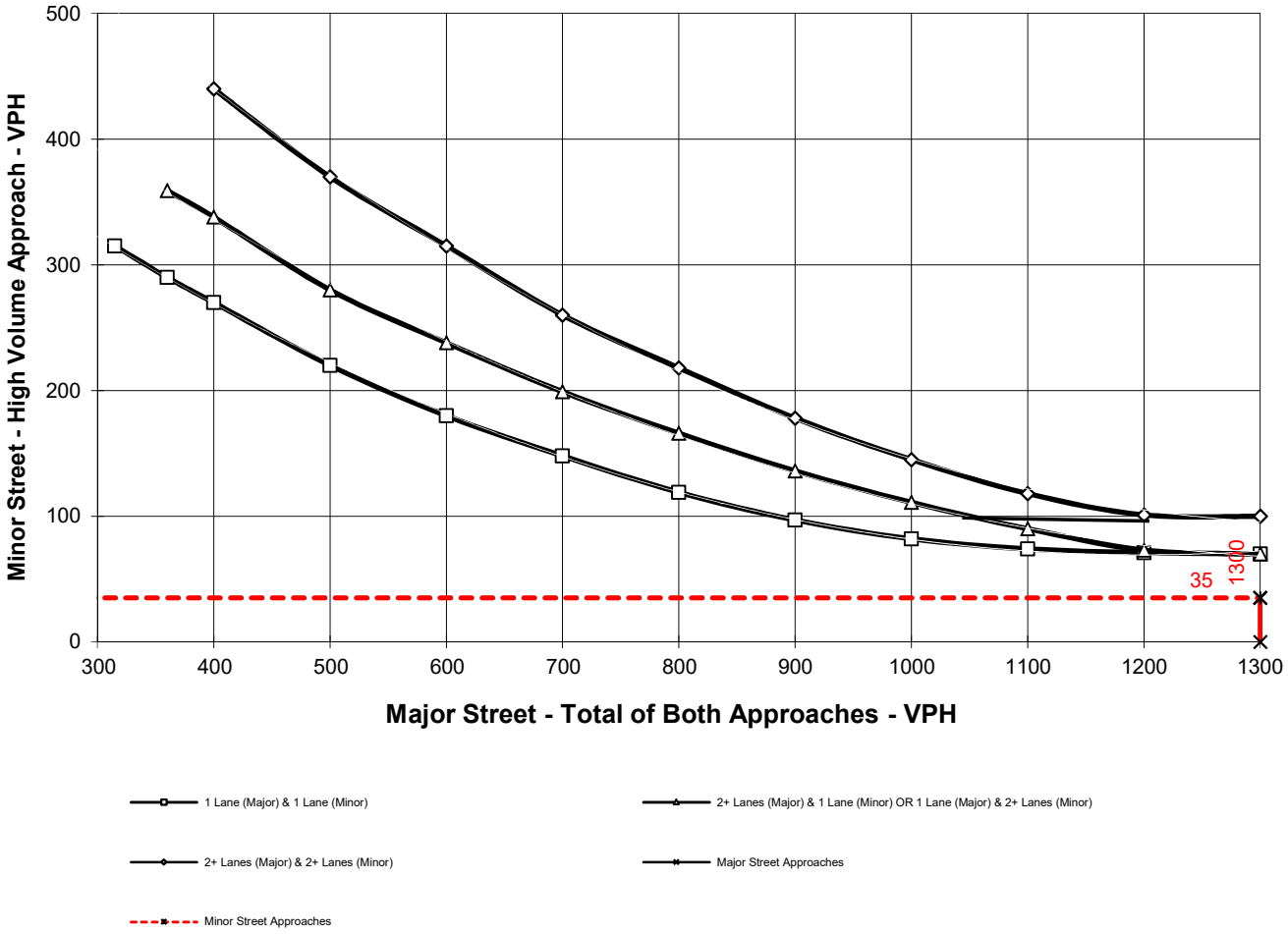
Number of Approach Lanes Major Street = 2

Minor Street Name = Klingerman St

High Volume Approach (VPH) = 35

Number of Approach Lanes Minor Street = 1

SIGNAL WARRANT NOT SATISFIED



** NOTE:
100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

PEAK HOUR VOLUME WARRANT
(Rural Areas)

Openying Year With Project PM

Major Street Name = Rosemead Blvd

Total of Both Approaches (VPH) = 3530

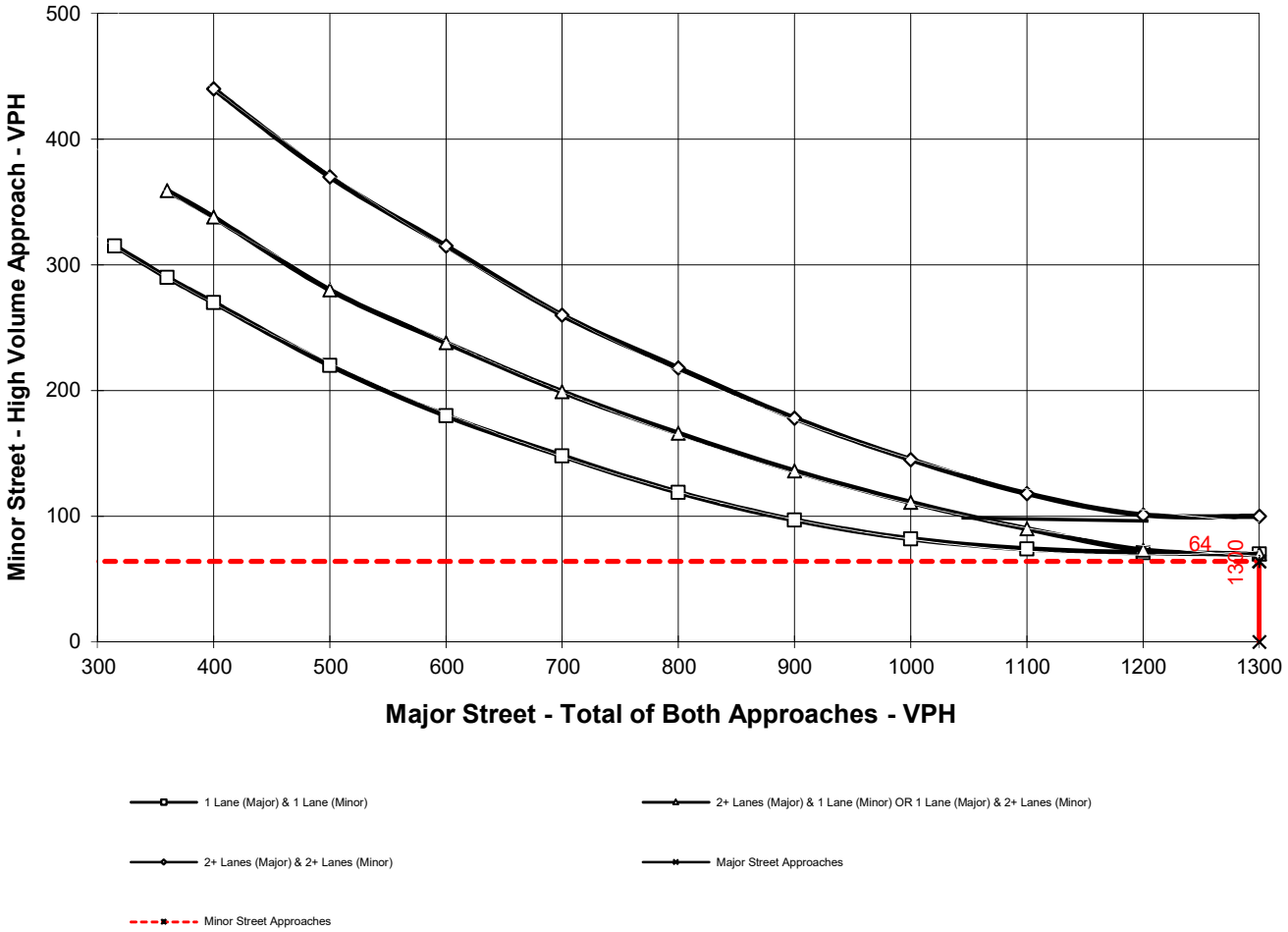
Number of Approach Lanes Major Street = 2

Minor Street Name = Klingerman St

High Volume Approach (VPH) = 64

Number of Approach Lanes Minor Street = 1

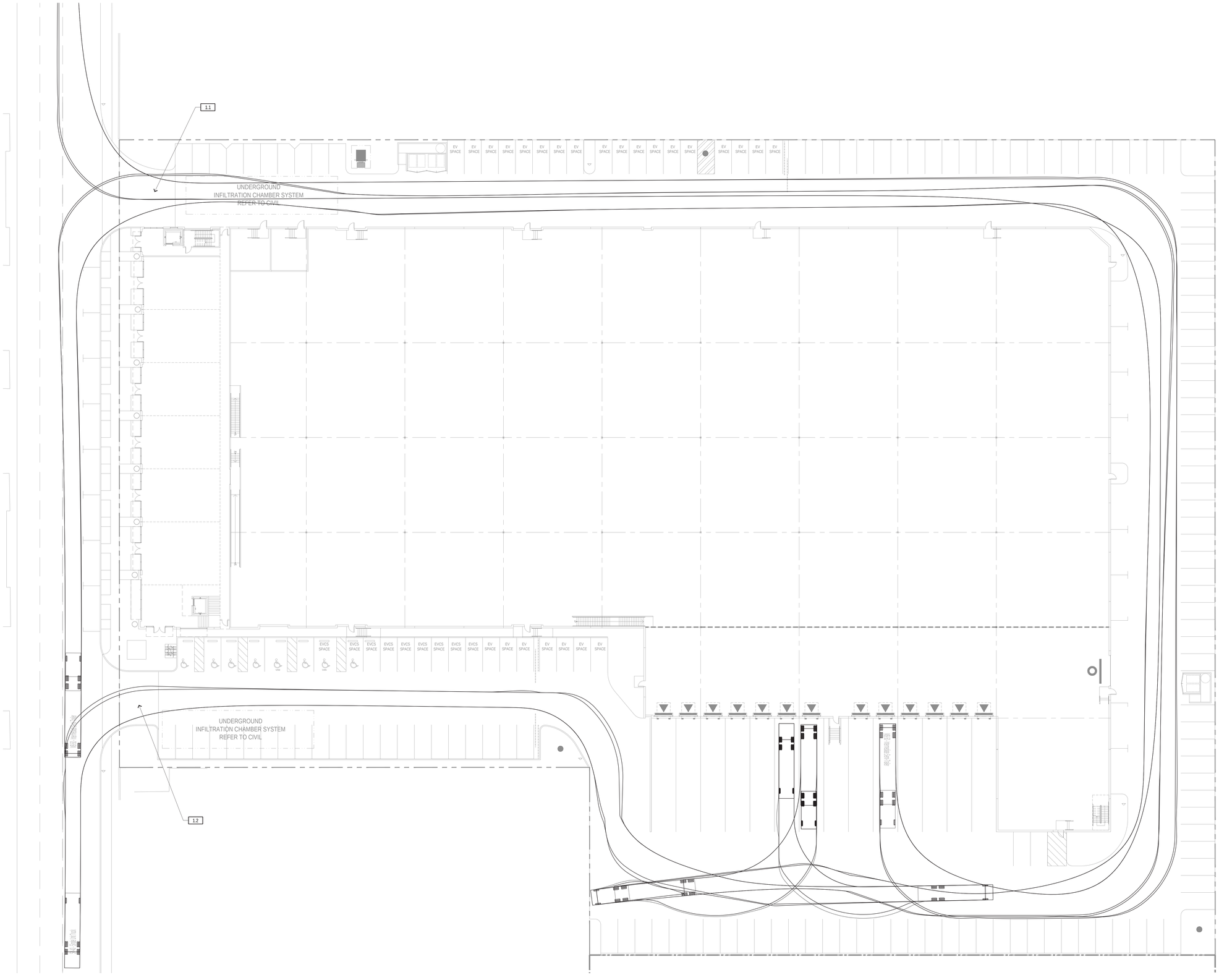
SIGNAL WARRANT NOT SATISFIED



** NOTE:
100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

APPENDIX G

TRUCK TURNING TEMPLATES



KEYNOTES

1.0 GENERAL

- **1.1 TRUCKS WITH TRAILERS ENTRANCE/EXIT**
- **1.2 BOX TRUCKS AND VANS ENTRANCE/EXIT**

Appendix G-1: WB-50 Trucks

SITE PLAN - TRUCK TEMPLATE

0 20' 40'

2222 ROSEMEAD BLVD

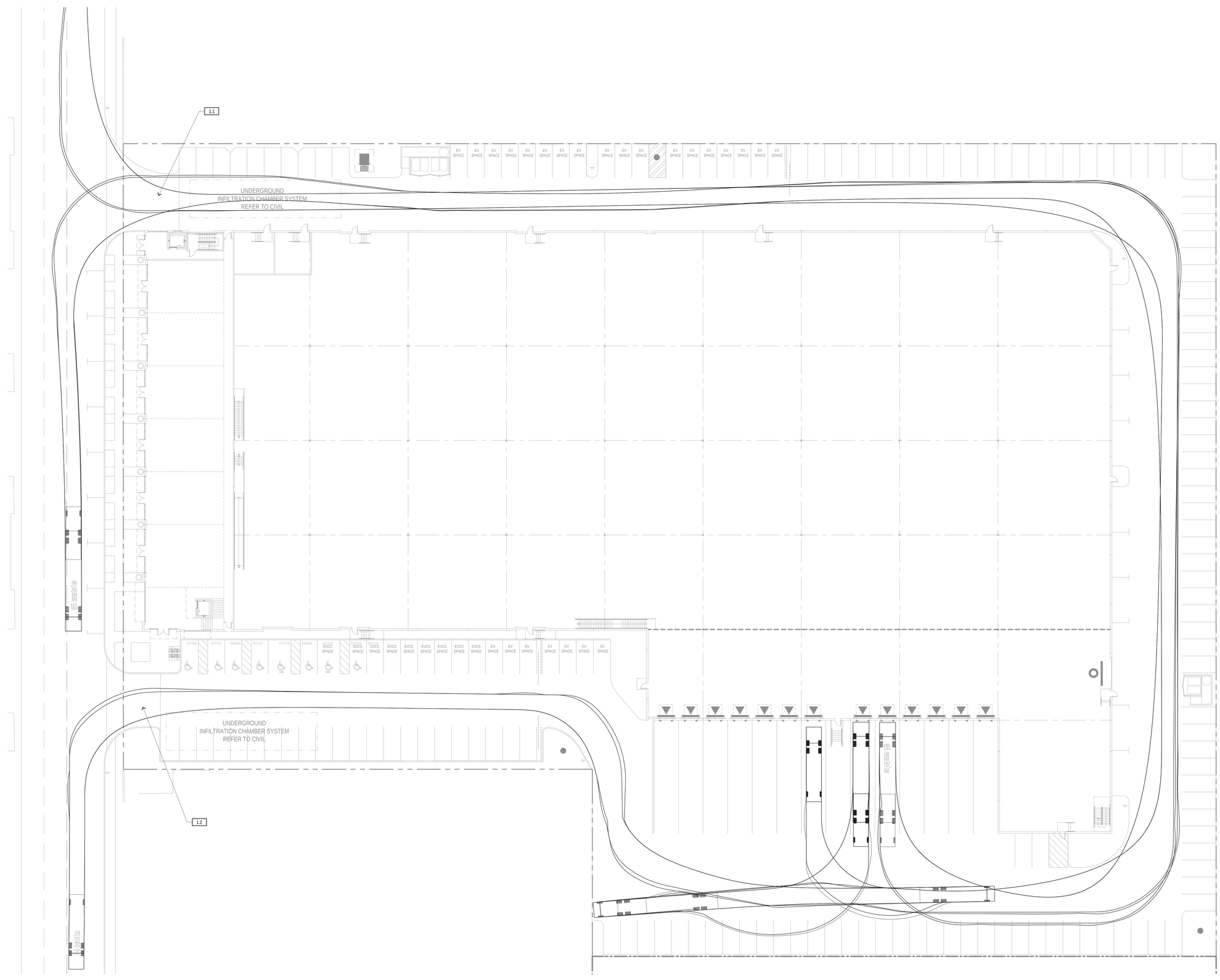
2222 Rosemead Boulevard, South El Monte, CA 91733

Xebec Building Company
CONCEPT • DESIGN • BUILD

Architecture. Design. Relationships.

EX1

Scale	1"=20'-0"
Job No.	2022-392
Date	2023-03-17



KEYNOTES

1.0 GENERAL

- **1.1 TRUCKS WITH TRAILERS ENTRANCE/EXIT**
- **1.2 BOX TRUCKS AND VANS ENTRANCE/EXIT**

Appendix G-2: WB-55 Trucks

SITE PLAN - TRUCK TEMPLATE

0 20' 40'

Xebec Building Company
CONCEPT • DESIGN • BUILD

2222 ROSEMEAD BLVD

2222 Rosemead Boulevard, South El Monte, CA 91733

Architecture. Design. Relationships.

EX1

Scale	1"=20'-0"
Job No.	2022-392
Date	2023-02-21

APPENDIX H

VMT EVALUATION TOOL REPORT

SGVCOG VMT Evaluation Tool Report

Project Details

Timestamp of Analysis: April 28, 2023, 12:55:26 PM

Project Name: Rosemead and Rush Industrial Project

Project Description: 156,999 SF Warehouse/Retail Showroom

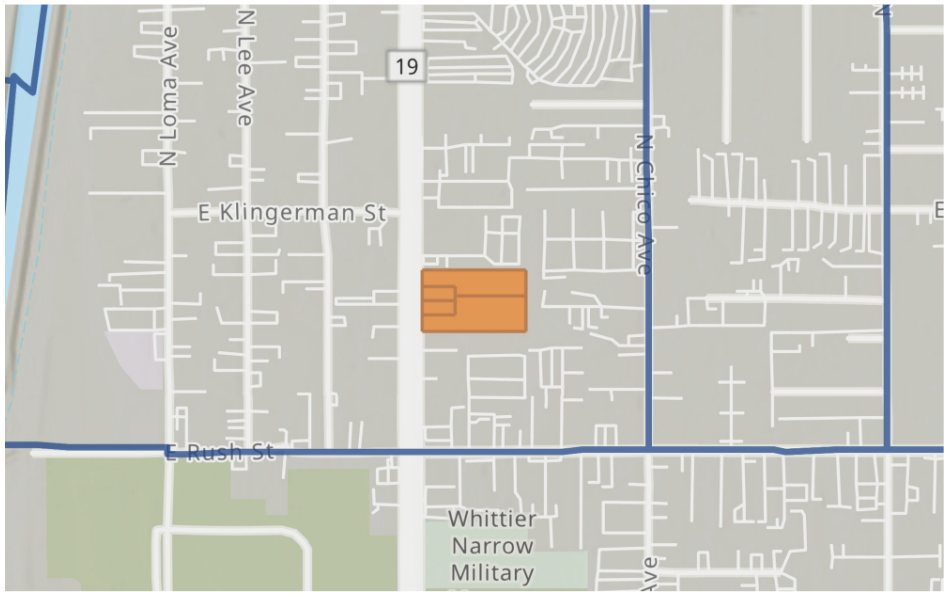
Project Location

jurisdiction: South El Monte

apn	TAZ	8102-039-029	22195100	8102-039-030	22195100
8102-039-031	22195100	8102-039-035	22195100		

Inside a TPA?

No (Fail)



Analysis Details

Data Version: SCAG Regional Travel Demand Model 2016 RTP Base Year 2012

Analysis Methodology: TAZ

Baseline Year: 2023

Project Land Use

Residential:

Single Family DU:	
Multifamily DU:	
Total DUs:	0

Non-Residential:

Office KSF:	
Local Serving Retail KSF:	8
Industrial KSF:	148

Residential Affordability (percent of all units):

Extremely Low Income:	0 %
Very Low Income:	0 %
Low Income:	0 %

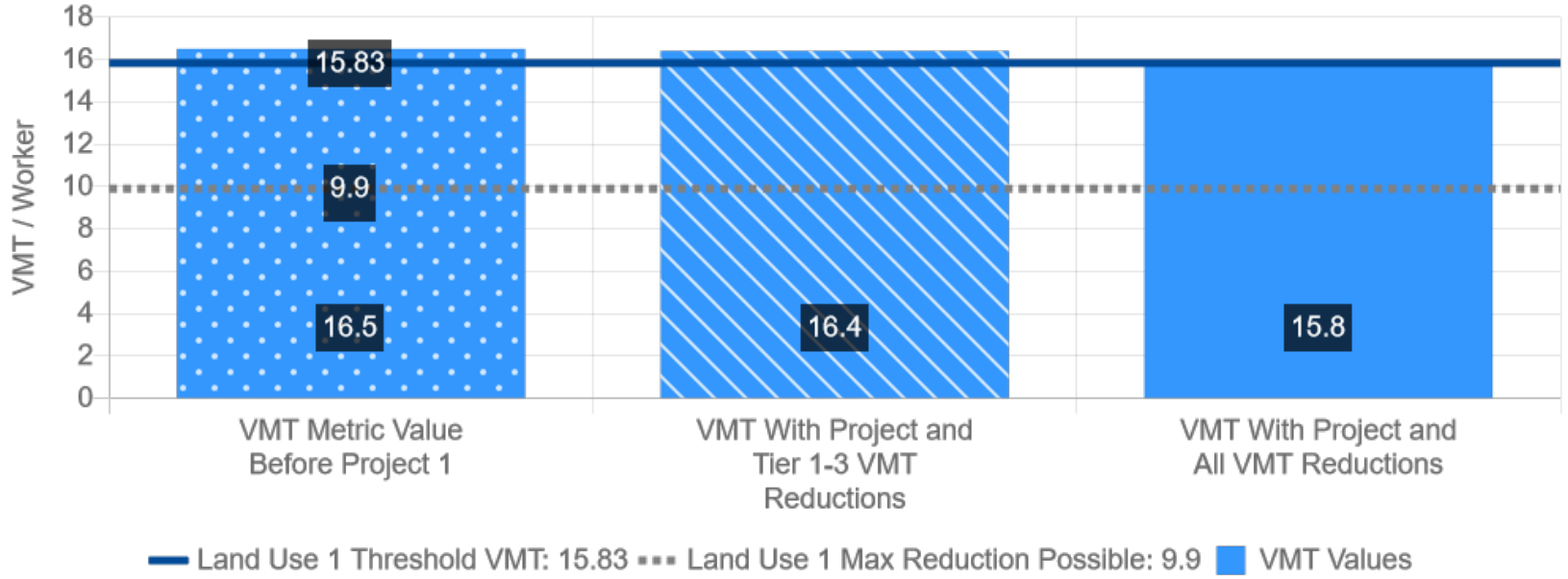
Parking:

Motor Vehicle Parking:	181
Bicycle Parking:	9

Industrial Vehicle Miles Traveled (VMT) Screening Results

Land Use Type 1:	Industrial
VMT Without Project 1:	Home-based Work VMT per Worker
VMT Baseline Description 1:	SGVCOG Average
VMT Baseline Value 1:	18.62
VMT Threshold Description 1:	-15%
Land Use 1 has been Pre-Screened by the Local Jurisdiction:	N/A

	Without Project	With Project & Tier 1-3 VMT Reductions	With Project & All VMT Reductions
Project Generated Vehicle Miles Traveled (VMT) Rate	16.5	16.4	15.8
Low VMT Screening Analysis	No (Fail)	No (Fail)	Yes (Pass)



Tier 3 Parking

PK02 Provide Bike Facilities

Bicycle Parking:	9
Project End-of-trip Bike Facilities:	

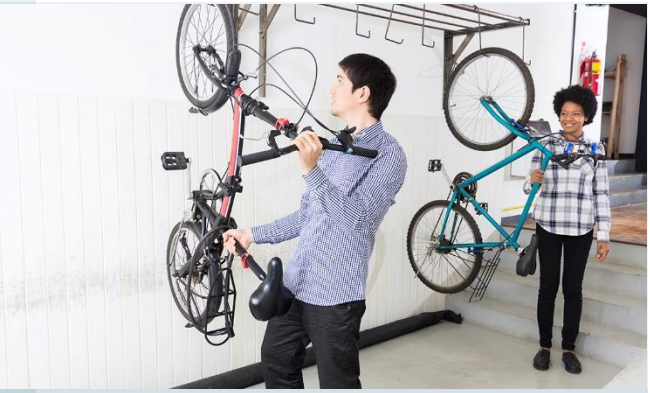
Tier 4 TDM Programs

TP04 CTR Marketing and Education

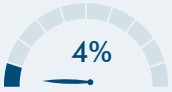
CTR Marketing/Education Percent Expected Participants:	100 %

TP08 Telecommuting and Alternative Work Schedules

T-5. Implement Commute Trip Reduction Program (Voluntary)



GHG Mitigation Potential



Up to 4.0% of GHG emissions from project/site employee commute VMT

Co-Benefits (icon key on pg. 34)

Climate Resilience

CTR programs could result in less traffic, potentially reducing congestion or delays on major roads during peak AM and PM traffic periods. When this reduction occurs during extreme weather events, it better allows emergency responders to access a hazard site. Lower transportation costs would also increase community resilience by freeing up resources for other purposes.

Health and Equity Considerations

Design of CTR programs need to ensure equitable access and benefits to all employees are provided considering disparate existing mobility options in diverse communities.

Measure Description

This measure will implement a voluntary commute trip reduction (CTR) program with employers. CTR programs discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking, thereby reducing VMT and GHG emissions. Voluntary implementation elements are described in this measure.

Subsector

Trip Reduction Programs

Locational Context

Urban, suburban

Scale of Application

Project/Site

Implementation Requirements

Voluntary CTR programs must include the following elements to apply the VMT reductions reported in literature.

- Employer-provided services, infrastructure, and incentives for alternative modes such as ridesharing (Measure T-8), discounted transit (Measure T-9), bicycling (Measure T-10), vanpool (Measure T-11), and guaranteed ride home.
- Information, coordination, and marketing for said services, infrastructure, and incentives (Measure T-7).

Cost Considerations

Employer costs may include recurring costs for transit subsidies, capital and maintenance costs for the alternative transportation infrastructure, and labor costs for staff to manage the program. Where the local municipality has a VMT reduction ordinance, costs may include the labor costs for government staff to track the efficacy of the program.

Expanded Mitigation Options

Other strategies may also be included as part of a voluntary CTR program, though they are not included in the VMT reductions reported by literature and thus are not incorporated in the VMT reductions for this measure.

This program typically serves as a complement to the more effective workplace CTR measures such as pricing workplace parking (Measure T-12) or implementing employee parking "cash-out" (Measure T-13).

GHG Reduction Formula

$A = B \times C$

GHG Calculation Variables

ID	Variable	Value	Unit	Source
Output				
A	Percent reduction in GHG emissions from project/site employee commute VMT	0–4.0	%	calculated
User Inputs				
B	Percent of employees eligible for program	0–100	%	user input
Constants, Assumptions, and Available Defaults				
C	Percent reduction in commute VMT from eligible employees	-4	%	Boarnet et al. 2014

Further explanation of key variables:

- (B) – This refers to the percent of employees that would be able to participate in the program. Employees who might not be able to participate could include those who work nighttime hours when transit and rideshare services are not available or employees who are required to drive to work as part of their job duties. This input does not refer to the percent of employees who participate in the program.
- (C) – A policy brief summarizing the results of employer-based trip reduction studies concluded that these programs reduce total commute VMT for employees at participating work sites by 4 to 6 percent (Boarnet et al. 2014). To be conservative, the low end of the range is cited.

GHG Calculation Caps or Maximums

Measure Maximum

(A_{max}) The maximum GHG reduction from this measure is 4 percent. This maximum scenario is presented in the below example quantification.

Subsector Maximum

($\sum A_{max_{T\text{-}5 \text{ through } T\text{-}13}} \leq 45\%$) This measure is in the Trip Reduction Programs subsector. This subcategory includes Measures T-5 through T-13. The employee commute VMT reduction from the combined implementation of all measures within this subsector is capped at 45 percent.

Mutually Exclusive Measures

If this measure is selected, the user may not also take credit for Measure T-6, which represents the same implementation activities as Measure T-5, except that the CTR program would be mandatory. Users should select either Measure T-5 or T-6.

If this measure is selected, the user may not also take credit for Measures T-7 through T-11. Measure T-5 accounts for the combined GHG reductions achieved by each of these individual measures. To combine the GHG reductions from T-5 with any of these measures would be considered double counting. However, the user may take credit for Measures T-12 through T-13 within the larger CTR subcategory, so long as the combined VMT reduction does not exceed 45 percent, as noted above.

Example GHG Reduction Quantification

The user reduces employee commute VMT by requiring that employers of a project offer a voluntary commute trip reduction program to their employees. In this example, the percent of employees eligible (B) is 100 percent, which would reduce GHG emissions from employee commute VMT by 4 percent.

$$A = 100\% \times -4\% = -4\%$$

Quantified Co-Benefits

Improved Local Air Quality

The percent reduction in GHG emissions (A) would be the same as the percent reduction in NO_X, CO, NO_2, SO_2, and PM. Reductions in ROG emissions can be calculated by multiplying the percent reduction in GHG emissions (A) by an adjustment factor of 87 percent. See *Adjusting VMT Reductions to Emission Reductions* above for further discussion.

Energy and Fuel Savings

The percent reduction in vehicle fuel consumption would be the same as the percent reduction in GHG emissions (A).

VMT Reductions

The percent reduction in VMT would be the same as the percent reduction in GHG emissions (A).

Sources

- Boarnet, M., H. Hsu, and S. Handy. 2014. *Impacts of Employer-Based Trip Reduction Programs and Vanpools on Passenger Vehicle Use and Greenhouse Gas Emissions*. September. Available: https://ww2.arb.ca.gov/sites/default/files/2020-06/Impacts_of_Employer-Based_Trip_Reduction_Programs_and_Vanpools_on_Passenger_Vehicle_Use_and_Greenhouse_Gas_Emissions_Policy_Brief.pdf. Accessed: January 2021.

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