FINAL
Focused Traffic Study for Walnut Grove

PREPARED FOR

Lewis
Group Of Companies

October 2020

Balancing the Natural and Built Environment

PSOMAS

FOCUSED TRAFFIC STUDY
WALNUT GROVE
WEST COVINA, CA

PREPARED FOR

Lewis
Group Of Companies

PREPARED BY

PSOMAS

PSOMAS PROJECT NO. 3LEW001200

OCTOBER 2020

TABLE OF CONTENTS

LIST OF FIGURES

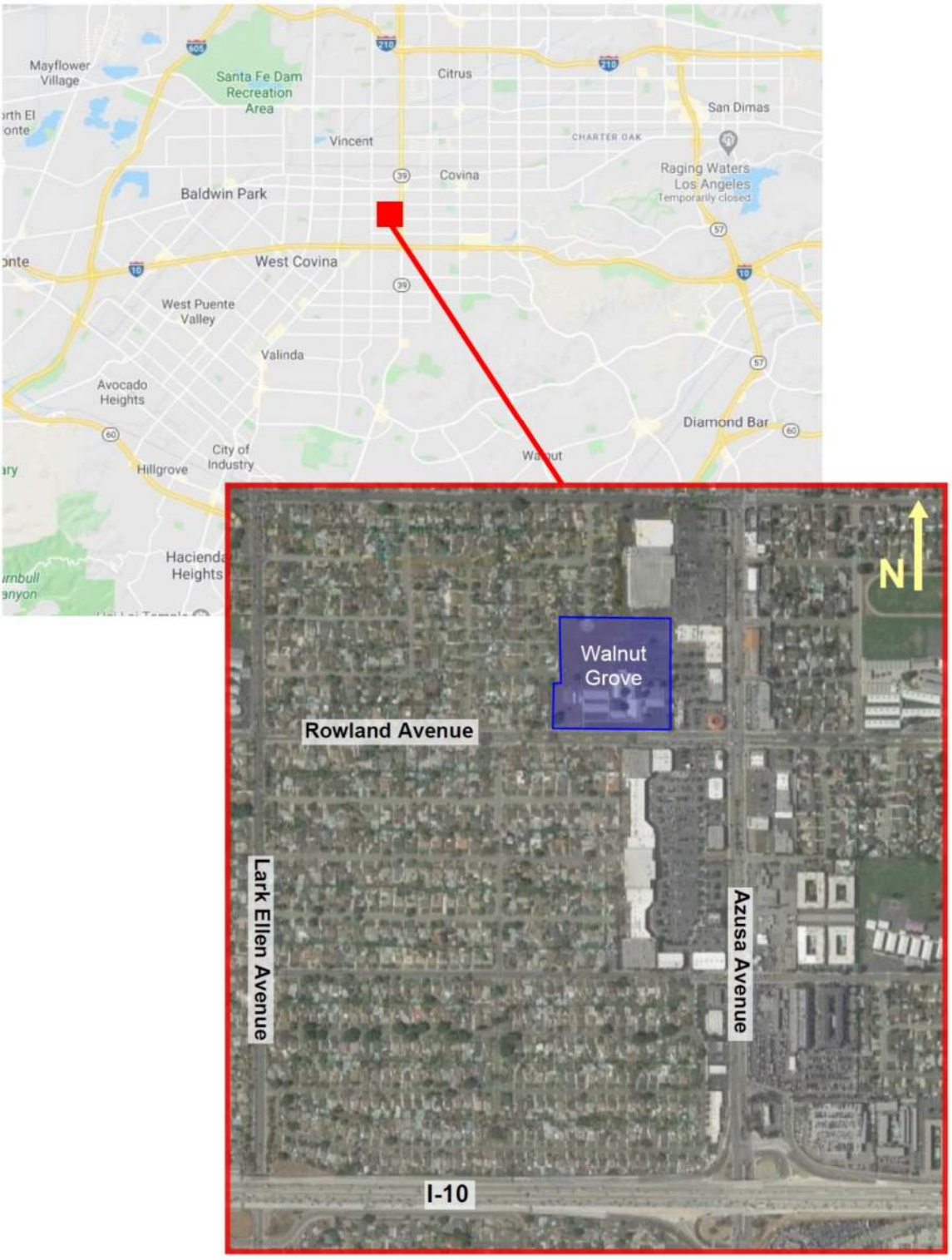
LIST OF TABLES

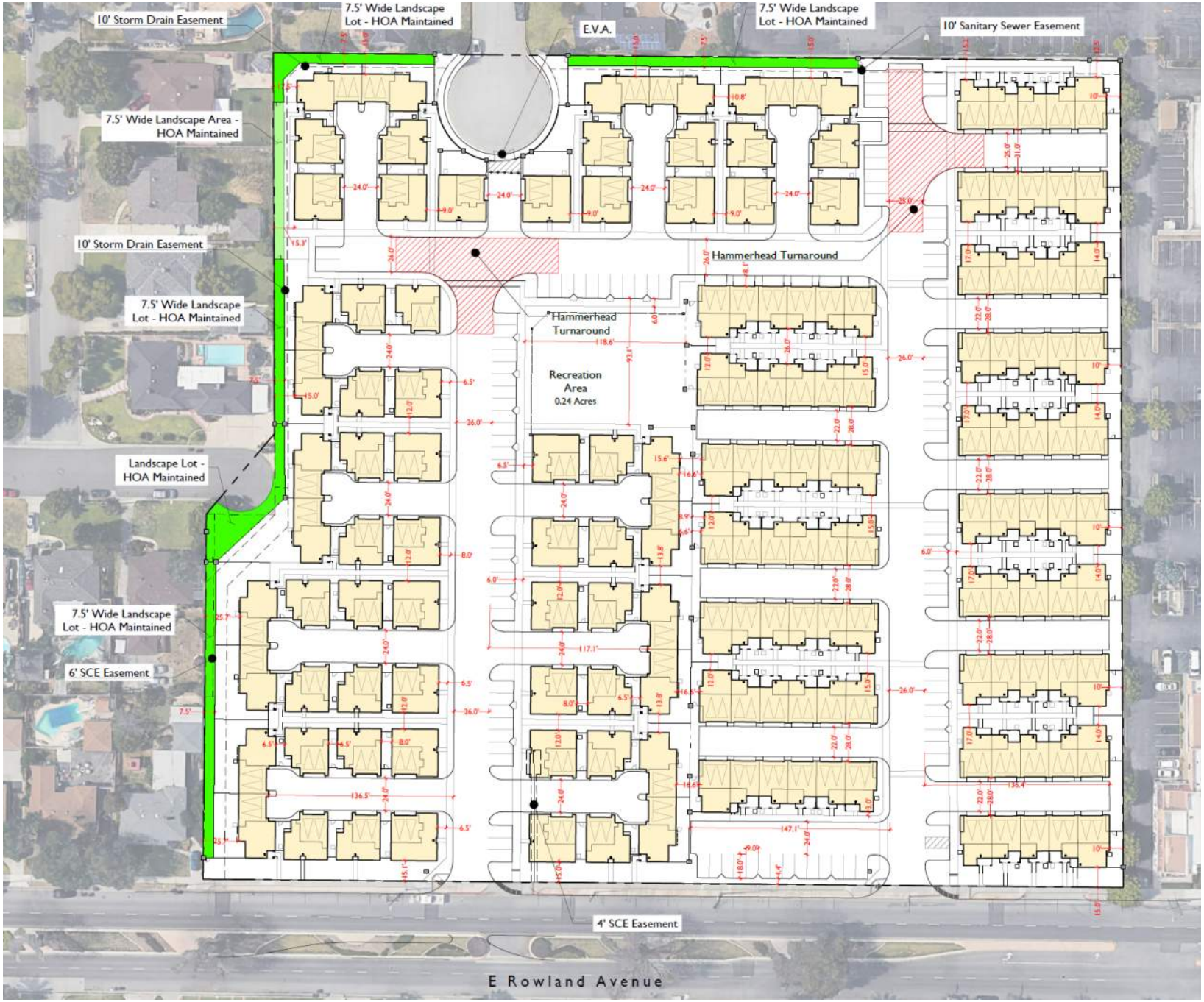
1. INTRODUCTION

The Walnut Grove Specific Plan is a residential project in the City of West Covina as shown in Figure 1. The project is located in a generally residential area, will replace an existing empty school campus, and is expected to include 66 detached units and 92 attached units for a total of 158 new residential townhome units. The site will have two access points onto Rowland Avenue including one full access driveway and one right turn only driveway. The site plan is shown in Figure 2. The project is expected to generate 1,124 daily trips, including 106 trips in the peak hour.

The City of West Covina recently adopted the use of Vehicle Miles Traveled (VMT) analysis methodology for evaluating potential traffic impacts for development projects. The City has also elected to continue to use Level of Service (LOS) analyses for planning purposes. However, due to the COVID-19 pandemic, traffic volumes are far below normal, and therefore, the data collection needed to serve the LOS analysis is infeasible. However, per a scoping agreement, this report will include various site analyses including queuing, turning movements, sight distance, and circulation. The scoping agreement is included in Appendix A.

Figure 1. Site Location





Walnut Grove Focused Traffic Study	*Figure 2.* *Site Plan*	PSOMAS October 2020

2. EXISTING STUDY AREA CONDITIONS

2.1. ROADWAY NETWORK

The two existing major roadways in the immediate project vicinity are discussed below:

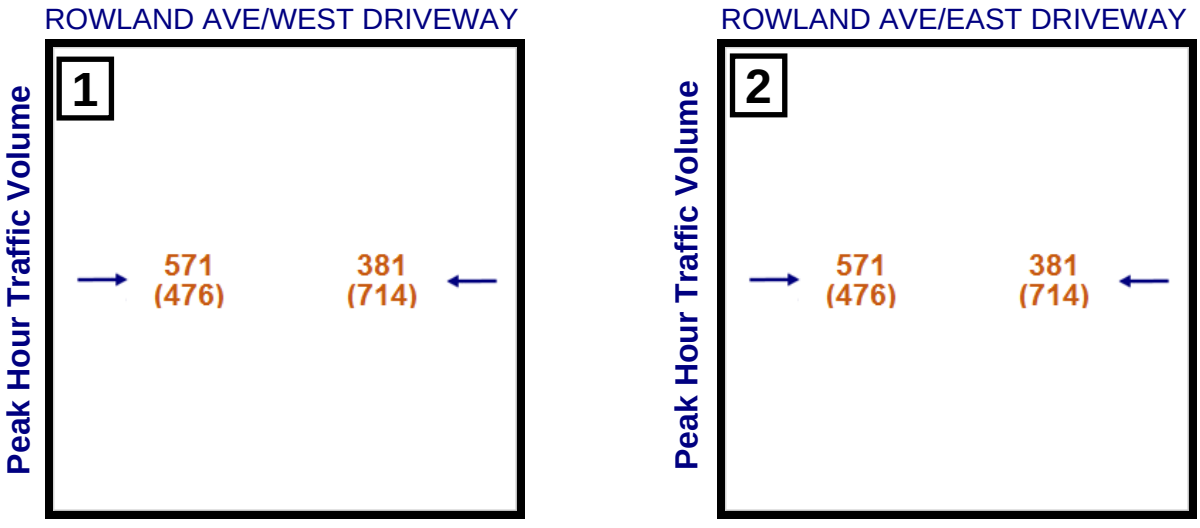
Rowland Avenue is a four-lane divided roadway with on-street parking on both sides. In the vicinity of the project (east of Lark Ellen Avenue), the roadway is classified as principle arterial by the City of West Covina[1]. The roadway has a posted speed limit of 40 mph.

Azusa Avenue is also a four-lane divided roadway in the project vicinity with on-street parking on both sides of the street. The roadway is classified as a principle arterial by the City of West Covina, and has a posted speed limit of 40 mph.

2.2. TRAFFIC VOLUMES

Due to the COVID-19 pandemic, traffic volumes were not collected for this study. Instead, daily traffic volumes collected for the *Engineering and Traffic Survey*[2] prepared for the City in 2017 were obtained for Rowland Avenue along the frontage of the project. The 2017 volume was grown by 1% per year to estimate 2020 volumes, resulting in approximately 12,100 vehicles per day on Rowland Avenue along the project frontage. The 1% per year growth rate is likely conservative, particularly considering the significant decrease in traffic volumes which has occurred with the COVID-19 pandemic and is expected to linger for an extended period moving forward. In addition, most of the land on both sides of Rowland Avenue is developed, and the roadway does not serve as a major regional connection.

In order to provide estimated peak hour volumes for use in driveway analyses later in this report, the general assumptions that 8% of traffic occurs in the AM peak hour and 10% occurs in the PM peak hour were used. It was further assumed that 60% of traffic is eastbound on Rowland Avenue in front of the project in the AM peak hour, while the reverse is true in the PM peak hour. Figure 3 shows the estimated existing (2020) traffic volumes.



Walnut Grove Focused Traffic Study	*Figure 3.* *Estimated Existing (2020) Traffic Volumes*	PSOMAS October 2020

3. PROJECT DESCRIPTION

The Walnut Grove Specific Plan is a residential community containing single family detached and attached townhomes on the north side of Rowland Avenue just west of Azusa Avenue in West Covina, California. The project is expected to include 66 detached units and 92 attached units for a total of 158 new residential units as shown in Figure 2 (Section 1). The project is expected to open in December 2021, but to be conservative, the analyses in this report are based on an opening year of 2022.

The project will have two access points onto Rowland Avenue. The west driveway will be a full access driveway, and the east driveway will be a right-in right-out only driveway. The median on Rowland Avenue in front of the west driveway will be reconstructed because the existing median opening is slightly east of the proposed west driveway location. The median reconstruction will also include a left turn cutout to allow left turns directly into the site, and a striping plan will be provided with the development plans. All of the units will be accessible from either driveway. Red curbing will also be required on the north side of Rowland Avenue along much of the project frontage as discussed in Section 5.3.

At the north end of the site, the existing Eileen Street cul-de-sac extends onto the project site. The cul-de-sac will remain as an emergency access point only for the Walnut Grove project – all other site traffic will not have access to Eileen Street. A driveway cutout will be provided in the cul-de-sac for emergency vehicles, along which parking will not be allowed. It is expected that on-street parking will remain available along the remaining areas of the cul-de-sac. The emergency access will have a 6’ tall by 24’ wide double swing gate with a Knox Box and will be accessible for emergency vehicles only. The remainder of the cul-de-sac will be walled off with no pedestrian or vehicle access to the site from Eileen Street.

4. PROJECTED TRAFFIC VOLUMES

4.1. BASELINE GROWTH

As with the estimated 2020 volumes, a 1% per year growth rate was assumed when projecting future traffic volumes without the project. Figure 4 shows the estimated 2022 baseline traffic volumes. The volumes indicate that the four-lane Rowland Avenue has significant excess capacity.

4.2. PROJECT TRAFFIC VOLUMES

4.2.1. Project Trip Generation

The anticipated traffic generation for the project was estimated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual*[3] for morning and evening weekday peak hour trips. Note that although the detached units are not typical single family units, the single family (detached) land use was used to be conservative. The resulting project trip generation is shown in Table 1. As seen in the table, the project is expected to generate 106 peak hour trips as well as 1,124 daily trips.

4.2.2. Project Trip Distribution

The project trip distribution is shown in Figure 5. The overall distribution was estimated based on estimated trip generators and attractors in West Covina and the surrounding areas. As previously discussed, the only left turn access for the project will be at the west driveway, so much of the traffic traveling to/from the west will use that driveway.

4.2.3. Project Traffic Volumes

Using the project trip generation and trip distribution, the project traffic volumes at the two driveways were calculated and are also shown in Figure 5.

4.3. EXISTING + BASELINE GROWTH + PROJECT TRAFFIC VOLUMES

Future volumes with the project were calculated by adding the baseline volumes and project traffic volumes. Figure 6 shows the projected opening year traffic volumes with the project.

ROWLAND AVE/WEST DRIVEWAY

Peak Hour Traffic Volume

1

582 (486) →

← 389 (728)

ROWLAND AVE/EAST DRIVEWAY

Peak Hour Traffic Volume

2

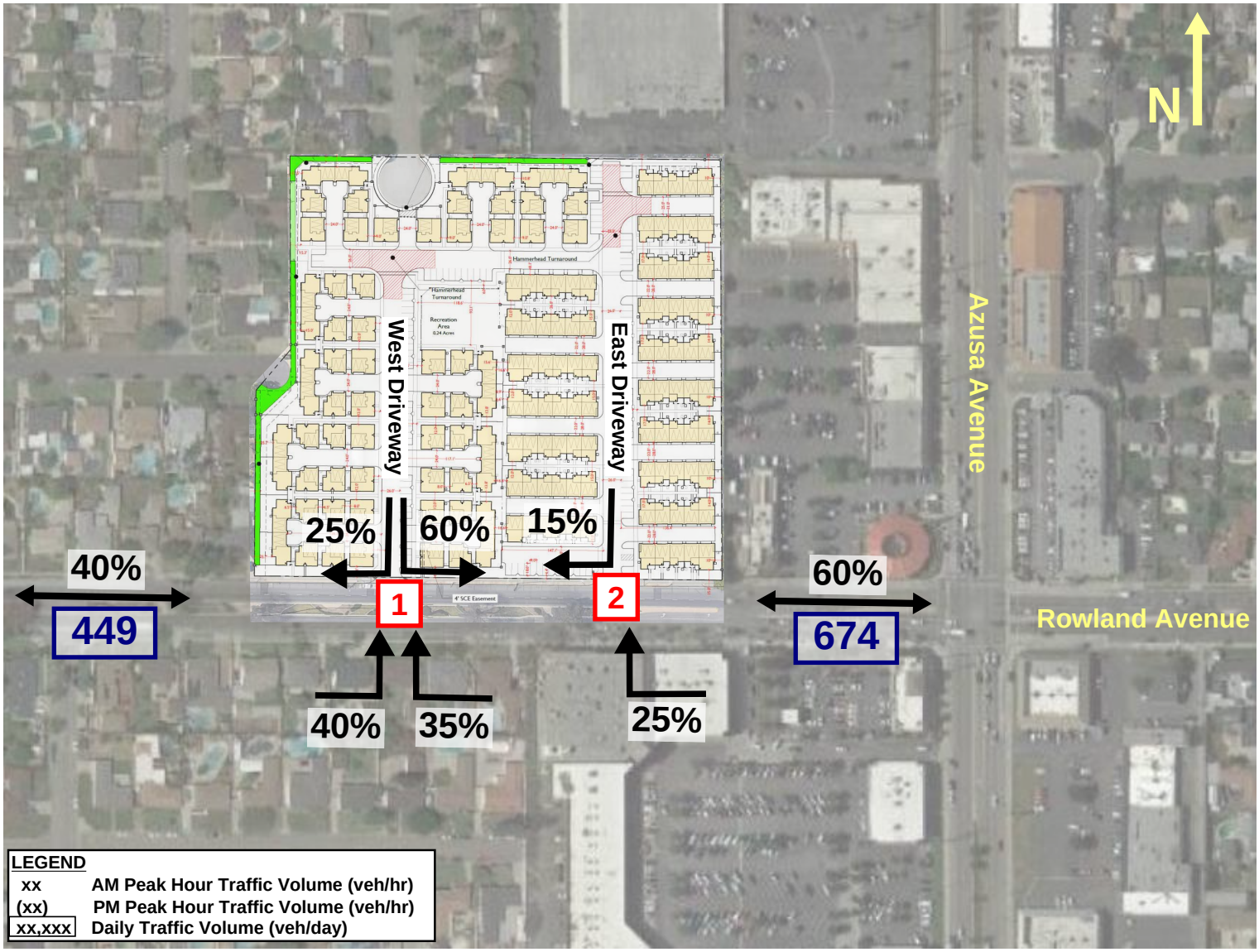
582 (486) →

← 389 (728)

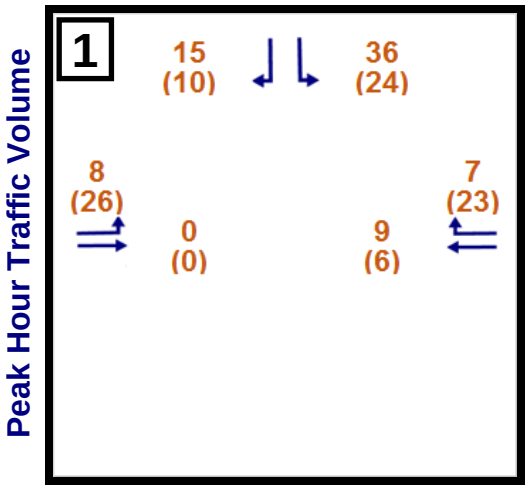
Walnut Grove Focused Traffic Study	*Figure 4.* *Opening Year (2022) Baseline Traffic Volumes*	PSOMAS October 2020

Table 1. Project Trip Generation

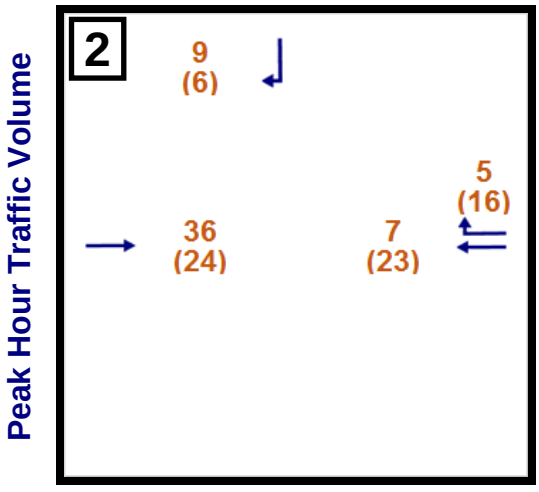
LU 210 - Single Family Residential						
Units			**66**			
Period	**Trips/Unit**	**Trips**	**% In**	**% Out**	**Trips In**	**Trips Out**
AM Peak	0.74	49	25%	75%	12	37
PM Peak	0.99	65	63%	37%	41	24
Daily	9.44	623	50%	50%	312	312
LU 221 - Multifamily Housing (Mid-Rise)						
Units			**92**			
Period	**Trips/Unit**	**Trips**	**% In**	**% Out**	**Trips In**	**Trips Out**
AM Peak	0.36	33	26%	74%	9	25
PM Peak	0.44	40	61%	39%	25	16
Daily	5.44	500	50%	50%	250	250
TOTAL						
Units			**158**			
Period	**Trips**		**Trips In**		**Trips Out**	
AM Peak	82		21		61	
PM Peak	106		66		40	
Daily	1,124		562		562	



ROWLAND AVE/WEST DRIVEWAY

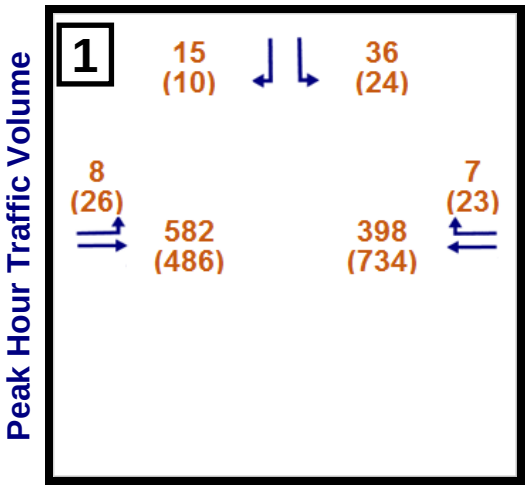


ROWLAND AVE/EAST DRIVEWAY

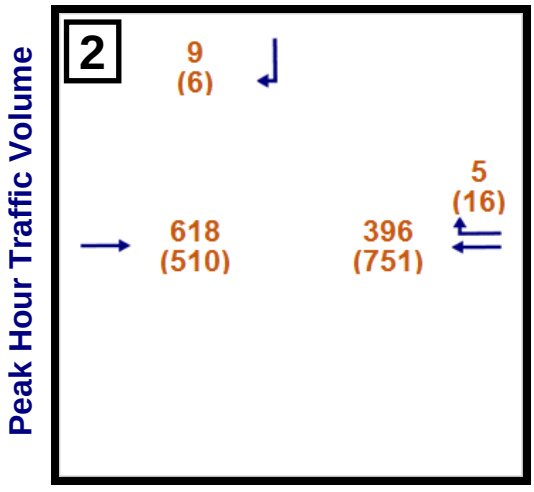


Walnut Grove Focused Traffic Study	*Figure 5.* *Project Trip Distribution and Traffic Volumes*	PSOMAS October 2020

ROWLAND AVE/WEST DRIVEWAY



ROWLAND AVE/EAST DRIVEWAY



Walnut Grove Focused Traffic Study	*Figure 6.* *Opening Year (2022) + Project Traffic Volumes*	PSOMAS October 2020

5. SITE ANALYSIS

5.1. VEHICLE MILES TRAVELED (VMT)

As previously discussed, the City has recently adopted a policy to evaluate potential traffic impacts based on VMT instead of the previous LOS thresholds. However, per the Scoping Agreement, this project is located in a Transit Priority Area (TPA) and is therefore exempt from a full VMT analysis. The bus lines and bus stops in the project vicinity are shown in Figure 7, and the City TPA map is included in Appendix B.

Although there have been some changes to transit service due to the COVID-19 pandemic, it was confirmed that the Foothill Transit bus lines in the project area are still operating as usual[4]. Therefore, the TPA exemption is still valid.

5.2. DRIVEWAY QUEUING

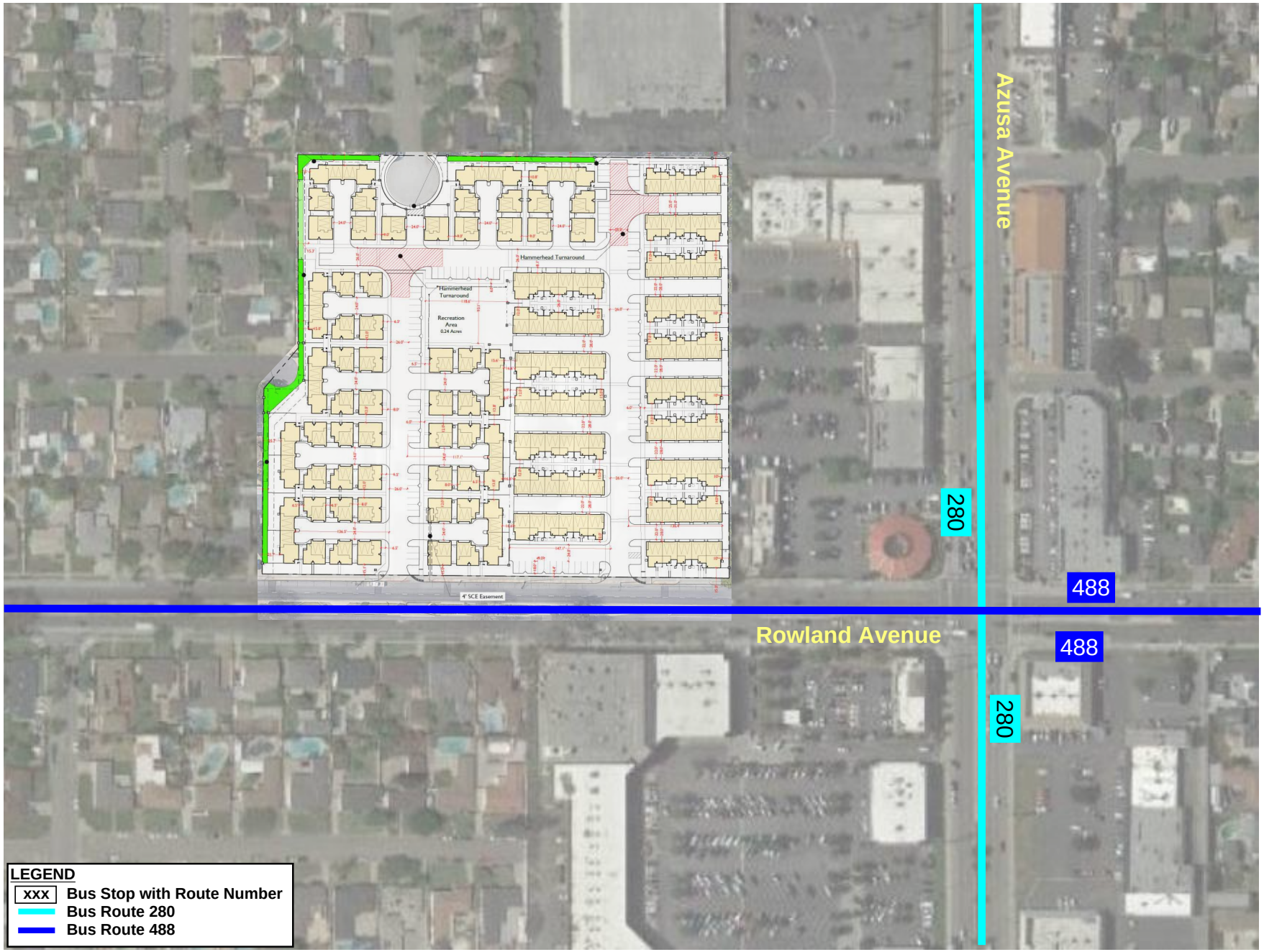
Although LOS analysis is not required, the anticipated queuing at the site driveways was evaluated using *Synchro*, which employs the methodology of the *Highway Capacity Manual*[5]. Because the driveways will only exist with the project, the analysis was only completed for 2022 conditions with the project.

Both driveways will operate with stop control on the driveway, so the only movements which are expected to experience queuing are the southbound turns exiting the site and the eastbound left turns into the site at the west driveway. All of those movements were found to have queues of less than one vehicle in both peak hours, as shown in Table 2. The *Synchro* reports are included in Appendix C.

Table 2. 95th Percentile Queues (feet)

	West Driveway		East Driveway
	EB LT	SB RT/LT	SB RT
AM Peak Hour	0	13	0
PM Peak Hour	3	13	0

*Note: Queue lengths are estimated assuming 25' per vehicle



Walnut Grove Focused Traffic Study	*Figure 7.* *Bus Facilities*	PSOMAS October 2020

5.3. SIGHT DISTANCE

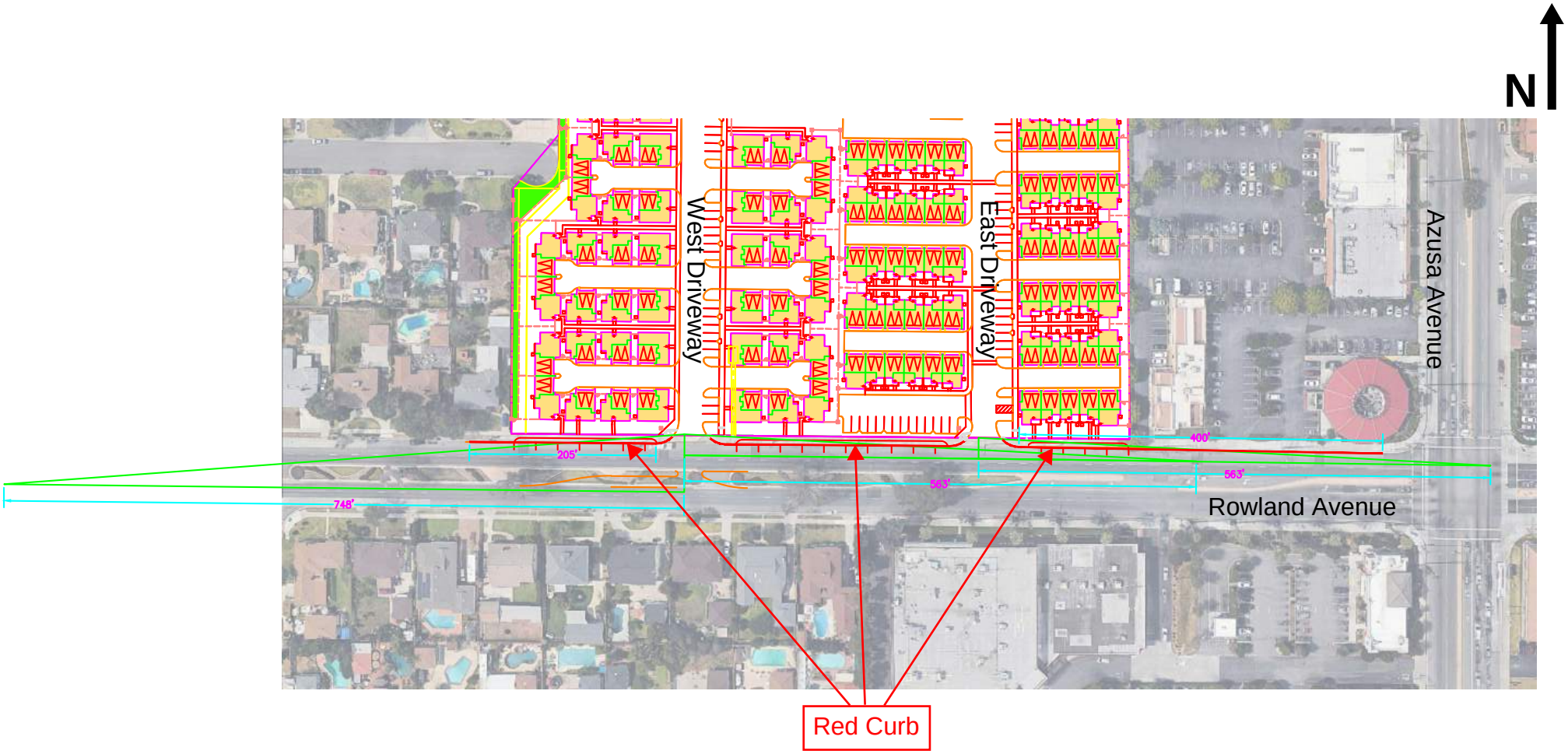
Per the scoping agreement, the sight distance for both driveways was evaluated using the requirements in the California *Highway Design Manual*[6]. For private road (site driveway) intersections, corner sight distance applies (Table 405.1A). Sight distance requirements are shown in Figure 405.7 of the manual. The corner sight distance is longer than the stopping sight distance (Table 201.1 of the manual) for Rowland Avenue, which has a posted speed of 40 mph. Figure 8 shows the sight visibility triangles for both driveways. As seen in the figure, the curb along the frontage of the project site will be painted red to prohibit parking in order to provide sufficient sight distance. Red curb is also shown beyond the sight visibility triangles where the curb is within eight feet of the triangle to account for the typical width of an on-street parking space.

5.4. TRASH/TRUCK ACCESS

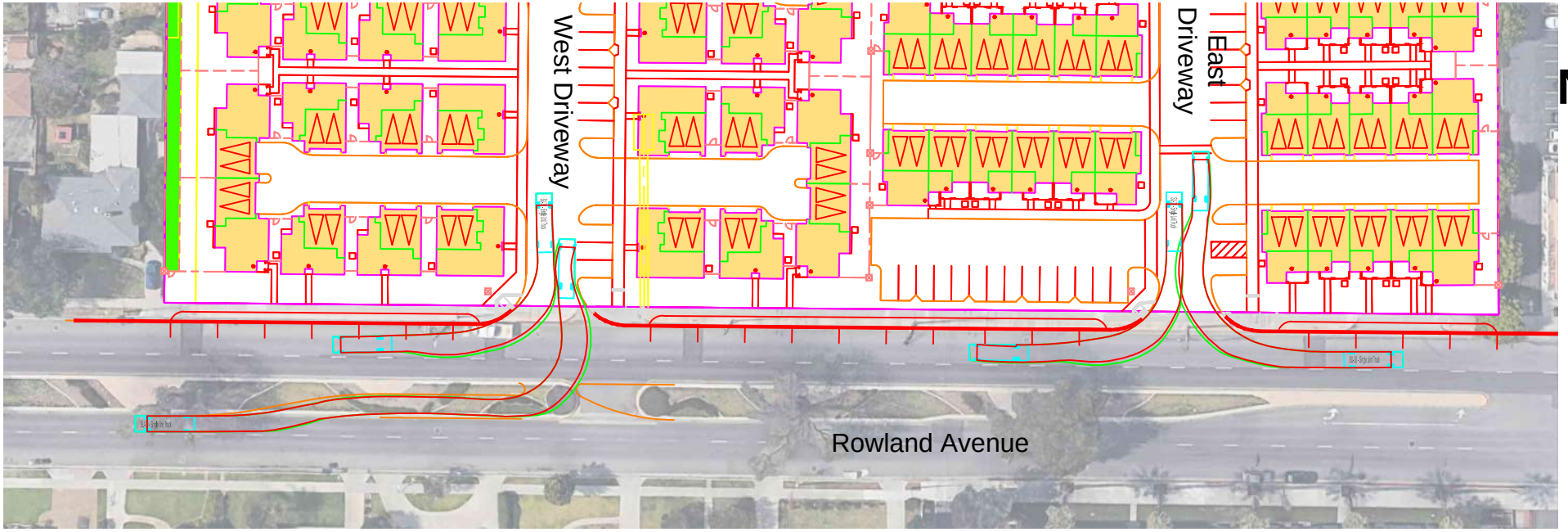
Trash pickup will occur in front of each residential unit separately, with trash bins stored inside the garage for each unit. To verify accessibility, the turning movements for a large single unit truck (SU-30) were evaluated throughout the site. The SU-30 is larger than a trash truck and would also account for delivery trucks on site. Figure 9 shows the turning movements into and out of the site, and Figure 10 shows turning movements within the site. Because the site is relatively symmetrical, the internal turning movements are only shown for the corner areas at the north of the site and for one of the drive aisles lined by units. As seen in Figure 10, trucks will have to back out of the drive aisles into the main circulation aisles, but all movements are possible based on the current design.

5.5. PARKING

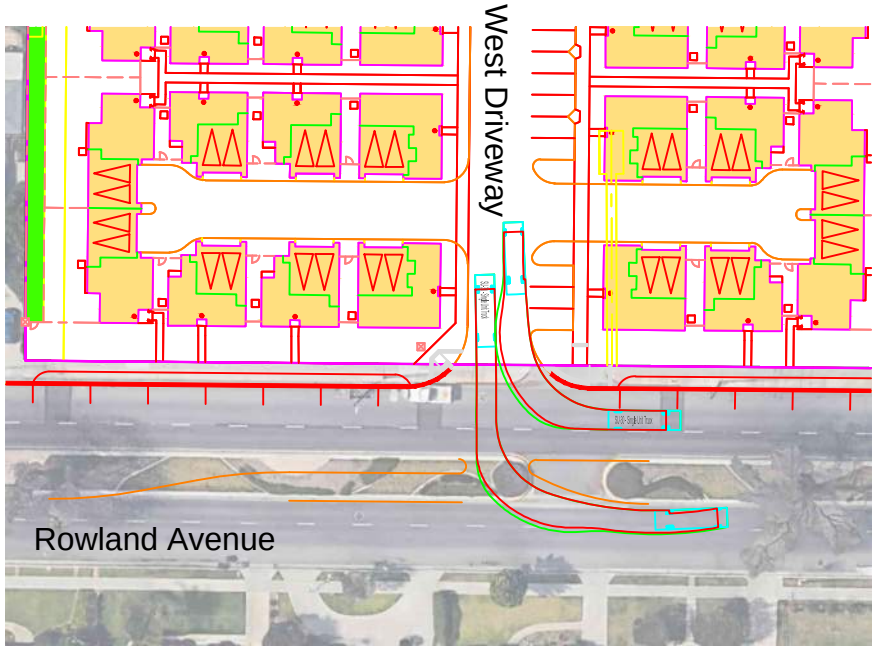
Because this project is a Specific Plan project, the parking requirements are specified separately from the typical City standards. Per the Specific Plan, the project is required to provide two parking spaces per unit and 0.5 guest parking spaces per unit (the City Code requires 0.25 guest spaces per unit). The Specific Plan conditions would result in a required 316 parking spaces for residents and 79 spaces for guests. As shown in the site plan, each unit will include a two-car garage, which meets the residential parking requirement. In addition, there are 99 guest parking spaces located throughout the site, which exceeds the required number of guest spaces.



Walnut Grove Focused Traffic Study	*Figure 8.* *Sight Visibility Triangles*	PSOMAS October 2020

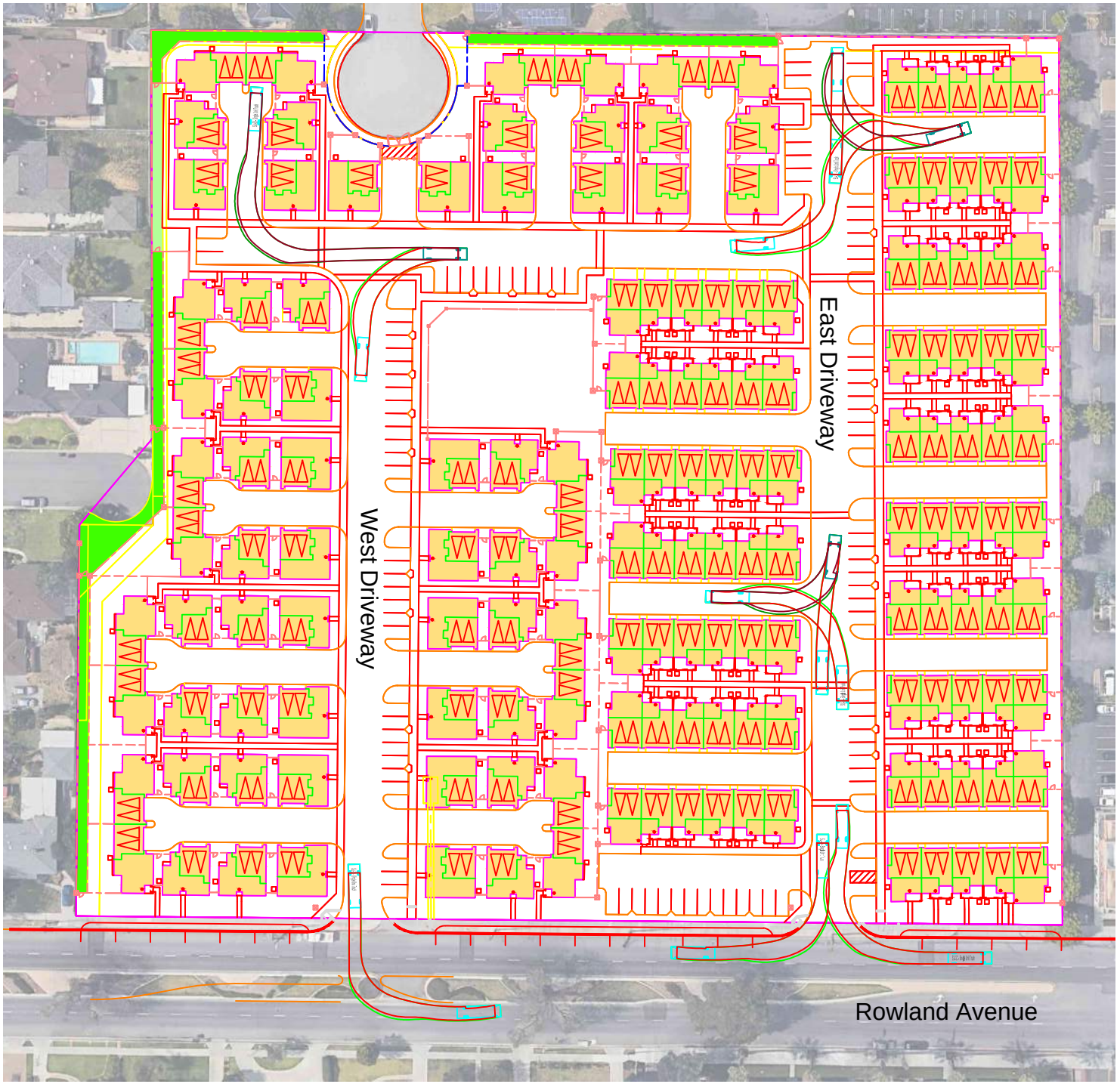


West Driveway - Left in, right out
East Driveway - Right in, right out



West Driveway - Left out, right in

Walnut Grove Focused Traffic Study	*Figure 9.* *Site Access Truck Movements - SU-30*	PSOMAS October 2020



Walnut Grove Focused Traffic Study	*Figure 10.* *On-Site Truck Movements - SU-30*	PSOMAS October 2020

6. SUMMARY

This focused traffic study provided an evaluation of the traffic and circulation conditions for the proposed Walnut Grove Specific Plan residential project. The project is expected to be exempt from VMT analysis because it is located in a Transit Priority Area. Further, due to the COVID-19 pandemic, traffic data collection is not feasible; therefore, Level of Service analysis was not required. However, this study provided information on the site access and circulation.

The Walnut Grove project is expected to include 66 detached units and 92 attached units for a total of 158 new residential townhome units. The project is located in a generally residential area and will be replacing a school campus which has been closed for some time. The site will have two access points onto Rowland Avenue including one full access driveway and one right-in right-out only driveway. The project is expected to generate 1,124 daily trips, including 106 trips in the peak hour.

The median on Rowland Avenue will be reconstructed to provide full access at the west driveway of the project, and all units will have access to both driveways. The sight visibility evaluation showed that much of the curb on the north side of Rowland Avenue along the project frontage will have to be painted red to prohibit parking and to provide sufficient site distance. The exact limits of the red curbing will be determined during final engineering for the site. The queues for vehicles entering and existing the site are expected to be minimal, and traffic projections for Rowland Avenue indicate that the roadway is operating far under its capacity.

Parking for residents will be within each unit, and 99 guest parking spaces will be provided. Truck turning movement evaluations showed that although trash (and potentially delivery) trucks will have to back out of the drive aisles into the main site circulation aisles, the trucks are expected to be able to maneuver throughout the site.

7. REFERENCES

[1] *City of West Covina Master Plan of Streets*. City of West Covina, http://www.westcovina.org/home/showdocument?id=426, accessed July 2020.

[2] *Engineering and Traffic Survey*. Willdan Engineering for the City of West Covina, October 2017.

[3] *Trip Generation, 10th Edition*. Institute of Transportation Engineers (ITE). Washington, D.C., 2017.

[4] Foothill Transit. http://foothilltransit.org/covid/, accessed July 29, 2020.

[5] *Highway Capacity Manual.* Transportation Research Board, 2016.

[6] *Highway Design Manual.* California Department of Transportation, 2020.

Appendix A – Scoping Agreement

Date: July 15, 2020

To:	Jo-Anne Burns, West Covina Planning Director Jburns@westcovina.org	Pages:	2 Pages
From:	Jana Robbins, PTP, RSP jana.robbins@transtech.org; T: 909-595-8599, 133	Job #:	TT 19862
Re:	Traffic Scoping for the Development of the Pioneer School Site for 158 Townhouse Units at 1650 E Rowland Avenue in the City of West Covina	Cc:	Michael Ackerman, City Engineer

TRAFFIC SCOPING

Recently, the City adopted in June the use of VMT Analysis Methodology for projects when evaluating Traffic Impacts for those projects that need to perform an EIR with CEQA analysis to be in line with State Mandates. CEQA Guidelines identified that all lead agencies must use VMT as the new transportation metric for identifying impacts for land use projects beginning July 1, 2020. While CEQA requirements have changed and LOS no longer constitutes CEQA impacts, the City elected to still use LOS for planning and analysis purposes. However, since the State is in COVID-19 conditions with low base traffic on the streets today which do not reflect what we are used to in traffic flow with schools and some business still closed any traffic analysis to be performed within the City of West Covina will be determined on a case by case basis to see if the development will be required to prepare a LOS based analysis.

If a project is determined by the City to be large enough to require a traffic analysis than the first step would be to determine if there is any existing count data available that can be utilized by proposed development to determine base traffic conditions. If no counts are available than at a minimum development projects will need to prepare a Focused Traffic Analysis.

For this specific project, the City has determined that the City does not have any available intersection count data. So an intersection Level of Service (LOS) analysis will not be required. However, a Focused Traffic Analysis will need to be Performed and include the following:

1. Determination of projects Trip generation using latest ITE Trip Generation Manual.
2. Figure showing the estimated project trips and directional Distribution from each driveway.
3. ADT on the Roadway adjacent to the project site (Rowland Avenue) using 2017 ADT data from the City of West Covina's Citywide Radar Speed Survey and adjusted using an ambient growth rate for 2020 or Opening Year Conditions– look at Opening Year and Opening Year + project only.
4. Access at each of the project driveways. Including any project queuing to get into proposed driveways.

5. Show the driveway locations in relation to existing striping on Rowland Avenue on the site plan. And identify how vehicles access will be affected by the raised median islands on Rowland? (right in right out?)
6. Access expected on Eileen Street. Will residents be allowed to access the complex through this street? Explain the on-street parking layout in the cul-de-sac with Eileen.
7. Line of Sight at each Access Point – any on-street requirements for red curb for clear sight triangle at project driveways.
8. Discussion on On-Site circulation.
9. Parking on-site (Required per code – versus what is provided) identification of where guests will park and potential for Off-site or On-street Parking for overflow.
10. Truck deliveries to include location of Trash and Truck Templates for Trash Trucks entering and exiting the site.

VMT Screening – It has been determined that this project is located within a Transit Priority Location (TPA) and is exempt from a full VMT analysis. Azusa Avenue is considered in a TPA area. There are three types of screening that may be applied to effectively screen projects from a detailed, project-level assessment. These screening steps are summarized below:

Transit Priority Area (TPA) Screening
Projects located within a TPA[1] may be presumed to have a less than significant impact absent substantial evidence to the contrary. Additionally, the analyst should confirm with all local transit providers that no recent changes in transit service have occurred in the project area (e.g. addition or removal of transit lines, addition or removal of transit stops, or changes to service frequency). The City of West Covina's TPA map is attached. A map or diagram should be included in the focused analysis showing the location of bus stops and the bus lines that frequent the TPA area providing justification for a project to be screened as located in a TPA area.

Low VMT Area Screening
Residential and office projects located within a low VMT-generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary. In addition, other employment-related and mixed-use land use projects may qualify for the use of screening if the project can reasonably be expected to generate VMT per resident, per employee, or per service population that is similar to the existing land uses in the low VMT area.

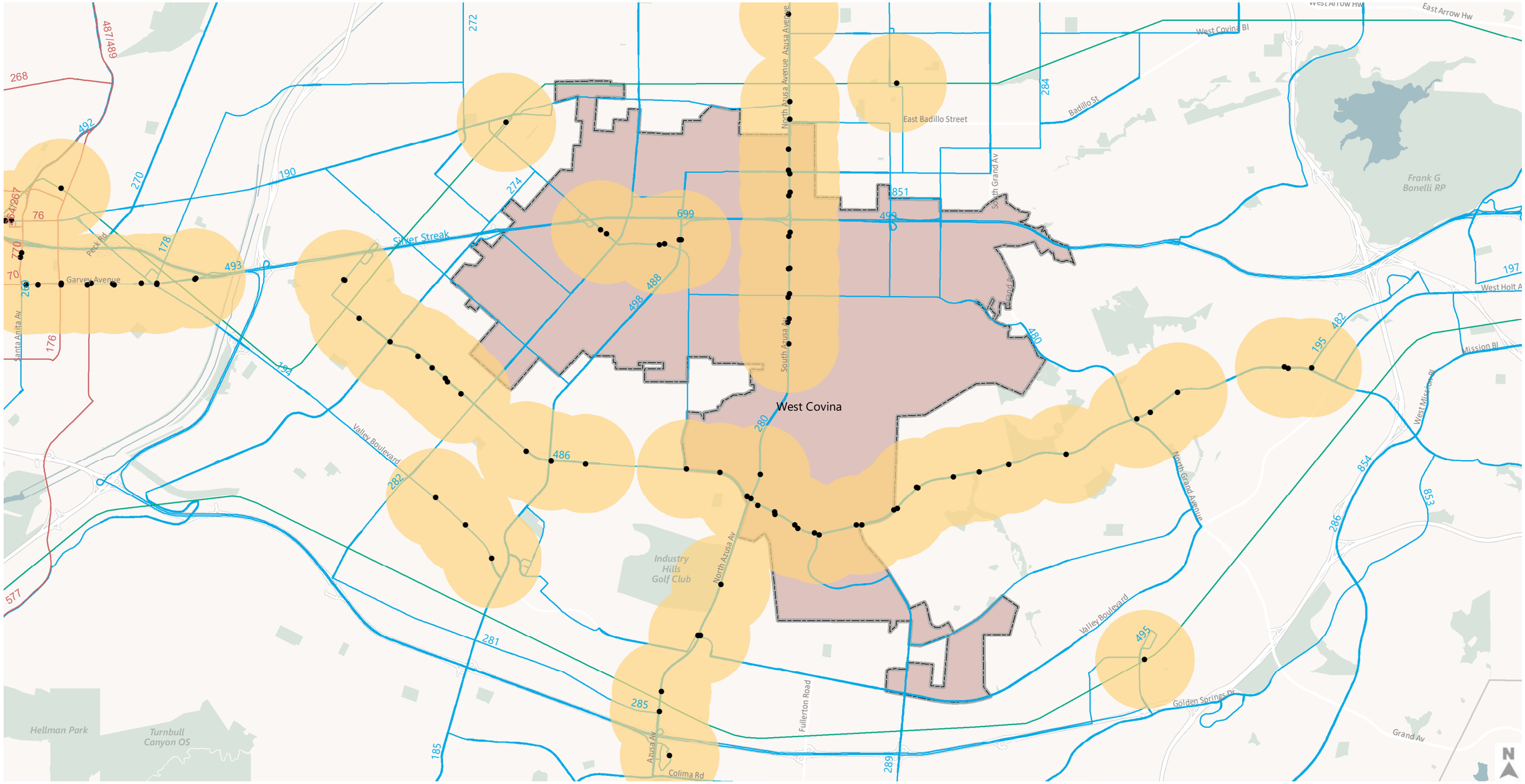
Project Type Screening
Some project types have been identified as having the presumption of a less than significant impact. The following uses can be presumed to have a less than significant impact absent substantial evidence to the contrary as their uses are local serving in nature.

[1] A TPA is defined as a half mile area around an existing major transit stop or an existing stop along a high-quality transit corridor per the definitions below. Public Resources Code § 21099(a)(7)

Pub. Resources Code, § 21064.3 - 'Major transit stop' means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

Pub. Resources Code, § 21155 - For purposes of this section, a 'high-quality transit corridor' means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.

Appendix B – Transit Priority Areas Map



- Transit Stop with Frequent Service
- Transit Priority Area
- LA Metro Bus (Simplified)
- LA Metro Rail
- Metrolink
- Foothill Transit
- City Boundary

SGVCOG SB 743:
Transit Priority Areas - West Covina

Appendix C – Synchro Reports

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	582	398	7	36	15
Future Vol, veh/h	8	582	398	7	36	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	633	433	8	39	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	441	0	-	0	772	221
Stage 1	-	-	-	-	437	-
Stage 2	-	-	-	-	335	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1115	-	-	-	336	783
Stage 1	-	-	-	-	619	-
Stage 2	-	-	-	-	697	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1115	-	-	-	333	783
Mov Cap-2 Maneuver	-	-	-	-	333	-
Stage 1	-	-	-	-	614	-
Stage 2	-	-	-	-	697	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	15.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1115	-	-	-	401
HCM Lane V/C Ratio	0.008	-	-	-	0.138
HCM Control Delay (s)	8.3	-	-	-	15.4
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.5

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	618	396	5	0	9
Future Vol, veh/h	0	618	396	5	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage,-#		0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	672	430	5	0	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	218
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	786
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	786
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	786
HCM Lane V/C Ratio	-	-	-	0.012
HCM Control Delay (s)	-	-	-	9.6
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	26	486	734	23	24	10
Future Vol, veh/h	26	486	734	23	24	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	528	798	25	26	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	823	0	-	0	1131	412
Stage 1	-	-	-	-	811	-
Stage 2	-	-	-	-	320	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	803	-	-	-	197	589
Stage 1	-	-	-	-	397	-
Stage 2	-	-	-	-	709	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	803	-	-	-	190	589
Mov Cap-2 Maneuver	-	-	-	-	190	-
Stage 1	-	-	-	-	383	-
Stage 2	-	-	-	-	709	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	23
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	803	-	-	-	237
HCM Lane V/C Ratio	0.035	-	-	-	0.156
HCM Control Delay (s)	9.6	-	-	-	23
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	510	751	16	0	6
Future Vol, veh/h	0	510	751	16	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage,-#		0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	554	816	17	0	7

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	417
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	585
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	585
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.2
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	585
HCM Lane V/C Ratio	-	-	-	0.011
HCM Control Delay (s)	-	-	-	11.2
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0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