RICHARDS RANCH PROJECT
CITY OF SANTA MARIA, CALIFORNIA

UPDATED TRAFFIC AND CIRCULATION STUDY

October 7, 2022 **ATE #21069**

MD3 Investments
San Luis Obispo, CA

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UPDATED TRAFFIC AND CIRCULATION STUDY
FOR THE RICHARDS RANCH PROJECT, CITY OF SANTA MARIA

Associated Transportation Engineers (ATE) has prepared the following updated traffic and circulation study for the Richards Ranch Project, located in the City of Santa Maria. The study evaluates Existing + Project and Cumulative + Project traffic conditions in order to determine the Project's consistency with the City's transportation policies; and determines the Project's potential CEQA traffic impacts based on the City's adopted "Vehicle Miles Traveled" (VMT) impact criteria.

We appreciate the opportunity to assist you with the project.

Associated Transportation Engineers

Scott A. Schell
Principal Transportation Planner

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INTRODUCTION

The following updated report contains analyses of the traffic and circulation issues associated with the Richards Ranch Project (the "Project"), proposed in the City of Santa Maria. The report evaluates existing and future traffic operations within the Project study area and assesses the Project's consistency with City's adopted transportation policies. An analysis of site access and circulation is also provided. The roadways and intersections analyzed in the study were determined based on input provided by City of Santa Maria staff. An evaluation of the Project's potential CEQA impacts is also provided based on the City's CEQA requirements for Vehicle Miles Traveled (VMT) adopted under Senate Bill 743. The updated study addresses the comments provided in the January 20, 2022 and August 23, 2022 comment letters submitted by City Public Works staff (Mr. Mark Mueller) and Central Coast Transportation Consulting.

PROJECT DESCRIPTION

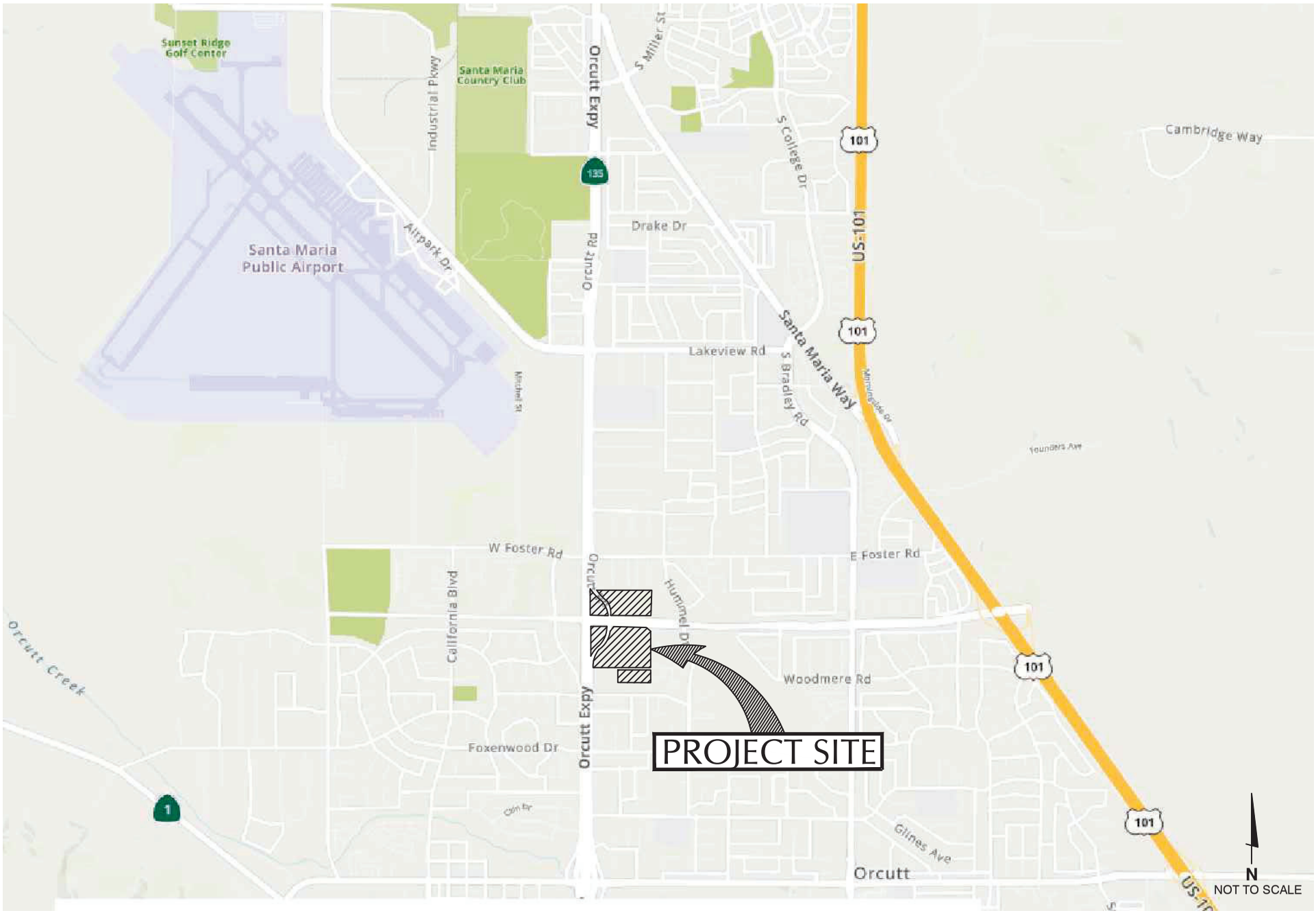
The Project consists of 4 separate parcels located adjacent to the Union Valley Parkway/Orcutt Road and Union Valley Parkway/Orcutt Expressway intersections in the southwestern portion of the City of Santa Maria. Figure 1 shows the location of the 4 parcels. The parcels are currently located within Santa Barbara County and would be annexed to the City of Santa Maria. The proposed zoning for three parcels would be C-2 commercial and the proposed zoning for the remaining parcel would be R-3 residential.

Figure 2a presents the preliminary site plan for the commercial parcels and Figure 2b presents the preliminary site plan for the residential parcel. As shown, the two smaller parcels located west of Orcutt Road would be zoned C-2 commercial and would contain auto service uses and a restaurant. The larger parcel located north of the Union Valley Parkway (UVP) would be zoned C-2 commercial and would contain a shopping center, restaurants, and a mini-storage. The two parcels located south of the UVP would be zoned R-3 Residential and would contain apartments and townhomes. Table 1 provides a summary of the land uses assumed for each parcel for this study.

Table 1
Assumed Land Use Statistics

Parcel	Zoning	Land Use	Size
Parcel 1 (Northwest)	C-2 Commercial	Gas Station with Mart(a) Lube Station(b)	10 Fueling Positions 3 Bays
Parcel 2 (Northeast)	C-2 Commercial	Shopping Center Sit-Down Restaurant Fast-Food Restaurant w/DT (5) Fast Casual Restaurant (2) Mini Storage	55,500 SF 5,000 SF 15,250 SF 6,000 SF 39,500 SF
Parcel 3 (Southwest)	C-2 Commercial	Car Wash-Automated Fast-Food Restaurant w/DT	1 Tunnel 3,500 SF
Parcel 4A (Southeast)	R-3 Residential	Three-Story Apartments	400 Units
Parcel 4B (Southeast)	R-3 Residential	Two-Story Townhomes	95 Units

(a) Gas Station Convenience Market contains 3,950 SF of building area.
(b) Lube Station contains 2,400 SF of building area.



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PROJECT SITE LOCATION

FIGURE 1

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PROJECT SITE PLAN - COMMERCIAL

FIGURE 2a

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PROJECT SITE PLAN - RESIDENTIAL

FIGURE 2b

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TRAFFIC ANALYSIS SCENARIOS

The following scenarios are included in the traffic and circulation analysis.

Existing Conditions: This scenario describes the existing street network and evaluates peak hour operations at the key study-area intersections identified for analyses.

Existing + Project: This scenario evaluates traffic operations assuming Existing + Project traffic forecasts. The Project's consistency with City transportation policies is evaluated for this scenario.

Cumulative Conditions: This scenario evaluates traffic operations assuming the additional traffic that will be generated by approved and pending developments located in the adjacent areas of the City and the County of Santa Barbara. Traffic volumes generated by the approved and pending projects are layered onto the Existing baseline traffic forecasts for analyses.

Cumulative + Project: This scenario evaluates operations assuming the Cumulative conditions plus the traffic generated by the Project. The Project's consistency with City transportation policies is evaluated for this scenario.

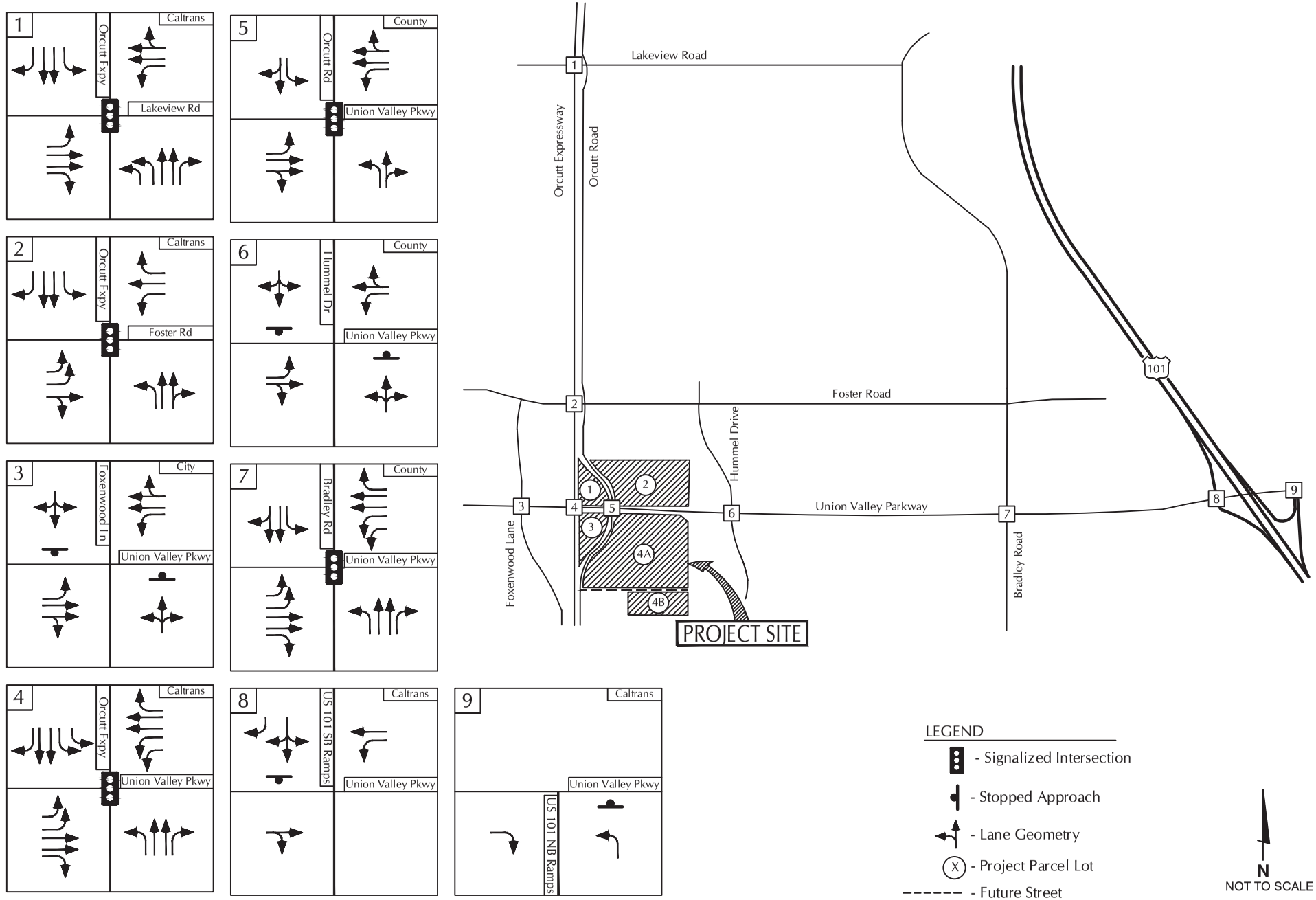
EXISTING CONDITIONS

Existing Street Network

The Project site is served by a network of highways, arterial, and collector streets, as shown on Figure 3. The following text provides a brief discussion of the major components of the street network in the study area.

US 101, located east of the Project site, is a freeway that serves as the major north-south link through the Santa Maria Valley and is the principal inter-city route along the Pacific Coast. US 101 is a 6-lane freeway within the Santa Maria area, with 4 lanes provided north and south of the City. Access to the Project site from US 101 is provided via the UVP interchange.

Orcutt Expressway (State Route 135), located west of the of the Project site, is an arterial roadway that extends from US 101 on the north end of the City to its junction with State Route 1 south of the Orcutt community. Within the study-area, Orcutt Expressway is a 4-lane arterial street north of UVP with turn lanes provided at intersections. South of the UVP, Orcutt Expressway becomes a 4-lane freeway. There are no bikeways or sidewalks on the Orcutt Expressway and vehicle access is limited (no driveways or access connections).



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EXISTING STREET NETWORK

FIGURE 3

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Union Valley Parkway, extends easterly from Blosser Road as a 2-lane arterial roadway to Foxenwood Lane where it widens to 4 lanes. The UVP passes mid-way through the Project site where it transitions from 4 lanes back to 2 lanes. The UVP extends east of the site Project site to its terminus at the US 101 interchange. The UVP provides access between the western areas of the City and Orcutt and US 101. The UVP would provide access to several of the Project parcels via new driveway connections. Within the Project study-area, Class II bike lanes are provided on both sides of the UVP. Additional bicycle improvements proposed in the study-area are shown on Figure 4a, the City's Bicycle Master Plan.

Orcutt Road (Orcutt Frontage Road), located on the west side of the Project site, is a two-lane north-south frontage road that parallels the east side of Orcutt Expressway. Orcutt Road extends from Goodwin Road on the north to Rice Ranch Road on the south. Orcutt Road would provide access to several of the Project parcels via new driveway connections. Class II bikeways are provided on both sides of Orcutt Road adjacent to the Project site.

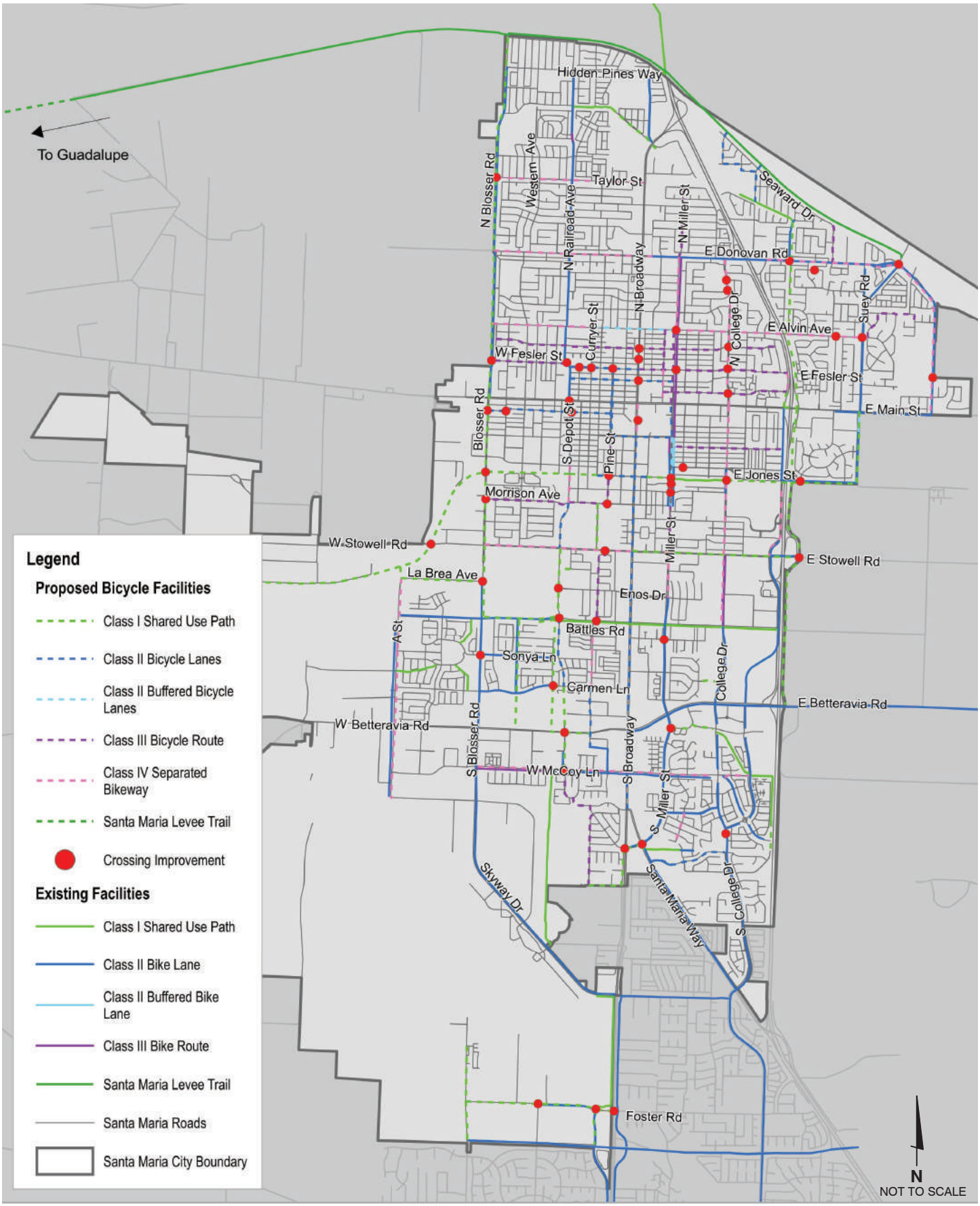
Foxenwood Lane, located west of the Project site, is a two-lane north-south frontage road that parallels the west side of Orcutt Expressway. Foxenwood Lane extends from Foster Road on the north to Clark Avenue on the south. Foxenwood Lane provides access to the residential subdivisions located south of UVP. Class II bike lanes are provided on both sides of the roadway and a Class I bike path extends from the Foster Road terminus north to Skyway Drive.

Foster Road, located north of the Project site is a two-lane east-west collector street within the study area. Foster Road serves primarily institutional and industrial uses west of the Orcutt Expressway and residential uses east of the Orcutt Expressway. No bike lanes are currently provided on Foster Road. The City of Santa Maria Bicycle Master Plan indicates that Class I bike lanes will be provided on Foster Road from the Orcutt Expressway to Blosser Road.

Hummel Drive, located east of the Project site, is a two-lane north-south collector road that extends north from the UVP to Foster Road where it becomes Dartmouth Street; and south from the UVP to its terminus at Patterson Road. Within the Project study-area, no bike lanes are provided on Hummel Drive. It is noted that Hummel Drive is located in Santa Barbara County and would not be annexed to the City as part of the Project.

Existing Pedestrian Facilities

Within the Project study area, sidewalks are currently provided on the south side of the UVP and the east side of Orcutt Road. On the north side of the UVP, sidewalks are provided from the Orcutt Expressway to Orcutt Road; and no sidewalks are provided on the west side of Orcutt Road. ADA accessible crosswalks with pedestrian signals heads are provided on all four legs of the UVP/Orcutt Road intersection and three of the four legs of the UVP/Orcutt Expressway intersection. At the UVP/Hummel Drive intersection, a "continental" style crosswalk with flashing beacons is provided on the east leg of the intersection (across the UVP) and standard crosswalks are provided on the north and south legs. Figure 4b shows the pedestrian improvements proposed in the Project study-area in the City's Pedestrian Master Plan.



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SANTA MARIA BIKEWAY MASTER PLAN

FIGURE 4a

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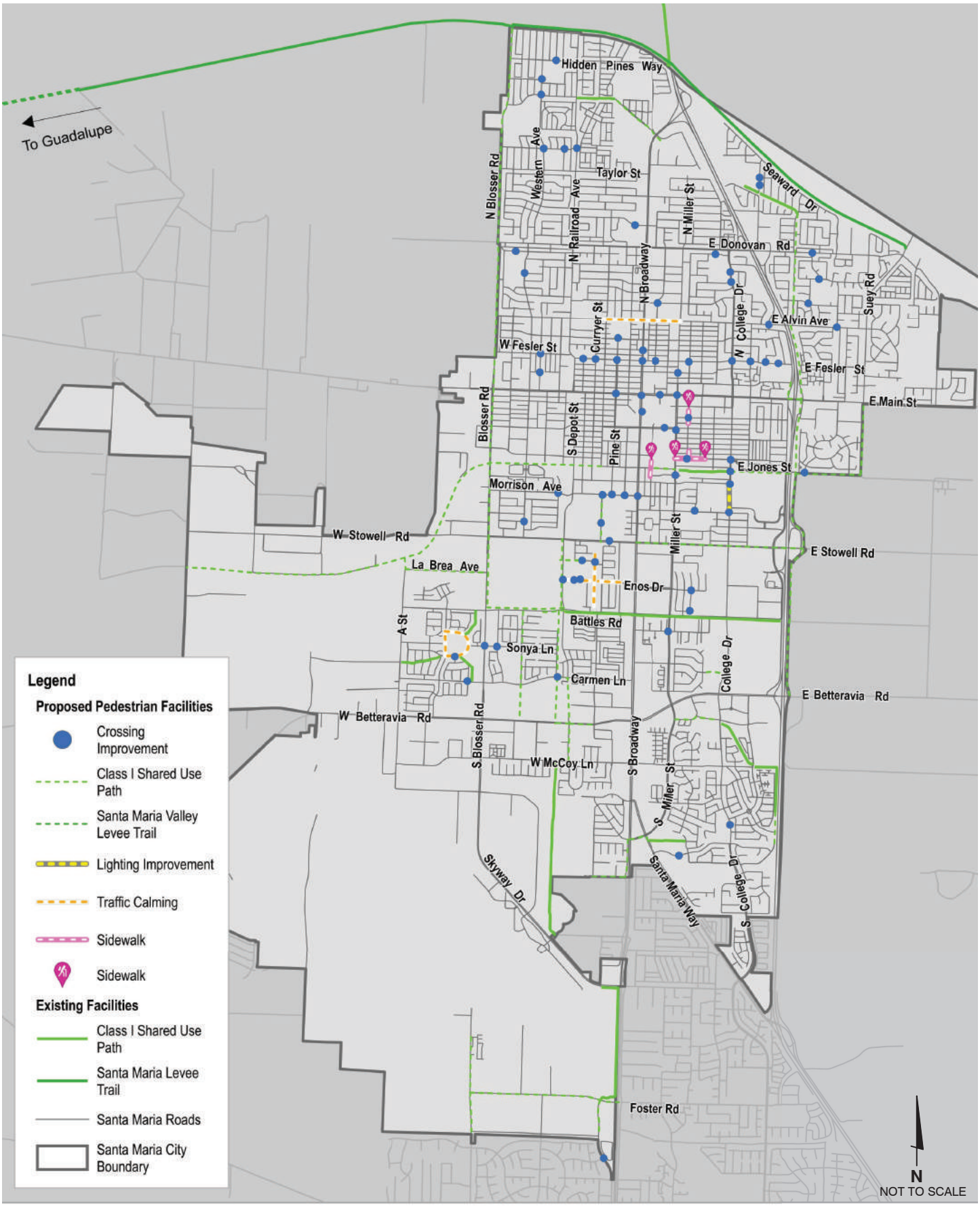

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SANTA MARIA PEDESTRIAN MASTER PLAN

FIGURE 4b

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Existing Transit Facilities

Transit service in the City of Santa Maria and the community of Orcutt is provided by the Santa Maria Regional Transit (SMRT) service. SMRT Route 6 provides weekday and weekend bus service with 45-minute headways starting at the Crossroads Shopping Center and traveling through Orcutt. The closest transit stops to the Project site are located on Foster Road west of Foxenwood Lane and east of Orcutt Road. The Breeze Bus operates commuter services between the City of Santa Maria, Vandenberg AFB, the City of Lompoc, the community of Los Alamos, the City of Buellton, and the City of Solvang. Breeze Route 100 is a weekday bus service between the Santa Maria and Lompoc Transit Centers with seven trips per day in each direction. The closest stops to the Project site are on Orcutt Road south of Foster Road.

The Clean Air Express bus service, administered by the Santa Barbara Council of Associated Governments (SBCAG), provides service for commuters traveling between northern Santa Barbara County and the Cities of Goleta and Santa Barbara. The closest stop to the project is the Santa Maria Hagerman Softball Complex, where three trips depart each morning to Goleta, and two trips depart each morning to Santa Barbara, with the same number of trips returning in the afternoon. Connections to other services are available at both the Santa Maria and Lompoc Transit Centers.

Intersection Operations

Because traffic flow on urban arterials is most constrained at intersections, detailed traffic flow analyses focus on the operating conditions of critical intersections during peak travel periods. "Levels of Service" (LOS) A through F are used to rate intersection operations, with LOS A indicating very good operation and LOS F indicating poor operation (more complete definitions are contained in the Technical Appendix for reference). The City of Santa Maria considers LOS D as the performance standard for intersections (maintain LOS D or better), and the County of Santa Barbara considers LOS C as the minimum acceptable operating standard for most intersections (LOS D acceptable for selected locations). Caltrans no longer applies LOS standards in their Transportation Impact Study Guide; instead, they apply VMT thresholds.

Existing traffic volumes were obtained from traffic count data contained in the Santa Maria Airport Business Park Specific Plan Rezone Transportation Impact Study[1] and the Traffic Impact Study for the Orcutt Community Plan General Plan Amendment Project[2] (see Technical Appendix for count data). New Counts were conducted in 2022 at the UVP/Hummel Drive intersection after the area schools were open. Counts were conducted during the AM peak commuter period (7:00-9:00 AM) and PM peak commuter period (4:00-6:00 PM). The peak 1-hour volumes were then identified for the analysis. Figure 5 presents the existing peak hour traffic volumes for the study-area intersections.

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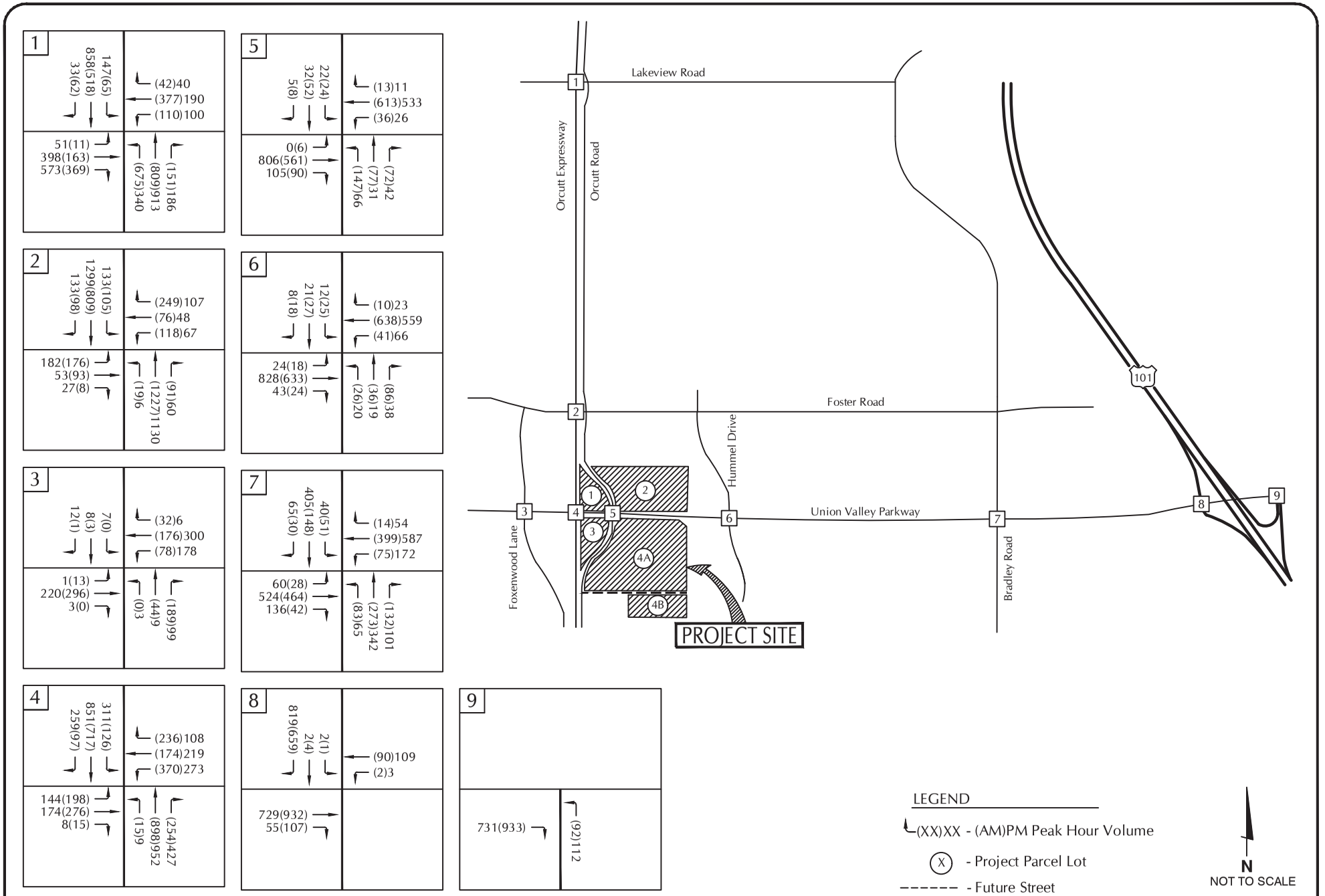
[1] Santa Maria Airport Business Park Specific Plan Rezone Transportation Impact Study, Central Coast Transportation Consulting, October, 2020.

[2] Traffic Impact Study for the Ocrutt Community Plan General Plan Amendment Project, Psomas, May, 2020.



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EXISTING TRAFFIC VOLUMES

FIGURE 5

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Levels of service for the signalized intersections were calculated using the intersection capacity utilization (ICU) methodology adopted by both the City of Santa Maria and the County of Santa Barbara. Levels of service for the STOP-Sign controlled intersections were calculated using the operations methodology outlined in the Highway Capacity Manual.[3] The levels of service for the stop sign controlled intersections are reported as the average weighted delay in seconds for the movements that are required to wait for a gap (rather than for the highest movement or the highest approach), which is the method adopted by both the City and the County. Table 2 lists the existing traffic control, levels of service, and jurisdiction for the study-area intersections identified for the analysis.

Table 2
Existing Levels of Service

Intersection	Jurisdiction	Control	AM Peak Hour		PM Peak Hour	
			ICU or Delay	LOS	ICU or Delay	LOS
Orcutt Expressway/Lakeview Rd	Caltrans	Signal	0.61	LOS B	0.66	LOS B
Orcutt Expressway /Foster Rd	Caltrans	Signal	0.71	LOS C	0.64	LOS B
UVP/Foxenwood Ln(a)	City	STOP-Sign	14.3 sec.	LOS B	9.9 sec.	LOS A
UVP/ Orcutt Expressway	Caltrans	Signal	0.62	LOS B	0.63	LOS B
UVP/Orcutt Road	County	Signal	0.46	LOS A	0.47	LOS A
UVP/Hummel Drive(a)	County	STOP-Sign	**34.7 sec.**	**LOS D**	**34.3 sec.**	**LOS D**
UVP/Bradley Road(a)	County	Signal	0.39	LOS A	0.51	LOS A
UVP/US 101 SB Ramps(a)	Caltrans	STOP-Sign	12.4 sec.	LOS B	15.0 sec.	LOS B
UVP/US 101 NB Ramps(a)	Caltrans	STOP-Sign	9.3 sec.	LOS A	9.4 sec.	LOS A

Bolded Values exceed City/County LOS policy standards.

(a) Unsignalized intersection. LOS based on average weighted control delay per vehicle in seconds.

The data presented in Table 2 show that the UVP/Hummel Drive intersection currently operates in the LOS D range during the AM and PM peak hours, which exceeds the County's LOS C standard in this area. The remaining study-area intersections currently operate in the LOS A-C range during the AM and PM peak hours, which meet the City's LOS D operating standard and the County's LOS C - D operating standard.

TRAFFIC POLICY STANDARDS

As noted in Table 2, several of the study-area intersections area located in the City of Santa Maria and several of the intersections are located in the County of Santa Barbara. Both the City and County traffic consistency standards were therefore utilized to assess the Project's traffic additions. There are additional intersections that are under Caltrans' jurisdiction. The current Caltrans Transportation Impact Study Guide is based on VMT and not LOS, thus the VMT section of this report addresses the Caltrans requirements.

[3] Highway Capacity Manual, Transportation Research Board, 6th Edition, 2016.

These standards are outlined below.

City of Santa Maria Standard

The City of Santa Maria Circulation Element considers LOS D acceptable for roadway and intersection operations, with improvements required for LOS E and F.

Santa Barbara County Standard

The County thresholds are based on the policies and standards contained in the Orcutt Community Plan (OCP). These thresholds are outlined below.

Policy CIRC-O-3: The County shall maintain a minimum Level of Service C or better on roadways and intersections within the Orcutt Planning Area, except that Minimum LOS shall be "D" for the following roadway segments and intersections:

- Foster Road and Highway 135 intersection
- Lakeview Road and Skyway Drive intersection
- Stillwell Road and Lakeview Road intersection
- All Clark Avenue roadway segments and intersections between Blosser Road on the west and Foxenwood Lane on the east.

EXISTING + PROJECT CONDITIONS

Project Trip Generation

Trip generation estimates were calculated for the Project using the rates contained in the ITE Trip Generation Manual, 11th edition.[4] Table 3 summarizes the trip generation estimates for the Project and lists the specific ITE rates used for each Project component. Worksheets showing the detailed calculations for each parcel are contained in the Technical Appendix.

[4] Trip Generation, Institute of Transportation Engineers, 11th Edition, 2021.

Table 3
Project Trip Generation

Land Use	Size	ADT		AM Peak		PM Peak	
		Rate	Trips	Rate	Trips	Rate	Trips
Parcel 1							
Gas Station with Mart (a)	10 Fueling Positions	200.80	2,008	16.06	161	18.42	184
Lube Station (b)	3 Bays	40.00	120	3.00	9	4.85	15
Parcel 2							
Shopping Center (c)	55,000 SF	94.49	5,197	3.53	194	9.84	541
Sit-Down Restaurant (d)	5,000 SF	107.20	536	9.57	48	9.05	45
Fast-Food Restaurant w/DT (5) (e)	15,250 SF	467.48	7,129	44.61	681	33.03	505
Fast Casual Restaurant (2) (f)	6,000 SF	97.14	582	1.43	8	12.55	76
Mini Storage (g)	39,500 SF	1.45	57	0.09	4	0.15	6
Parcel 3							
Car Wash-Automated (h)	1 Tunnel	249.00	249	8.50	9	23.70	24
Fast-Food Restaurant w/DT (e)	3,500 SF	467.48	1,636	44.61	156	33.03	116
Parcel 4A							
Apartments (i)	400 Units	6.60	2,639	0.37	147	0.48	193
Parcel 4B							
Townhomes (i)	95 Units	6.60	627	0.37	35	0.48	46
Totals			**20,780**		**1,452**		**1,751**

(a) Trip generation based on ITE Code #945 (Convenience Store/Gas Station).
(b) Trip generation based on ITE Code #941 (Quick Lubrication Vehicle Shop).
(c) Trip generation based on ITE Code #821 (Shopping Plaza).
(d) Trip generation based on ITE Code #932 (High-Turnover (Sit-Down) Restaurant).
(e) Trip generation based on ITE Code #934 (Fast-Food Restaurant with Drive-Through Window).
(f) Trip generation based on ITE Code #930 (Fast Casual Restaurant).
(g) Trip generation based on ITE Code #151 (Mini-Warehouse).
(h) Trip generation for Car Wash-Automated derived from local studies.
(i) Trip generation based on ITE Code #220 (Multi-Family Housing – Low Rise).

As shown in Table 3, the Project is forecast to generate 20,780 ADT, with 1,452 AM peak hour trips and 1,751 PM peak hour trips.

Internal Capture Trip Analysis

Given the mix of land uses, there will be some trips that travel between the various parcels that comprise the site and not affect the off-site street network. "Internal Capture" trips include trip interactions between the commercial uses as well as between the commercial uses and residential uses. The ITE mixed-use traffic model was used to estimate the number of trips that would be captured within the site (a copy of the mixed-use model is contained in the Technical Appendix for reference). Based on the results of the model, internal factors of 30% for ADT, 13% for the AM peak hour, and 45% for the PM peak hour were used. The traffic study assumes 45% of the automated carwash customers would come from the service station or convenience market. The 45% capture rate was determined based on data collected at two local service station sites in the Santa Barbara-Goleta area: 1) Mesa Fuel Depot located at 1929 Cliff Drive in Santa Barbara, and 2) Walnut Shell located at 5097 Hollister Avenue in Goleta. Worksheets showing the detailed calculations are contained in the Technical Appendix. Table 4 summarizes the internal/external trip generation estimates for the Project (also see trip generation worksheets in Technical Appendix for details).

Table 4
Project Trip Generation – Internal & External Trip Breakdown

Trip Type	ADT	AM Peak	PM Peak
Internal (30% ADT, 13% AM, 45% PM)	6,272	192	787
External (70% ADT, 87% AM, 55% PM)	14,509	1,260	961
Totals	**20,781**	**1,452**	**1,748**

The data presented in Table 4 show that 6,234 ADT, 189 AM peak hour trips, and 787 PM peak hour trips would be internal to the Project site. The remaining 14,547 daily trips, 1,263 AM peak hour trips, and 961 PM peak hour trips would be external to the Project site.

Commercial Pass-By/Primary Trip Analysis

Pursuant to ITE recommendations, the trip generation analysis also accounts for "Pass-By" trips and "Primary" trips that would be generated by the retail and restaurant uses. Pass-By trips are trips that would come from the existing traffic streams on Orcutt Expressway, the UVP, and Orcutt Road; and would not affect the study-area street network beyond the Project site. Primary trips are trips with the sole purpose of patronizing the commercial center (i.e., from home to the store and then return home). Based on the data presented in the ITE Trip Generation manual, the Pass-By trip percentages for the shopping center and restaurant uses range between 40% - 55%, the Pass-By trip percentage for the gas station is 75%, and the Pass-By trip percentage for the car wash is 20%. The trip generation worksheets contained in the Technical Appendix show the specific pass-by adjustments applied to each of the uses. Table 5 shows the breakdown of the retail/restaurant Pass-By and Primary trips.

Table 5
Project Trip Generation – Commercial Trip Breakdown

Land Use	Pass-By Percentage	ADT		AM Peak Trips		PM Peak Trips	
		Pass-By Trips	Primary Trips	Pass-By Trips	Primary Trips	Pass-By Trips	Primary Trips
Shopping Center	40%	1,455	2,183	68	101	119	179
Sit Down Restaurants	43%	337	446	21	28	28	38
Fast Food Restaurants w/DT	55%	3,375	2,761	400	328	188	153
Gas Station	75%	1,055	352	105	35	76	25
Car Wash	20%	27	110	1	4	3	10
Totals		**6,249**	**5,852**	**595**	**496**	**414**	**405**

The data in Table 5 show that the commercial uses would generate 6,249 daily, 595 AM peak hour, and 414 PM peak hour Pass-By trips. The remaining 5,852 daily, 496 AM peak hour, and 405 PM peak hour trips generated by the commercial uses would be the Primary trips.

Table 6 summarizes the total Primary trips that would be external to the site – the trips that would affect the intersections in the study area.

Table 6
Project Trip Generation – External Trip Summary

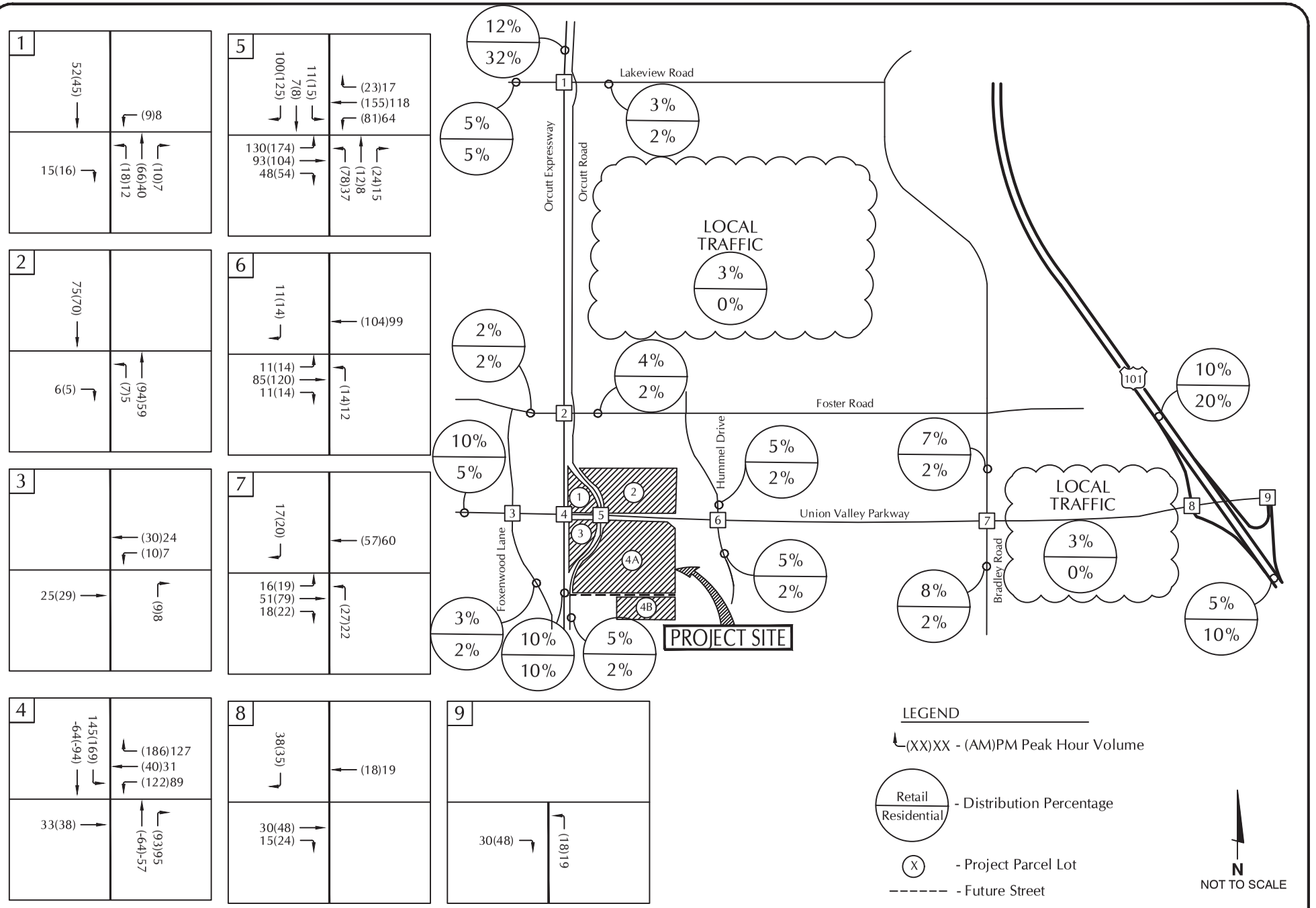
Land use	ADT	AM Peak Trips	PM Peak Trips
Shopping Center	2,183	101	179
Sit Down Restaurants	446	28	38
Fast Food Restaurants w/DT	2,761	328	153
Gas Station	352	35	25
Car Wash	110	4	10
Lube Station	84	8	8
Mini-Storage	40	3	3
Residential	2,286	158	131
Total	**8,262**	**665**	**547**

Project Trip Distribution

The distribution pattern developed for the Project is based on existing traffic counts as well as general knowledge of the population, employment, and commercial centers in the Santa Maria area. Given that the traffic generated by the retail uses would be more locally oriented than the traffic generated by the residential uses, two different distribution patterns were developed for these Project components. The retail pass-by trips were assigned to the driveways and the adjacent intersections based on the existing AM and PM peak hour traffic flows. Table 7 presents trip distribution patterns developed for the Project components and Figure 6 illustrates the distribution and assignment of Project traffic at the study-area intersections.

Table 7
Project Trip Distribution

Origin/Destination	Direction	Retail Percentage	Residential Percentage
US Highway 101	North South	10% 5%	20% 10%
Orcutt Expressway n/o Lakeview Rd Orcutt Expressway s/o UVP	North South	12% 10%	32% 10%
Orcutt Road	North (Local) South	3% 5%	0% 2%
Hummel Drive	North South	5% 5%	2% 2%
Foxenwood Lane	South	3%	2%
Bradley Road	North South	7% 8%	2% 2%
Lakeview Road w/o Orcutt Expressway Lakeview Road e/o Orcutt Expressway	West East	5% 3%	5% 2%
Foster Road	East West	2% 4%	2% 2%
UVP	East (local) West	3% 10%	0% 5%
Totals		**100%**	**100%**



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PROJECT TRIP DISTRIBUTION AND ASSIGNMENT (PRIMARY AND PASS-BY)

FIGURE 6

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Existing + Project Intersection Operations

Levels of service were calculated for the study-area intersections assuming the Existing + Project traffic volumes shown on Figure 7. Tables 8 and 9 compare the Existing and Existing + Project level of service forecasts and identify the Project's consistency with the City's LOS D standard and the County's LOS C – D standard.

Table 8
Existing + Project Levels of Service – AM Peak Hour

Intersection	Existing		Existing + Project		Consistent?
	ICU or Delay	LOS	ICU or Delay	LOS	
Orcutt Expressway/Lakeview Rd	0.61	LOS B	0.63	LOS B	Yes
Orcutt Expressway /Foster Rd	0.71	LOS C	0.74	LOS C	Yes
UVP/Foxenwood Ln (a)	14.3 sec.	LOS B	15.8 sec.	LOS B	Yes
UVP/ Orcutt Expressway	0.62	LOS B	0.67	LOS B	Yes
UVP/Orcutt Road	0.46	LOS A	0.73	LOS C	Yes
UVP/Hummel Drive (a)	**34.7 sec.**	**LOS D**	**>50.0 sec.**	**LOS F**	**No**
UVP/Bradley Road	0.39	LOS A	0.42	LOS A	Yes
UVP/US 101 SB Ramps (a)	12.4 sec.	LOS B	13.2 sec.	LOS B	Yes
UVP/US 101 NB Ramps(a)	9.3 sec.	LOS A	9.4 sec.	LOS A	Yes

Bolded Values exceed City/County LOS policy standards.

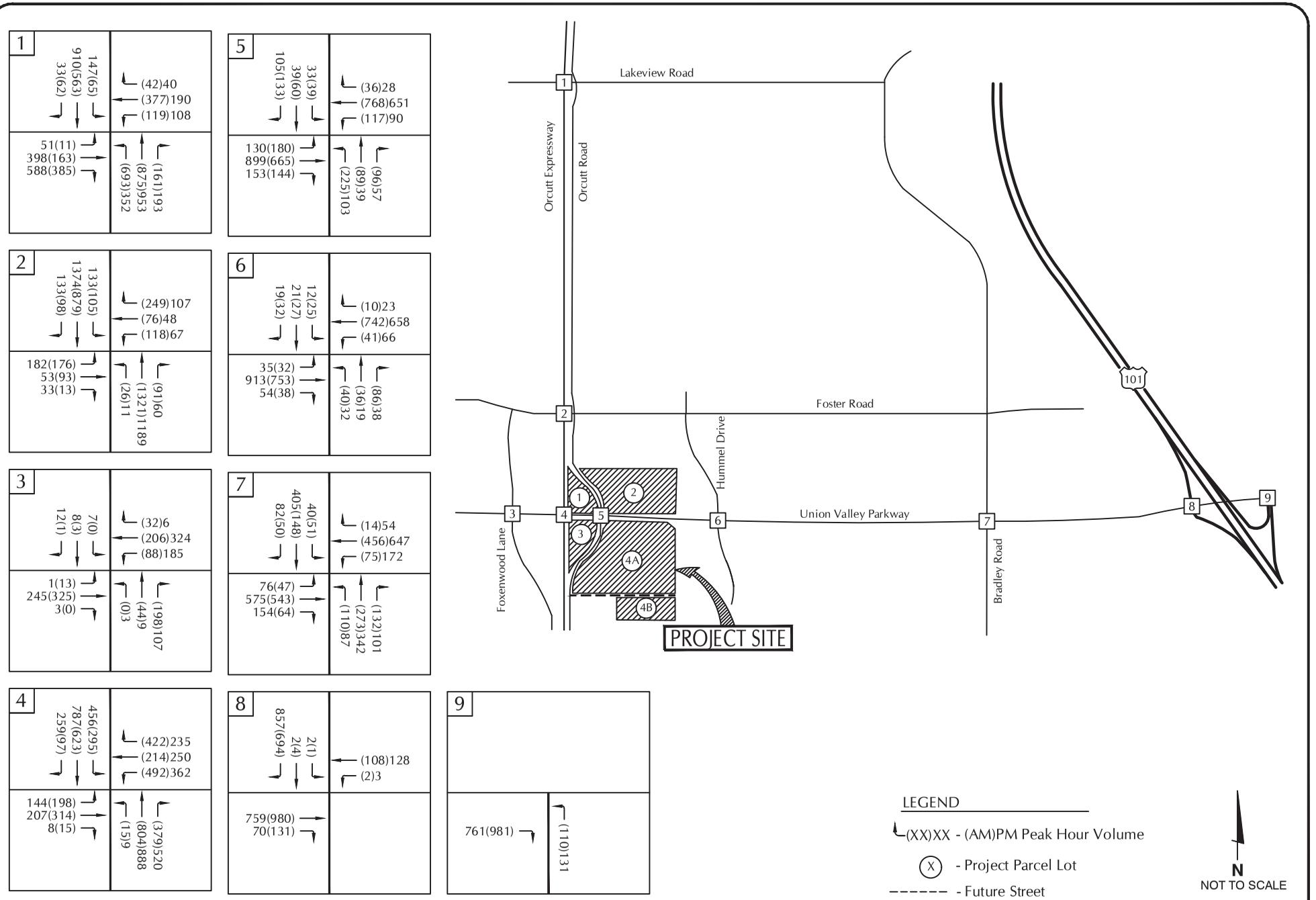
(a) Unsignalized intersection. LOS based on average weighted control delay per vehicle in seconds.

Table 9
Existing + Project Levels of Service – PM Peak Hour

Intersection	Existing		Existing + Project		Consistent?
	ICU or Delay	LOS	ICU or Delay	LOS	
Orcutt Expressway/Lakeview Rd	0.66	LOS B	0.69	LOS B	Yes
Orcutt Expressway /Foster Rd	0.64	LOS B	0.66	LOS B	Yes
UVP/Foxenwood Ln (a)	9.9 sec.	LOS A	10.2 sec.	LOS B	Yes
UVP/ Orcutt Expressway	0.63	LOS B	0.70	LOS B	Yes
UVP/Orcutt Road	0.47	LOS A	0.64	LOS B	Yes
UVP/Hummel Drive (a)	**34.3 sec.**	**LOS D**	**>50.0 sec.**	**LOS F**	**No**
UVP/Bradley Road	0.51	LOS A	0.54	LOS A	Yes
UVP/US 101 SB Ramps (a)	15.0 sec.	LOS B	16.6 sec.	LOS C	Yes
UVP/US 101 NB Ramps(a)	9.4 sec.	LOS A	9.5 sec.	LOS A	Yes

Bolded Values exceed City/County LOS policy standards.

(a) Unsignalized intersection. LOS based on average weighted control delay per vehicle in seconds.



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EXISTING + PROJECT TRAFFIC VOLUMES

FIGURE 7

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The data presented in Tables 8 and 9 indicate that the UVP/Hummel Drive intersection is forecast to operate in the LOS F range during the AM and PM peak hours with the addition of Project traffic, which exceeds the County's LOS C standard. The remaining intersections are forecast to operate in the LOS A-C range during the AM and PM peak hours with Existing + Project traffic, which meet the City's LOS D operating standard and the County's LOS C - D operating standard. Improvements for the UVP/Hummel Drive intersection are presented in the Recommended Improvements section of this report.

CUMULATIVE CONDITIONS

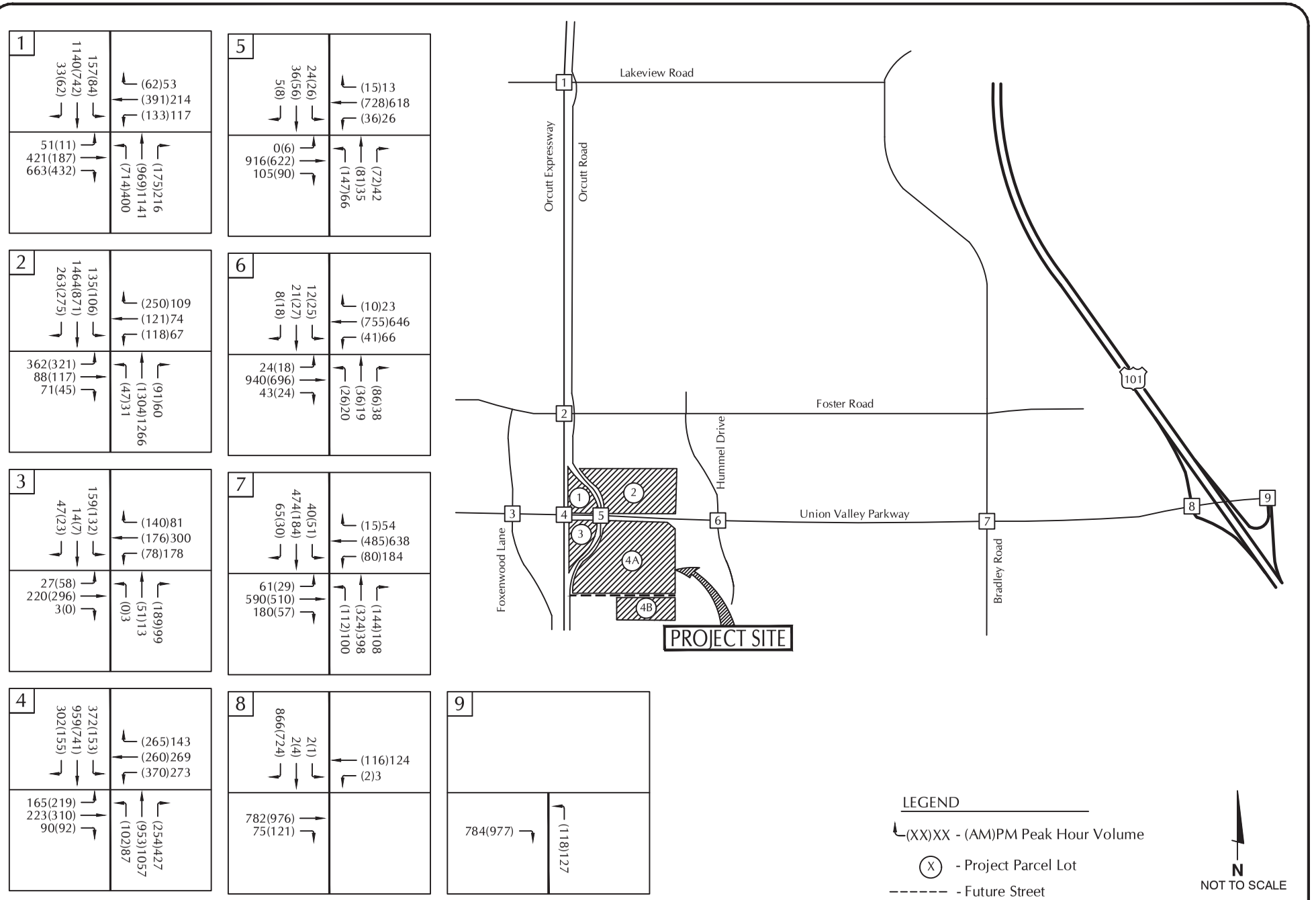
Cumulative Traffic Volumes

Cumulative traffic volumes were forecast for the study-area intersections assuming development of the approved and pending projects located in the adjacent portions of the City and the County (list of cumulative projects is contained in the Technical Appendix). Trip generation estimates were developed for the cumulative projects using ITE rates or from traffic studies prepared for the cumulative projects (cumulative trip generation calculations are contained in the Technical Appendix). The traffic generated by the Santa Maria Airport Business Park Rezone Project was included in cumulative traffic forecasts. It is noted that the SEIR prepared for this project required that the traffic signals be installed at the UVP/Foxenwood Lane intersection; this improvement is therefore included in the cumulative analysis. It is also noted that Santa Barbara County approved an amendment to the Orcutt Community Plan to provide a local road connection between the UVP/US 101 interchange and the adjoining frontage road on the east side of US 101. This Project is not scheduled or funded at this time and thus is not included in the Cumulative analysis.

Traffic generated by the cumulative projects was then added to the Existing volumes to produce the Cumulative traffic forecasts. Figure 8 shows the Cumulative traffic volumes and Figure 9 shows the Cumulative + Project volumes.

Cumulative Intersection Operations

Levels of service were calculated for the study-area intersections assuming the Cumulative and Cumulative + Project traffic volumes presented on Figures 8 and 9. Tables 10 and 11 compare the Cumulative and Cumulative + Project levels of service forecasts and identify the Project's consistency with the City's LOS D standard and the County's LOS C - D standard.



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CUMULATIVE TRAFFIC VOLUMES

FIGURE 8

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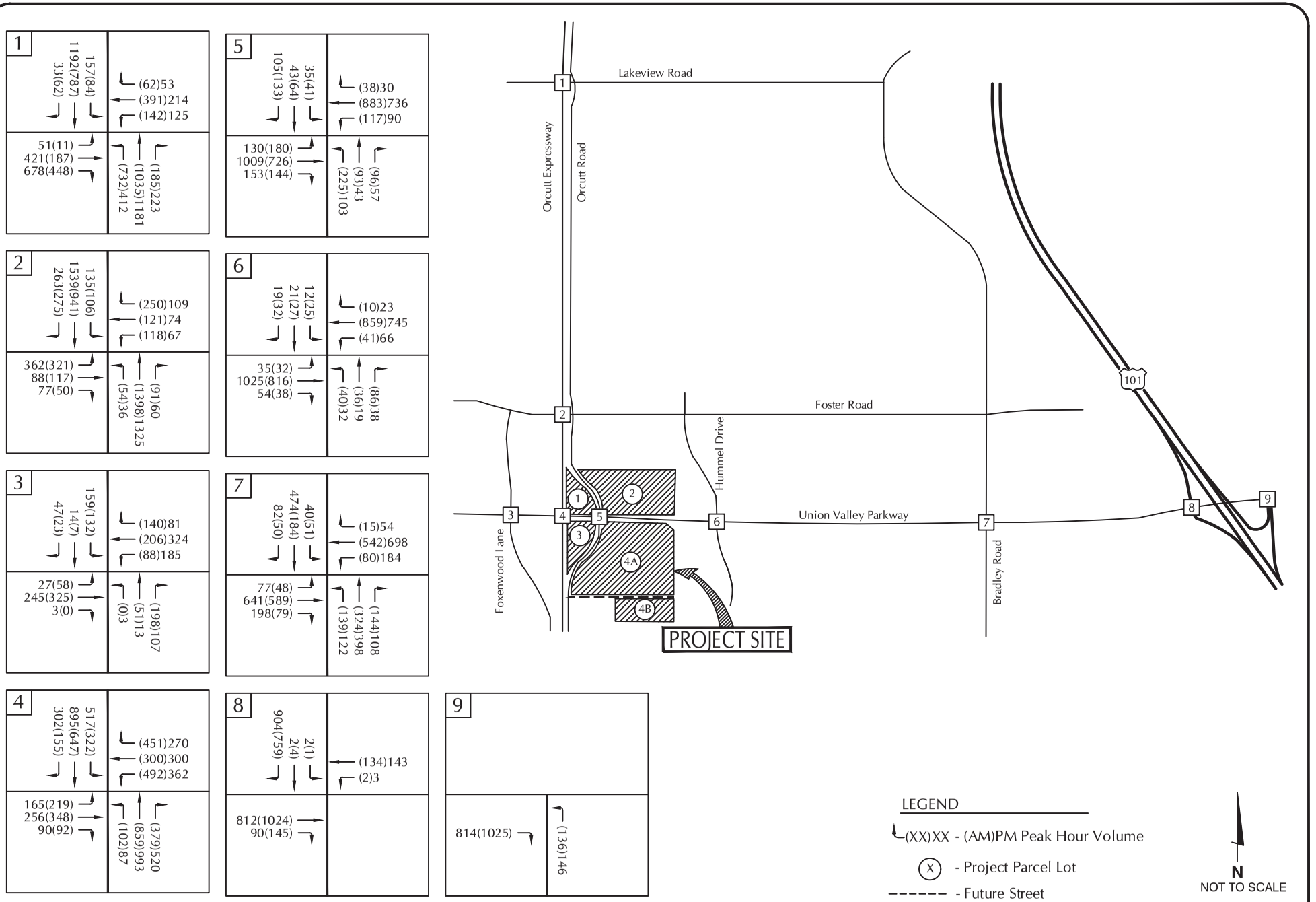

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CUMULATIVE + PROJECT TRAFFIC VOLUMES

FIGURE 9

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Table 10
Cumulative + Project Levels of Service – AM Peak Hour

Intersection	Cumulative		Cumulative + Project		Consistent?
	ICU or Delay	LOS	ICU or Delay	LOS	
Orcutt Expressway/Lakeview Rd	0.70	LOS B	0.72	LOS C	Yes
Orcutt Expressway /Foster Rd	0.78	LOS C	0.81	LOS D	Yes
UVP/Foxenwood Ln (a)	0.48	LOS A	0.50	LOS A	Yes
UVP/ Orcutt Expressway	0.66	LOS B	0.73	LOS C	Yes
UVP/Orcutt Road	0.48	LOS A	0.77	LOS C	Yes
UVP/Hummel Drive (b)	**>50.0 sec.**	**LOS F**	**>50.0 sec.**	**LOS F**	**No**
UVP/Bradley Road	0.42	LOS A	0.47	LOS A	Yes
UVP/US 101 SB Ramps (b)	13.8 sec.	LOS B	14.8 sec.	LOS B	Yes
UVP/US 101 NB Ramps(b)	9.4 sec.	LOS A	9.5 sec.	LOS A	Yes

Bolded Values exceed City/County LOS policy standards.

(a) Cumulative analysis assumes installation of traffic signals by Airport Business Park Specific Plan.

(b) Unsignalized intersection. LOS based on average weighted control delay per vehicle in seconds.

Table 11
Cumulative + Project Levels of Service – PM Peak Hour

Intersection	Cumulative		Cumulative + Project		Consistent?
	ICU or Delay	LOS	ICU or Delay	LOS	
Orcutt Expressway/Lakeview Rd	0.79	LOS C	0.81	LOS D	Yes
Orcutt Expressway /Foster Rd	0.75	LOS C	0.77	LOS C	Yes
UVP/Foxenwood Ln (a)	0.45	LOS A	0.47	LOS A	Yes
UVP/ Orcutt Expressway	0.70	LOS B	0.78	LOS C	Yes
UVP/Orcutt Road	0.50	LOS A	0.68	LOS B	Yes
UVP/Hummel Drive (b)	**>50.0 sec.**	**LOS F**	**>50.0 sec.**	**LOS F**	**No**
UVP/Bradley Road	0.57	LOS A	0.61	LOS B	Yes
UVP/US 101 SB Ramps (b)	16.6 sec.	LOS C	18.7 sec.	LOS C	Yes
UVP/US 101 NB Ramps(b)	9.5 sec.	LOS A	9.6 sec.	LOS A	Yes

Bolded Values exceed City/County LOS policy standards.

(a) Cumulative analysis assumes installation of traffic signals by Airport Business Park Specific Plan.

(b) Unsignalized intersection. LOS based on average weighted control delay per vehicle in seconds.

As shown in Tables 10 and 11, the UVP/Hummel Drive intersection is forecast to operate in the LOS F range during the AM and PM peak hours with and without the addition of Project traffic, which exceeds the County's LOS C - D standard. The Orcutt Expressway/Lakeview Road intersection is forecast to operate in the LOS D range, which is considered acceptable for this location in OCP Policy CIRC-O-3 (see Transportation Policy Standards section). The remaining intersections are forecast to operate in the LOS A-C range during the AM and PM peak hours with Cumulative + Project traffic, which meet the City's LOS D operating standard and the County's LOS C - D operating standard. Improvements for the UVP/Hummel Drive intersection are presented in the Recommended Improvements section of this report.

County Roadway Segment Operations

The Project is an annexation to the City of Santa Maria, thus the City's Circulation Element policies will be the applicable standards to assess the transportation aspects of the Project.

With respect to the Orcutt Community Plan, the roadway policy applicable to the UVP states that:

"For Primary roadway segments where the Estimated Future Volume exceeds the Acceptable Capacity, a project is considered consistent with this section of the Community Plan if: 1) intersections affected by traffic assigned from the project operate at or above minimum level of service standards, or 2) if the project provides a contribution toward an alternative transportation project (as identified in the OTIP) that is deemed to offset the effects of project-generated traffic."

The LOS analysis presented previously in the report shows that the intersections along the UVP from SR 135 to US 101, including Hummel Drive and Bradley Road, are forecast to operate in the LOS A – C range (assumes installation of signals at UVP/Hummel Drive intersection). The Project would therefore be consistent with the County's policies.

SITE ACCESS AND CIRCULATION

No detailed access plans were developed for the preliminary site plan that was submitted for review. An access and circulation analysis were therefore completed for each parcel, as reviewed review below. It is noted that the design and location of bus turnouts, non-motorized access elements, bike lanes, internal access designs, frontage improvements, streetlights, etc. will be addressed in more detail during the development review stage of the Project. The improvements will conform to City standards.

Parcel 1 Access and Circulation

This parcel is located on the northwest corner of the UVP/Orcutt Road intersection and would contain a gas station with a convenience mart and an auto lube facility. As shown on the retail site plan (see Figure 2a), access to this parcel is proposed via a driveway on the west side of Orcutt Road that would be aligned with a new driveway on the east side of Orcutt Road that would provide access to Parcel 2. Figure 10 shows the access improvements that should be considered for Parcel 1, which are reviewed below.

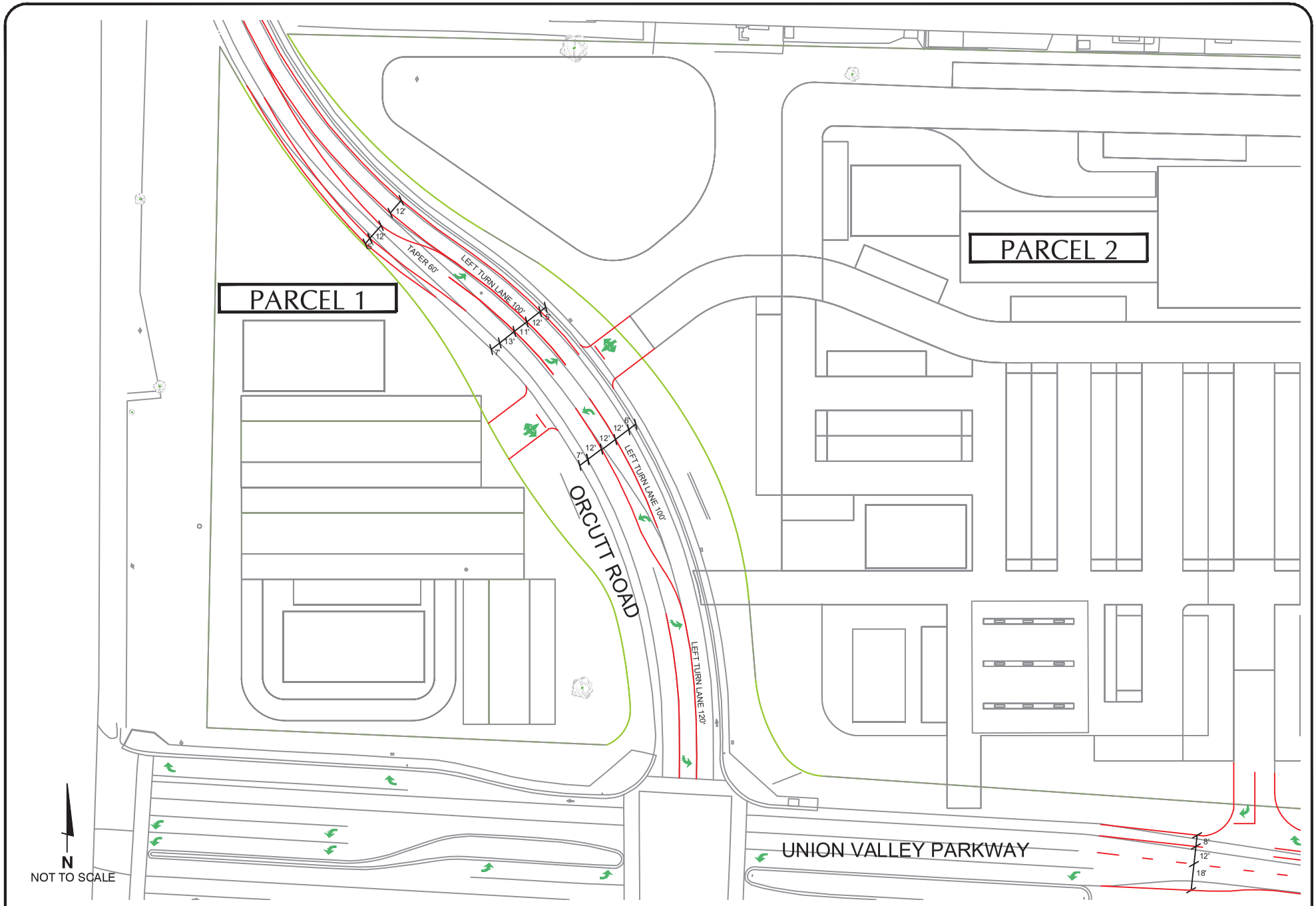
1. Frontage improvements should be implemented on the west side of Orcutt Road including curb, gutter, and sidewalk consistent, with the improvements that have been implemented on the east side of the roadway.
2. The driveway for Parcel 1 should be aligned with the driveway proposed for Parcel 2 on the east side of the roadway.
3. Orcutt Road should be widened to provide northbound and southbound left-turn lanes at the new driveway intersection.
4. The driveway approaches should be controlled by stop signs.
5. Pedestrian connections should be provided between the sidewalks on Orcutt Road and the proposed a convenience mart.

Parcel 2 Access and Circulation

This parcel is located on the north side of the UVP east of Orcutt Road and would contain 8 restaurant buildings, a neighborhood retail center, and a mini-storage facility. As shown on the retail site plan (see Figure 2a), access to the site is proposed via one driveway on the east side of Orcutt Road and two driveways on the north side of the UVP. Figures 10 and 11 show the access improvements that should be considered for Parcel 2, which are reviewed below.

Orcutt Road

1. The driveway for Parcel 2 should be aligned with the driveway proposed for Parcel 1 on the west side of the roadway.
2. Northbound and southbound left-turn lanes should be provided on Orcutt Road at the new driveway intersection.
3. The driveway approaches at the intersection should be controlled by stop signs.
4. Pedestrian connections should be provided between the sidewalks on Orcutt Road and the proposed retail buildings.



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PARCEL 1 AND PARCEL 2 - ORCUTT ROAD DRIVEWAYS

FIGURE 10

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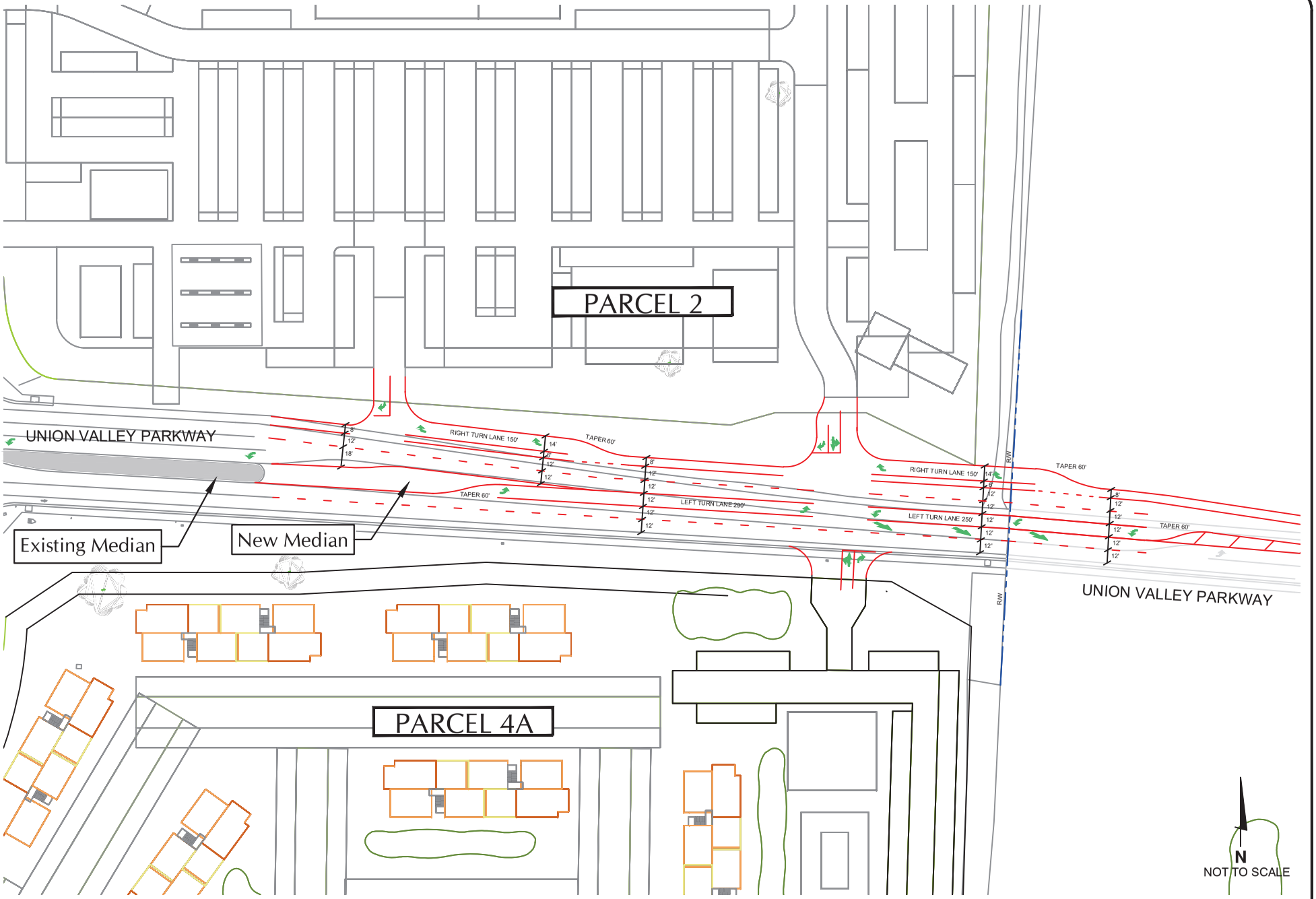

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PARCEL 2 AND PARCEL 4A - UNION VALLEY PARKWAY DRIVEWAYS

FIGURE 11

GM- ATE#21069

UVP

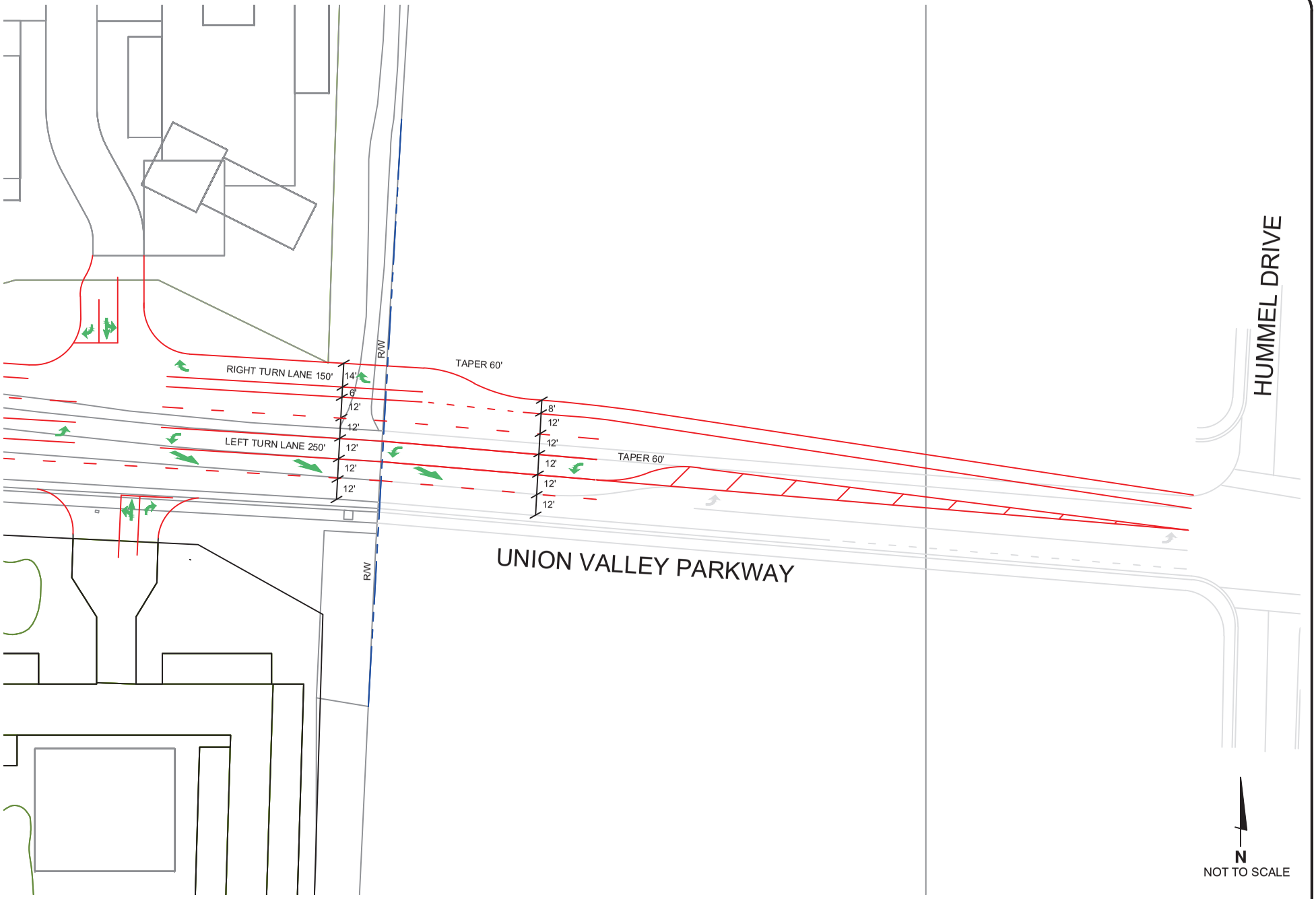
1. Frontage improvements should be implemented on the north side of the UVP including curb, gutter, and sidewalk, consistent with the improvements that have been implemented on the south side of the UVP.
2. The westerly driveway for Parcel 2 should be restricted to right-turns in/right-turns out with the easterly extension of the existing median on the UVP. A westbound right-turn lane should be provided at the driveway.
3. The easterly driveway for Parcel 2 should be aligned with the driveway proposed for Parcel 4A on the south side of the UVP. A westbound right-turn lane should be provided at the driveway.
4. Eastbound and westbound left-turn lanes should be provided on the UVP at the new easterly driveways
5. The easterly driveway should be configured with a through-left-turn lane and a right-turn lane.
6. The driveway approaches at the intersection should be controlled by stop signs.
7. Adequate vehicle storage should be provided in the proposed drive-through lanes.
8. Pedestrian connections should be provided between the sidewalks on the UVP and the proposed retail buildings

Implementation of the proposed frontage improvements on the north side of the UVP will require a transition to the two-lane section of the UVP west of the site and the UVP/Hummel Drive intersection. The interim transition plan, shown on Figure 12a, would transition the UVP back to a two-lane section on the east side of the UVP/Hummel Drive intersection. The long-term transition plan shown on Figure 12b, would provide full width improvements along the UVP through the Hummel Drive intersection and then transition back to the 2-lane section west of the intersection.

Parcel 3 Access and Circulation

This parcel is located on the southwest corner of the UVP/Orcutt Road intersection and would contain a restaurant with a drive-thru lane and an automated carwash. As shown on the retail site plan, access to this parcel is proposed via two driveways on the west side of Orcutt Road. Figure 13 shows the access improvements that should be considered for Parcel 3, which are reviewed below.

1. Frontage improvements should be implemented on the west side of Orcutt Road including curb, gutter, and sidewalk, consistent with the improvements that have been implemented on the east side of the roadway.
2. The northerly driveway would be designed with a median island treatment to limit movements to right-turn in/right-turn out (two options shown).
3. Orcutt Road should be widened to provide a northbound left-turn lane at the southerly driveway intersection.
4. The driveway approaches should be controlled by stop signs.
5. Pedestrian connections should be provided between the sidewalks on Orcutt Road and the proposed restaurant.



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UVP INTERIM TRANSITION PLAN

FIGURE 12a

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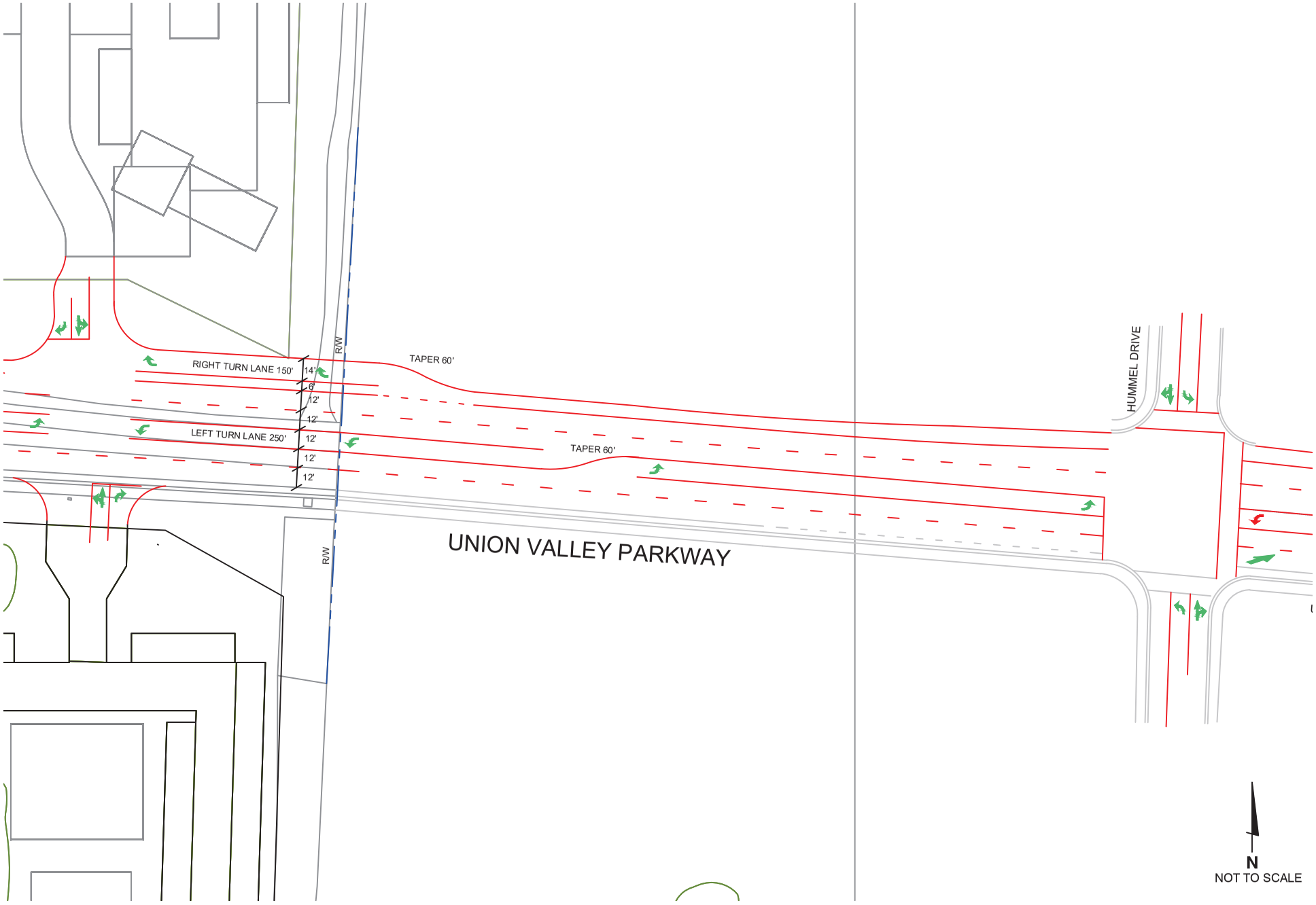

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UVP LONG TERM TRANSITION PLAN

FIGURE 12b

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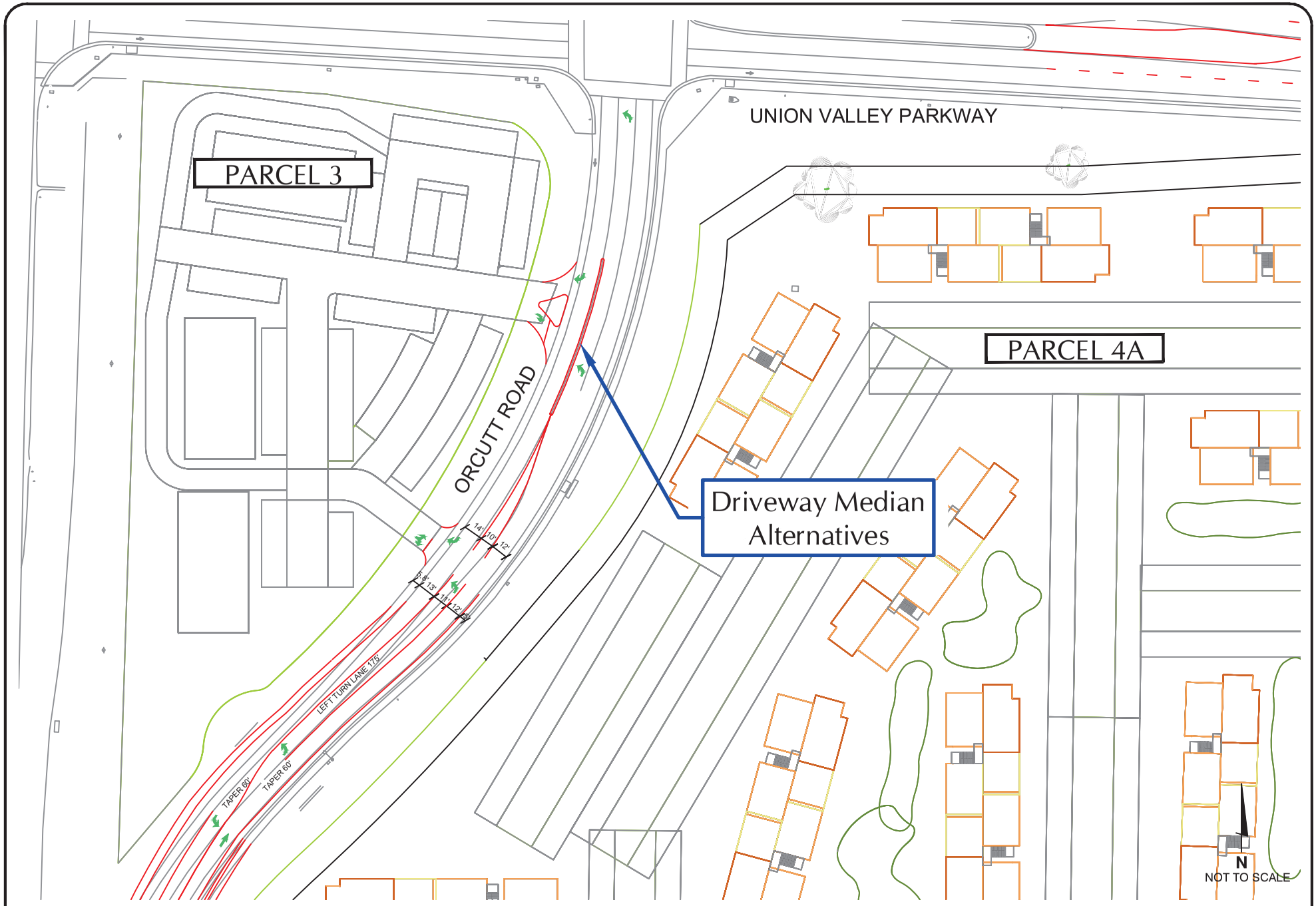

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PARCEL 3 - ORCUTT ROAD DRIVEWAYS

FIGURE 13

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Parcel 4A Access and Circulation

This parcel is located on the south side of the UVP east of Orcutt Road and would contain 400 apartments. As shown on the residential site plan (see Figure 2b), access to the site is proposed via a driveway on the UVP and a connection to a new east-west access road that would extend easterly from Orcutt Road between Parcels 4A and 4B. Figure 14 shows the access improvements that should be considered for Parcel 4A, which are reviewed below.

UVP

1. The driveway for Parcel 4A should be aligned with the easterly driveway for Parcel 2 on the north side of the UVP.
2. Eastbound and westbound left-turn lanes should be provided on the UVP at the new easterly driveways
3. The driveway should be configured with a through-left-turn lane and a right-turn lane.
4. The driveway approaches at the intersection should be controlled by stop signs.
5. Pedestrian connections should be provided between the sidewalks on the UVP and the proposed apartment buildings

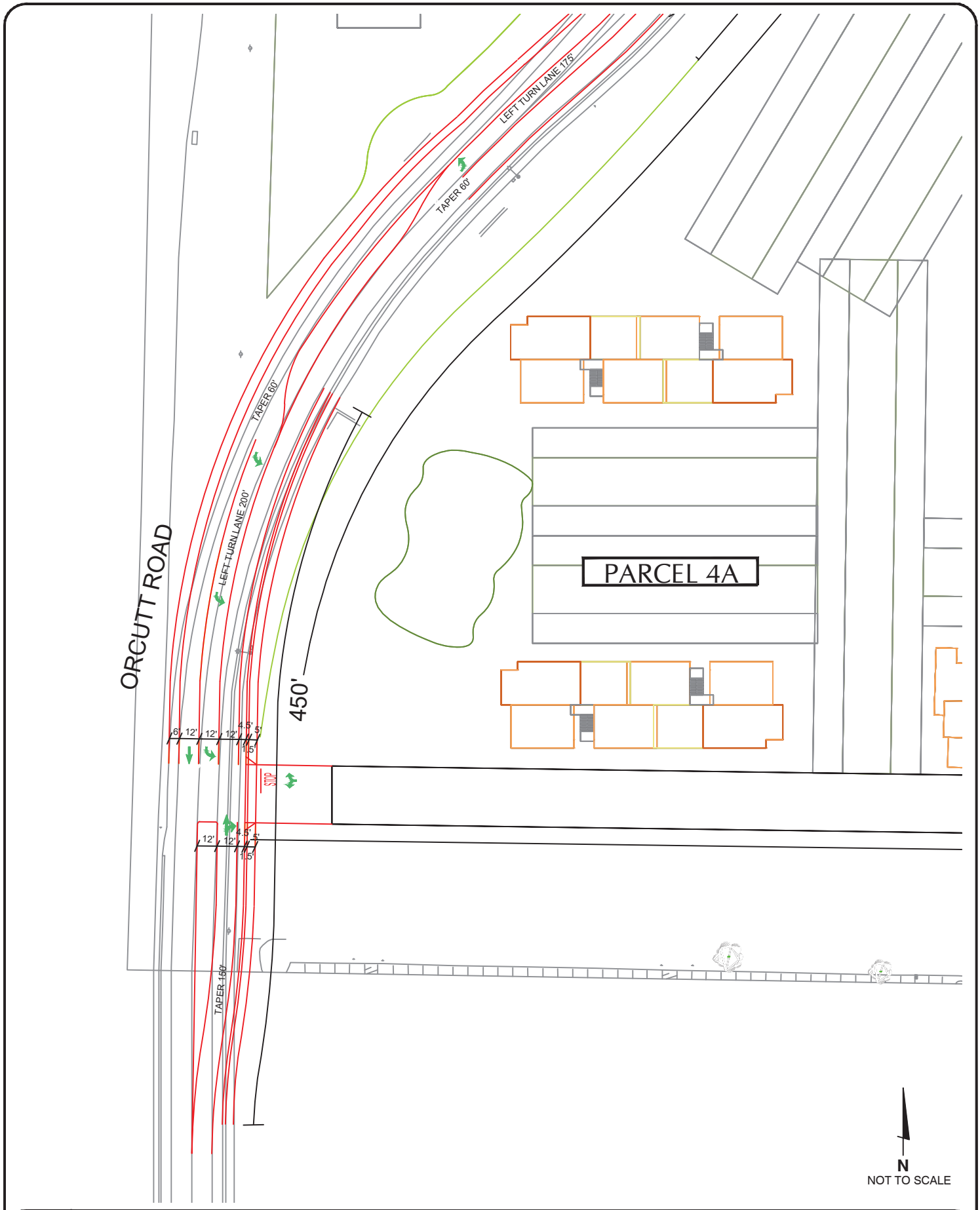
Orcutt Road

1. Orcutt Road should be widened north and south of the driveway to provide a southbound left-turn lane at the new roadway connection.
2. The new roadway approach should be controlled by stop signs.
3. Pedestrian connections should be provided between the sidewalks on Orcutt Road and the proposed apartment buildings.

Parcel 4B Access and Circulation

This parcel is located south of Parcel 4A and east of the Gloria Dei Lutheran Church on Orcutt Road. Parcel 4B would contain 95 townhome units. As shown on residential site plan (see Figure 2b) access to the site is proposed via a new east-west access road that would extend easterly from Orcutt Road between Parcels 4A and 4B. Secondary access would be provided through the internal road system in the adjacent Parcel 4A which provides access to the UVP. Figure 14 shows the access improvements that should be considered for Parcel 4B, which are reviewed below.

1. Orcutt Road should be widened north and south of the driveway to provide a southbound left-turn lane at the new roadway connection.
2. The new roadway approach should be controlled by stop signs.
3. Pedestrian connections should be provided between the sidewalks on Orcutt Road and the proposed apartment buildings.



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PARCEL 4A AND PARCEL 4B - ORCUTT ROAD DRIVEWAY

FIGURE 14

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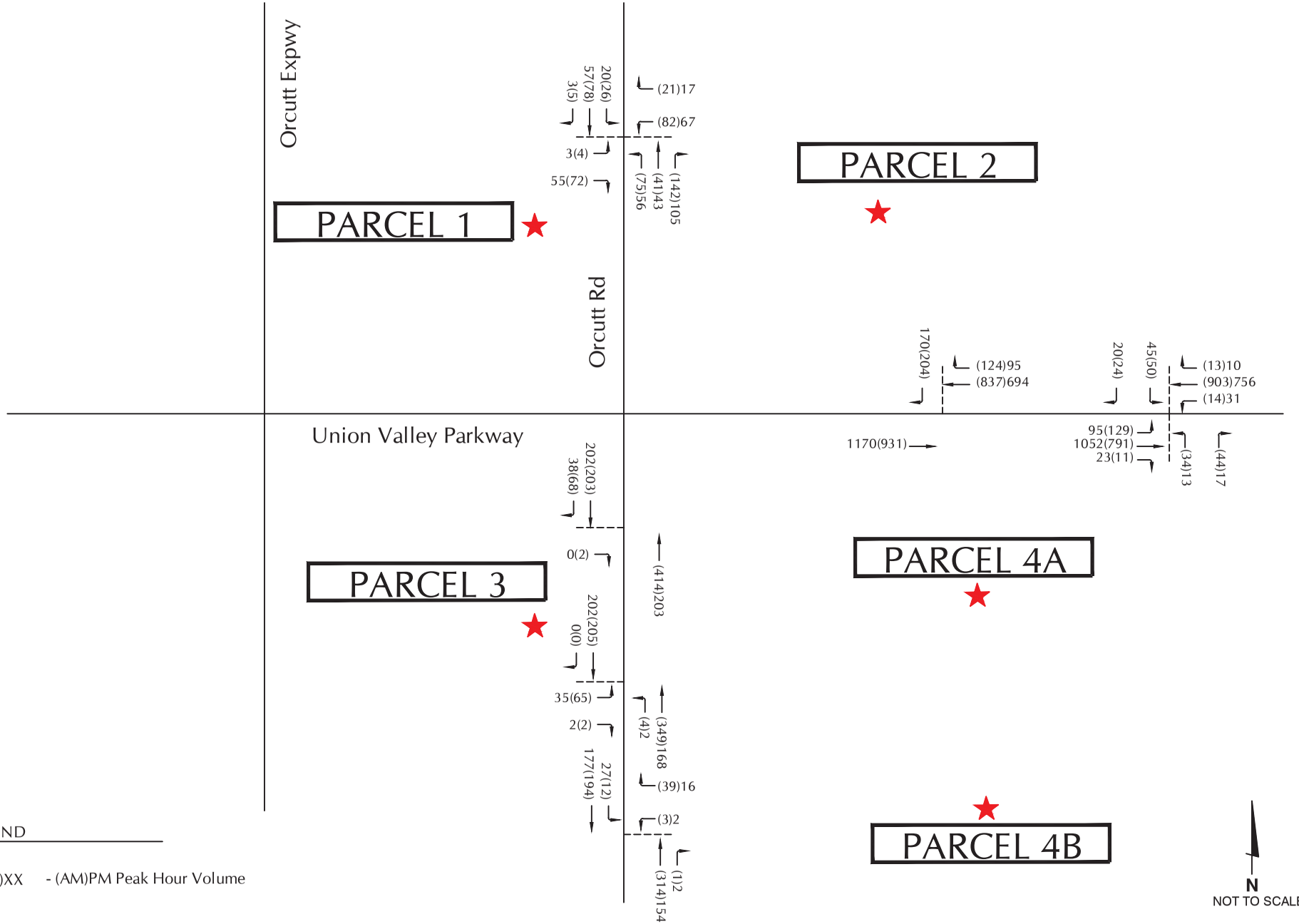
Driveway Operations

Levels of service were calculated for the Project's driveways using the methodology outlined in the Highway Capacity Manual for 2-way stop-sign controlled intersections. Levels of service were calculated for the project driveways assuming the Cumulative + Project traffic volumes presented on Figure 15 (level of service calculations are contained in the Technical Appendix). Tables 12 and 13 present the Cumulative + Project levels of service for the project driveway intersections and identify locations that are forecast to exceed the City's LOS D standard and the County's LOS C – D standard.

Table 12
AM Peak Hour Project Driveway Operations - Cumulative + Project Conditions

Intersection	Delay / LOS Cumulative + Project	Consistent?
Orcutt Road/Parcel 1&2 Driveways		
EB Parcel 1 Driveway Left + Thru + Right	9.1 Sec/LOS A	Yes
WB Parcel 2 Driveway Left + Thru + Right	12.3 Sec./LOS B	
SB Orcutt Road Left	7.6 Sec./LOS A	
NB Orcutt Road Left	7.5 Sec./LOS A	
Average Weighted Delay	9.7 Sec./LOS A	
Union Valley Parkway/Parcel 2 Easterly & Parcel 4 Driveways		
EB Union Valley Parkway Left	10.9 Sec./LOS B	Yes
WB Union Valley Parkway Left	9.5 Sec./LOS A	
SB Parcel 2 Easterly Driveway Left and Right	29.5 Sec./LOS D	
NB Parcel 4 Driveway Left and Right	23.1 Sec./LOS C	
Average Weighted Delay	18.7 Sec./LOS C	
Union Valley Parkway/Parcel 2 Westerly Driveway		Yes
SB Parcel 2 Westerly Driveway Right	14.5 Sec./ LOS B	
Orcutt Road/Parcel 3 Northerly Driveway		Yes
EB Parcel 3 Northerly Driveway Right	9.5 Sec./LOS A	
Orcutt Road/Parcel 3 Southerly Driveway		
EB Parcel 3 Southerly Driveway Left + Right	12.2 Sec./LOS B	Yes
NB Orcutt Road Left	7.7 Sec./LOS A	
Average Weighted Delay	11.2 Sec./LOS B	
Orcutt Road/Parcel 5 Driveway		
WB Parcel 5 Driveway Left + Right	10.4 Sec./LOS B	Yes
SB Orcutt Road Left	7.9 Sec./LOS A	
Average Weighted Delay	9.8 Sec./LOS A	



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PROJECT DRIVEWAY CUMULATIVE + PROJECT TRAFFIC VOLUMES

FIGURE 15

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Table 13
PM Peak Hour Project Driveway Operations - Cumulative + Project Conditions

Intersection	Delay / LOS Cumulative + Project	Consistent?
Orcutt Road/Parcel 1&2 Driveways		
EB Parcel 1 Driveway Left + Thru + Right	8.9 Sec/LOS A	Yes
WB Parcel 2 Driveway Left + Thru + Right	11.2 Sec./LOS B	
SB Orcutt Road Left	7.6 Sec./LOS A	
NB Orcutt Road Left	7.4 Sec./LOS A	
Average Weighted Delay	9.3 Sec./LOS A	
Union Valley Parkway/Parcel 2 Easterly & Parcel 4 Driveways		
EB Union Valley Parkway Left	9.9 Sec./LOS A	Yes
WB Union Valley Parkway Left	10.9 Sec./LOS B	
SB Parcel 2 Easterly Driveway Left and Right	26.7 Sec./LOS D	
NB Parcel 4 Driveway Left and Right	23.6 Sec./LOS C	
Average Weighted Delay	16.8 Sec./LOS C	
Union Valley Parkway/Parcel 2 Westerly Driveway		Yes
SB Parcel 2 Westerly Driveway Right	12.5 Sec./ LOS B	
Orcutt Road/Parcel 3 Northerly Driveway		Yes
EB Parcel 3 Northerly Driveway Right	9.4 Sec./LOS A	
Orcutt Road/Parcel 3 Southerly Driveway		
EB Parcel 3 Southerly Driveway Left + Right	10.6 Sec./LOS B	Yes
NB Orcutt Road Left	7.6 Sec./LOS A	
Average Weighted Delay	10.4 Sec./LOS B	
Orcutt Road/Parcel 5 Driveway		
WB Parcel 5 Driveway Left + Right	9.3 Sec./LOS A	Yes
SB Orcutt Road Left	7.6 Sec./LOS A	
Average Weighted Delay	8.3 Sec./LOS A	

As shown in Tables 12 and 13, the project driveway intersections are forecast to operate in the LOS A - C range under Cumulative + Project conditions during the AM and PM peak hours, which meet the City's LOS D standard and the County's LOS C – D standard.

City staff requested a queueing analysis for the Project driveways to determine the future vehicle queues. The analysis assumes the lane geometry shown in Figures 10 – 14. Tables 14 and 15 summarize the peak (95th) queue forecasts for the Project driveways.

Table 14
AM Peak Hour Driveway Queues - Cumulative + Project Conditions

Intersection	95th Queue Length Cumulative + Project
Orcutt Road/Parcel 1&2 Driveways	
EB Parcel 1 Driveway Left + Thru + Right	1 Vehicle
WB Parcel 2 Driveway Left + Thru + Right	1 Vehicle
SB Orcutt Road Left	1 Vehicle
NB Orcutt Road Left	1 Vehicle
Union Valley Parkway/Parcel 2 Easterly & Parcel 4 Driveways	
EB Union Valley Parkway Left	1 Vehicle
WB Union Valley Parkway Left	1 Vehicle
SB Parcel 2 Easterly Driveway Left	1 Vehicle
SB Parcel 2 Easterly Driveway Right	1 Vehicle
NB Parcel 4 Driveway Left	1 Vehicle
NB Parcel 4 Driveway Right	1 Vehicle
Union Valley Parkway/Parcel 2 Westerly Driveway	
SB Parcel 2 Westerly Driveway Right	2 Vehicles
Orcutt Road/Parcel 3 Northerly Driveway	
EB Parcel 3 Northerly Driveway Right	0 Vehicle
Orcutt Road/Parcel 3 Southerly Driveway	
EB Parcel 3 Southerly Driveway Left + Right	1 Vehicle
NB Orcutt Road Left	0 Vehicle
Orcutt Road/Parcel 5 Driveway	
WB Parcel 5 Driveway Left + Right	1 Vehicle
SB Orcutt Road Left	0 Vehicle

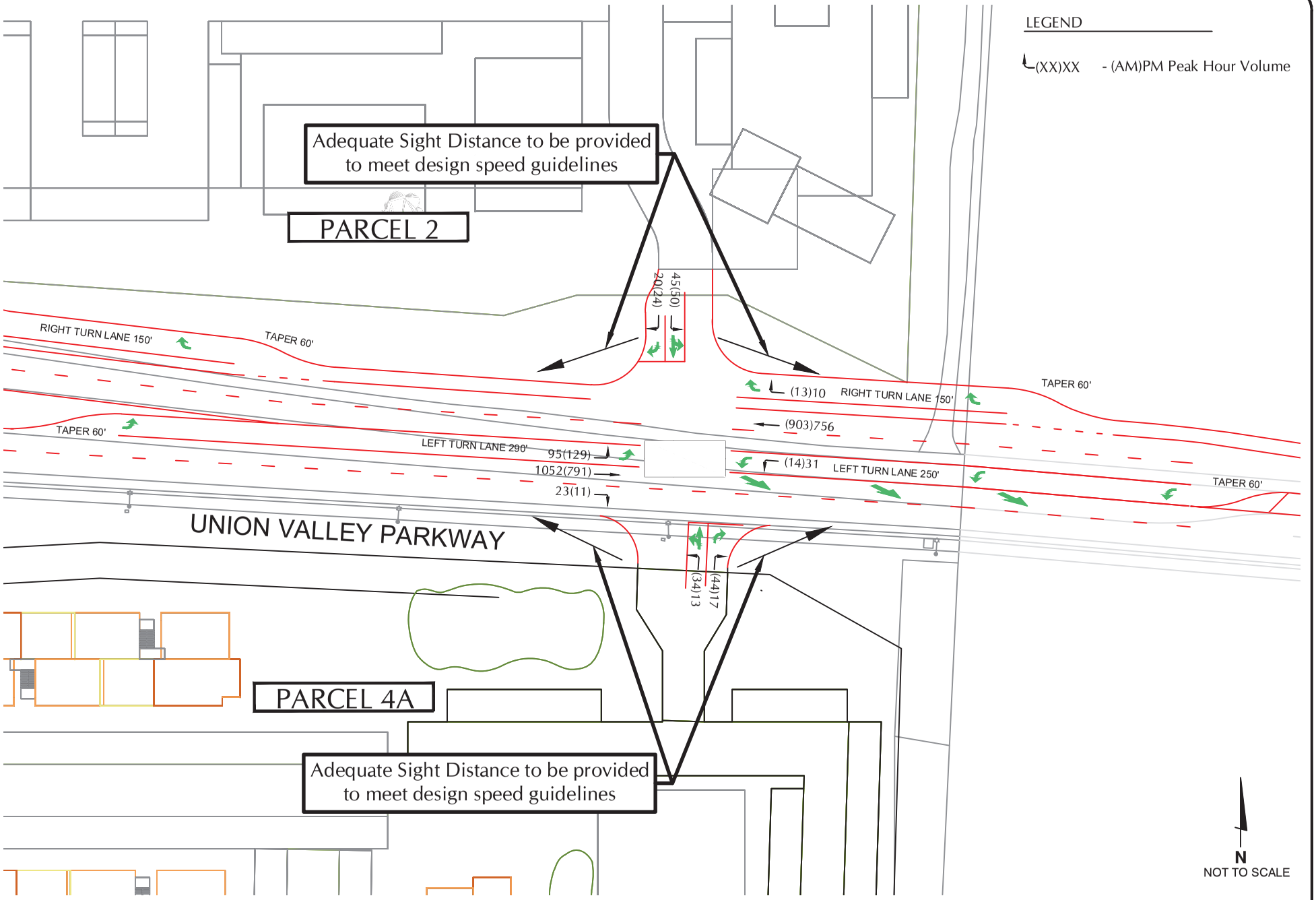
Table 15
PM Peak Hour Driveway Queues - Cumulative + Project Conditions

Intersection	95th Queue Length
	Cumulative + Project
Orcutt Road/Parcel 1&2 Driveways	
EB Parcel 1 Driveway Left + Thru + Right	1 Vehicle
WB Parcel 2 Driveway Left + Thru + Right	1 Vehicle
SB Orcutt Road Left	0 Vehicle
NB Orcutt Road Left	1 Vehicle
Union Valley Parkway/Parcel 2 Easterly & Parcel 4 Driveways	
EB Union Valley Parkway Left	1 Vehicle
WB Union Valley Parkway Left	1 Vehicle
SB Parcel 2 Easterly Driveway Left	1 Vehicle
SB Parcel 2 Easterly Driveway Right	1 Vehicle
NB Parcel 4 Driveway Left	1 Vehicle
NB Parcel 4 Driveway Right	1 Vehicle
Union Valley Parkway/Parcel 2 Westerly Driveway	
SB Parcel 2 Westerly Driveway Right	1 Vehicles
Orcutt Road/Parcel 3 Northerly Driveway	
EB Parcel 3 Northerly Driveway Right	0 Vehicle
Orcutt Road/Parcel 3 Southerly Driveway	
EB Parcel 3 Southerly Driveway Left + Right	1 Vehicle
NB Orcutt Road Left	0 Vehicle
Orcutt Road/Parcel 5 Driveway	
WB Parcel 5 Driveway Left + Right	1 Vehicle
SB Orcutt Road Left	1 Vehicle

The data presented in Tables 14 and 15 show that all the approaching movements at the Project driveways are forecast to have less than 2 vehicles in queue.

UVP/Parcel 2 Easterly & Parcel 4 Driveways

As requested by City staff, the UVP/Parcel 2 Easterly & Parcel 4 Driveway intersection was analyzed. Figure 16 presents the storage length, Cumulative + Project traffic volumes, and LOS at this intersection. As shown, the driveways are forecast to operate in the LOS C range and there is adequate left-turn storage on UVP for the full access driveway. Sight distances at the driveways will be assessed in more detail during the development review stage of the Project to ensure that the minimum requirements meet the Caltrans minimum sight distance standard for the 50 MPH design speed on UVP (430 feet).



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STORAGE LENGTH, CUMULATIVE + PROJECT TRAFFIC VOLUMES, AND LOS AT UVP/PARCEL 2 EASTERLY & PARCEL 4 DRIVEWAYS

FIGURE 16

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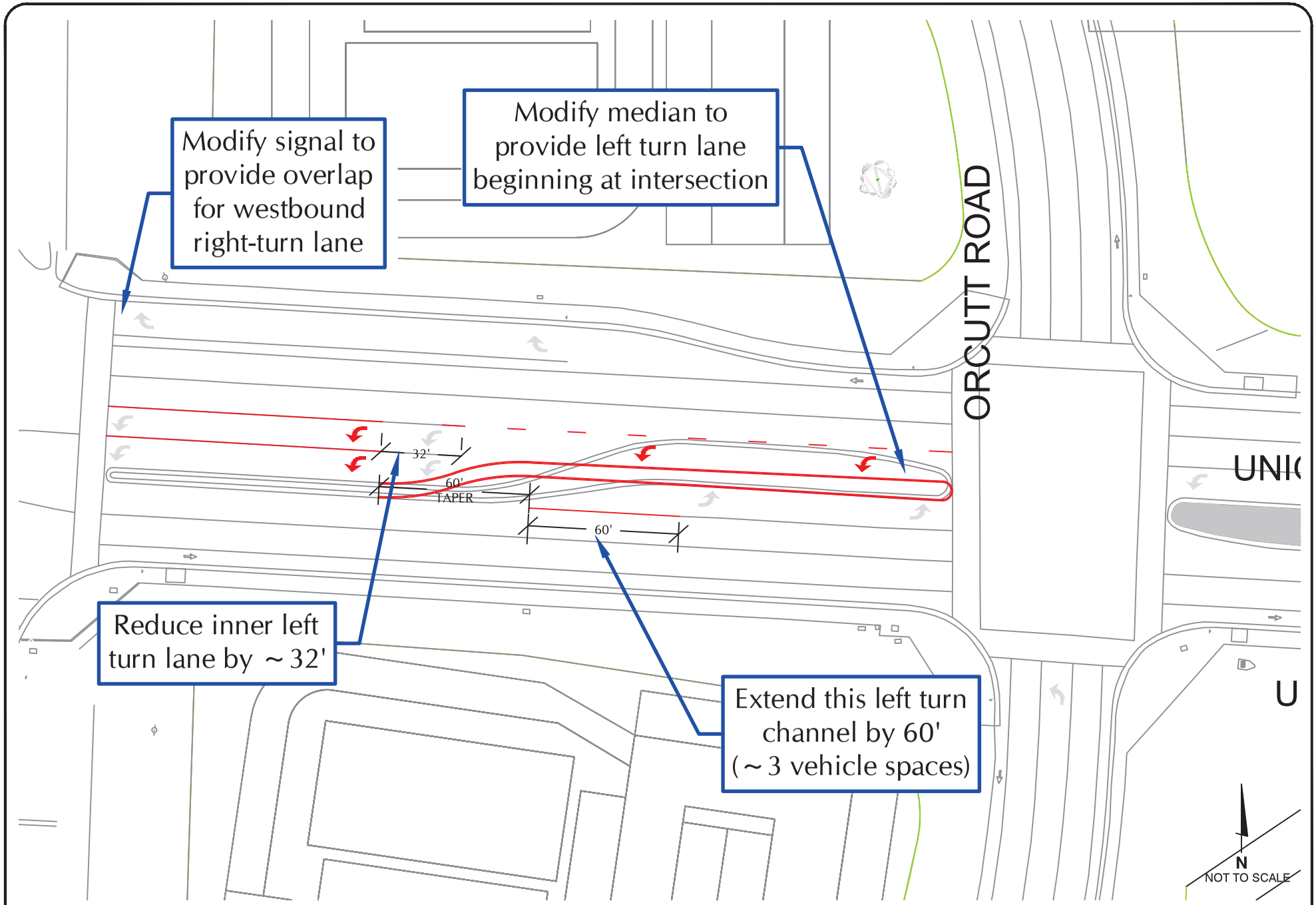
UVP QUEUING ANALYSIS

City staff and the peer review traffic consultant requested a queueing analysis for the UVP intersections adjacent to the Project site to determine if future vehicle queues will be accommodated in the available storage. The analysis assumes improvements to the median on UVP as shown in Figure 17. These median improvements increase the eastbound left-turn lane storage to 185 feet at the UVP/Orcutt Road intersection and the overall storage provided for the westbound dual left-turn lanes to 445 feet at the UVP/Orcutt Expressway intersection. The analysis also assumes a protected overlap westbound right-turn at the UVP/Orcutt Expressway intersection. The analysis reviews queue forecasts for the left-turn lanes and the adjacent through lanes under Cumulative + Project scenarios.

The queueing analysis was completed using the SYNCHRO software program. The SYNCHRO software implements the Highway Capacity Manual (HCM) operations methodology and predicts both "50th Percentile" and "95th Percentile" queue forecasts for the peak period. The 50th percentile queue forecasts represent the average queues during the peak period. The 95th percentile queue forecasts represent the peak queues during the peak period and are recommended for design purposes. Worksheets showing the queue forecasts are contained in the Technical Appendix. Tables 16 and 17 summarize the storage along with the average (50^{th}) and peak (95^{th}) queue forecasts for UVP intersections adjacent to the site.

Table 16
Cumulative + Project AM Peak Hour
Storage Length and Left-Turn Queues and Storage Requirements

Intersection	Storage Length	50^{TH} % Queue	95^{th} % Queue
UVP/Orcutt Expressway			
• WB Left-Turn #1	445 Feet	124 Feet	207 Feet
• WB Left-Turn #2		130 Feet	188 Feet
• WB Through #1	335 Feet	73 Feet	113 Feet
• WB Through #2	335 Feet	65 Feet	140 Feet
• SB Left-Turn #1	615 Feet	142 Feet	211 Feet
• SB Left-Turn #2	615 Feet	174 Feet	231 Feet
UVP/Orcutt Road			
• EB Left-Turn	185 Feet	90 Feet	114 Feet
• EB Through #1	390 Feet	105 Feet	155 Feet
• EB Through #2	390 Feet	184 Feet	289 Feet
• WB Left-Turn	270 Feet	49 Feet	109 Feet
• NB Left-Turn	245 Feet	102 Feet	156 Feet
• SB Left-Turn	175 Feet	24 Feet	60 Feet



Associated Transportation Engineers

LEFT TURN CHANNELS AT UVP/ORCUTT ROAD AND ORCUTT EXPY

FIGURE 17

GM- ATE#21069

Table 17
Cumulative + Project PM Peak Hour
Storage Length and Left-Turn Queues and Storage Requirements

Intersection	Storage Length	50TH % Queue	95th % Queue
UVP/Orcutt Expressway			
• WB Left-Turn #1	445 Feet	96 Feet	155 Feet
• WB Left-Turn #2		95 Feet	121 Feet
• WB Through #1	335 Feet	53 Feet	120 Feet
• WB Through #2	335 Feet	59 Feet	110 Feet
• SB Left-Turn #1	615 Feet	204 Feet	314 Feet
• SB Left-Turn #2	615 Feet	246 Feet	339 Feet
UVP/Orcutt Road			
• EB Left-Turn	185 Feet	104 Feet	135 Feet
• EB Through #1	390 Feet	209 Feet	369 Feet
• EB Through #2	390 Feet	253 Feet	384 Feet
• WB Left-Turn	270 Feet	39 Feet	56 Feet
• NB Left-Turn	245 Feet	77 Feet	118 Feet
• SB Left-Turn	175 Feet	27 Feet	66 Feet

The data presented in Tables 16 and 17 indicate that all of the storage lengths at the intersections meet the 50th and 95th percentile queue forecasts with the proposed improvements of the median and the protected overlap movement.

ACCIDENT ANALYSIS

An accident analysis was completed to evaluate the accident rates at the key intersections within the UVP corridor adjacent to the Project site, which include UVP/Foxenwood Lane, UVP/Orcutt Expressway, UVP/Orcutt Road, UVP/Hummel Drive, and UVP/Bradley Road. Accident data was obtained from the City of Santa Maria for the most current 3-year period of accident records available (copy of 2018-2020 accident data is attached).

It is important to note that accident data is used as a screening tool to identify potential safety problems. The rate of accidents was calculated for each intersection and then compared to California statewide averages for similar facilities to identify potential safety issues. By nature, accident rates experienced on a facility are often higher than the statewide average rate for similar facilities since the statewide averages are comprised of lower-than-average rates + higher-than-average rates (lower + higher = average).

If the accident rate experienced on a facility is higher than the statewide average, the Caltrans significance test is performed to determine if the number of accidents that occurred on the facility is statistically significant. If the number of accidents experienced is statistically significant, more detailed safety investigations are performed to determine if there are accident patterns that can be corrected by changing design features of the facility (e.g., widen traffic lanes, widen roadway shoulders, change roadway curvatures, add signs, install traffic signals, etc.).

Accident rates were calculated for the each of the UVP intersections adjacent to the Project stie using the 3-year accident histories. The "area of influence" for each intersection is defined as within 250 feet of the intersection. The rate of accidents was calculated and then compared to California statewide average for similar facilities. Table 18 lists the actual rate of accidents for the 3-year period and compares the rates to the California statewide averages for similar intersections (see attached accident rate calculations for more details).

Table 18
UVP Intersections - Accident Rates

Location	# Accidents	Accident Rate(a)	Statewide Average Rate(a)
UVP Foxenwood Lane	1 Accident	0.12 per mev	0.24 per mev
UVP/Orcutt Expressway	12 Accidents	0.35 per mev	0.42 per mev
UVP/Orcutt Road	9 Accidents	0.53 per mev	0.42 per mev
UVP/Hummel Drive	5 Accidents	0.31 per mev	0.24 per mev
UVP/Bradley Road	4 Accidents	0.15 per mev	0.42 per mev

(a) Accident rates per million entering vehicles (mev).

UVP/Foxenwood Lane. As shown in Table 18, there was 1 accident at this intersection within the 3-year period. The rate of accidents was 0.12 accidents per million entering vehicles and the California statewide average for similar intersections is 0.24 accidents per million entering vehicles. Thus, the rate of accidents is below the statewide average and further investigation is not required.

UVP/Orcutt Expressway. As shown in Table 18, there were 12 accidents at this intersection within the 3-year period. The rate of accidents was 0.35 accidents per million entering vehicles and the California statewide average for similar intersections is 0.42 accidents per million entering vehicles. Thus, the rate of accidents is below the statewide average and further investigation is not required.

UVP/Orcutt Road. As shown in Table 18, there were 9 accidents at this intersection within the 3-year period. The rate of accidents was 0.53 accidents per million entering vehicles and the California statewide average for similar intersections is 0.42 accidents per million entering vehicles. Thus, the rate of accidents is slightly higher that the statewide average. The Caltrans significance test was performed to determine if the number of accidents that occurred is statically significant (a worksheet showing the Caltrans formula and the significance test is included in the Technical Appendix). The results show that the number of accidents required to be statistically significant is 15 accidents within the 3-year period. The number of accidents that occurred during the 3-year period was 9, which is statistically insignificant. Thus, further investigation of the accident history is not warranted.

UVP/Hummel Drive. As shown in Table 18, there were 5 accidents at this intersection within the 3-year period. The rate of accidents was 0.31 accidents per million entering vehicles and the California statewide average for similar intersections is 0.24 accidents per million entering vehicles. Thus, the rate of accidents is slightly higher that the statewide average. The Caltrans significance test was performed to determine if the number of accidents that occurred is statically significant (a worksheet showing the Caltrans formula and the significance test is included in the Technical Appendix). The results show that the number of accidents required to be statistically significant is 10 accidents within the 3-year period. The number of accidents that occurred during the 3-year period was 5, which is statistically insignificant. Thus, further investigation of the accident history is not warranted.

UVP/Bradley Road. As shown in Table 18, there were 4 accidents at this intersection within the 3-year period. The rate of accidents was 0.15 accidents per million entering vehicles and the California statewide average for similar intersections is 0.42 accidents per million entering vehicles. Thus, the rate of accidents is below the statewide average and further investigation is not required.

SIGNAL WARRANT ANALYSIS

As requested by City Staff, a signal warrant analysis was conducted at the UVP/Hummel Drive intersection. The California Manual on Uniform Traffic Control Devices (CA MUTCD) warrants were applied using Cumulative + Project volumes. The posted speed limit on UVP is 50 MPH, therefore the rural warrants were utilized (traffic signal warrant worksheets contained in the Technical Appendix).

The UVP/Hummel Drive intersection is STOP-sign controlled on the Hummel Drive approaches and free flow on the UVP approaches. As noted above, the signal warrant analysis was completed using the Existing and Cumulative + Project volumes. Table 19 presents the results of the traffic signal warrant analysis.

Table 19
Signal Warrant Analysis Results – UVP/Hummel Drive

Scenario	Warrant #	Type	Warrant Satisfied?
Existing	3	Peak Hour Count and Cumulative Forecast	Yes
Cumulative + Project	3	Peak Hour Count and Cumulative Forecast	Yes

The data presented in Table 19 show that the existing volumes at the UVP/Hummel Drive intersection meet the Peak Hour warrant. It is also noted that the intersection currently operates at LOS D, which exceeds the County's LOS C policy. The data indicates that signals are required without the addition of the Project's traffic.

The data presented in Table 19 also show that the Cumulative + Project volumes at the intersection meet the Peak Hour warrant. The intersection is forecast to operate at LOS F under Cumulative + Project conditions further indicating that traffic signals should be considered for this location.

RECOMMENDED IMPROVEMENTS

The traffic analysis presented in Tables 8-11 found that the UVP/Hummel Drive intersection would operate in the LOS D - F range which exceeds the County's LOS C Standard. As noted previously, the intersection meets the Peak Hour warrant for the Existing and Cumulative + Project conditions. The following section review improvement measures that have been identified for the UVP/Hummel Drive intersection.

UVP/Hummel Drive Intersection

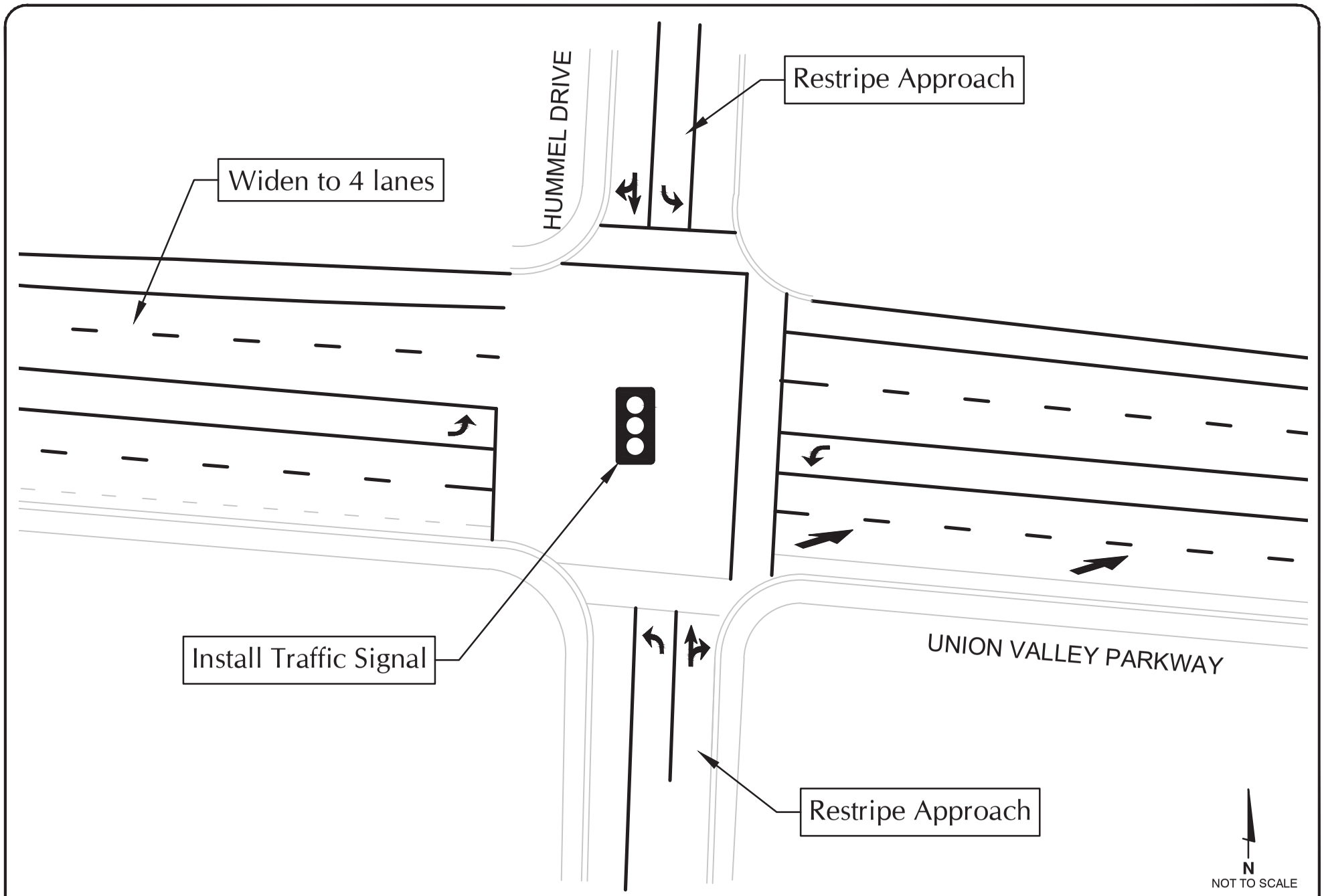
County staff have indicated that the ultimate plan for the UVP adjacent to the Hummel Drive intersection is to widen UVP from two lanes to four lanes with left-turn channelization. This widening will occur west of Hummel Drive to match the four lanes in front of the Project site. In addition, County staff indicated that traffic signals may be installed at the UVP/Hummel Drive intersection in the future. Figure 18 provides a schematic illustration of the future intersection design with the widening. Table 20 presents the Existing + Project and Cumulative + Project levels of service forecasts for the intersection assuming implementation of the improvements.

Table 20
Intersection Levels of Service With Improvements

Intersection	Existing + Project		Cumulative + Project	
	Existing Geometry	With Improvements	Existing Geometry	With Improvements
UVP/Hummel Drive AM(a)	> 50.0 sec. / LOS F	0.47 / LOS A	> 50.0 sec / LOS F	0.49 / LOS A
UVP/Hummel Drive PM(a)	> 50.0 sec. / LOS F	0.49 / LOS A	> 50.0 sec / LOS F	0.52 / LOS A

(a) Assumes UVP widening and traffic signal installation.

The data presented in Table 20 show that with the planned improvements, the UVP/Hummel Drive intersection will operate in the LOS A range.



ASSOCIATED TRANSPORTATION ENGINEERS

UNION VALLEY PARKWAY/HUMMEL DRIVE - FUTURE INTERSECTION DESIGN

FIGURE 18

GM- ATE#21069

VMT ANALYSIS

Per the State's Natural Resource Agency Updated Guidelines for the Implementation of the CEQA adopted in 2018, Vehicle Miles Traveled (VMT) has been designated as the most appropriate measure of transportation impacts. "Vehicle Miles Traveled" refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. For land use projects, vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact.

The Governor's Office of Planning and Research (OPR) published a Technical Advisory on Transportation that includes recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures[5]. The Technical Advisory provides screening tools to determine when a project may have a significant VMT impacts. The City of Santa Maria's adopted Environmental Procedures and Guidelines manual contain thresholds and methodologies for assessing potential VMT impacts for Project located in the City.

Criteria For Mixed-Use Developments

The City's Environmental Procedures and Guidelines manual ("CEQA Guidelines") provides the following guidance for mixed-use projects:

> "For mixed use projects, the CEQA Guidelines recommend either analyzing each component of the proposed project separately or focusing on the predominant land use."

Given that the residential portion of the Project accounts for approximately 29% of the primary trips generated at the site, each component of the Project is analyzed separately.

VMT Analysis - Residential

The potential VMT impacts associated with the residential portion of the Project are reviewed below.

VMT Thresholds

Consistent with CEQA Guidelines Section 15064.7, Thresholds of Significance, the City of Santa Maria has adopted the countywide baseline average of home-based VMT per population for residential projects and thresholds set at 85% of these countywide baseline averages for determining whether a project's VMT will be significant. The thresholds will be periodically updated as necessary during normal updates of the model baseline (approximately every five years).

[5] Technical Advisory on Evaluating Transportation Impacts in CEQA, Governor's Office of Planning and Research, December 2018.

New residential projects (single family, multi-family, mobile home) are required to generate less than 6.17 VMT per person (one-way trip). Projects that exceed this threshold may have a significant effect on the environment and will require project revisions and/or mitigation measures may be implemented to reduce the impact to less than significant. Mitigation strategies would be specific to the particular project and could include introducing mixed-use components, alternative transportation opportunities, pedestrian and/or transit network improvements, and traffic calming measures.

VMT Analysis

City staff indicated that the City's VMT calculator was not available for the VMT analysis as the Project is currently located outside of the City limits. The City's CEQA Guidelines, however, contain screening maps to determine the VMT generation of residential projects located in different zones within the City and the adjacent County areas (screening map contained in the Technical Appendix). The screening map indicates that the residential portion of the Project would generate up to the countywide average home based VMT per population of 7.26. As discussed in the trip generation section of this report, there will be some internal trips that travel between the various parcels that comprise the site and would not generate new VMT. The internal capture trips include trip interactions between the residential uses and the adjacent commercial uses. The ITE mixed-use traffic model shows that up to 40% of the trips generated by the residential component of the Project would be internal to the site. To be conservative, the traffic study assumes that 25% of the Project-generated trips are internal. This 25% mixed-use factor was applied to the City's VMT screening map forecasts to determine if the Project would exceed the City's VMT impact thresholds. Table 21 presents the results of the analysis.

Table 21
Residential Component VMT Comparison to City Threshold

City of Santa Maria Screening Map VMT Estimate	VMT Estimate with Mixed-Use Reduction	City of Santa Maria VMT Threshold	Potential Impact?
7.26 VMT Per Population	5.45 VMT per Population	6.17 VMT Per Capita	NO

The data presented in Table 21 indicate that the residential component of the Project would generate 7.26 VMT per population (as shown on CEQA Guidelines screening map) which would exceed the City's threshold of 6.17 VMT per capita. With the mixed-use adjustments, the residential component VMT would be reduced to 5.45 VMT per population which would be below the City's impact threshold. This portion of the mixed-use project would therefore have a less than significant impact based on City thresholds.

VMT Analysis Mini-Storage

The potential VMT impacts associated with the mini-storage portion of the Project are reviewed below.

Screening Criteria

Consistent with the recommendations in the OPR Technical Advisory, Section 4.3.1 of the City of Santa Maria's CEQA Guidelines establishes screening criteria for certain projects that are exempt from performing a detailed VMT analysis and may be presumed to have a less than significant VMT impact. Section 4.3.1-A states that:

> "The following discretionary development projects are not subject to VMT analysis:
>
> 3. Small discretionary projects that would generate or attract fewer than 110 daily trips (per CEQA)."

VMT Analysis

The mini-storage component of the Project consists of approximately 25,000 SF of development that is forecast to generate 36 ADT, which is less than the 110 ADT screening criteria. This component of the Project therefore satisfies the screening criteria for small discretionary projects and may be presumed to result in less than significant VMT impacts in accordance with the City of Santa Maria CEQA Guidelines.

VMT Analysis – Retail

The potential VMT impacts associated with the retail portion of the Project are reviewed below.

Screening Criteria

Consistent with the recommendations in the OPR Technical Advisory, Section 4.3.1 of the City of Santa Maria's CEQA Guidelines establishes screening criteria for certain projects that are exempt from performing a detailed VMT analysis and may be presumed to have a less than significant VMT impact. Section 4.3.1-A states that:

> "The following discretionary development projects are not subject to VMT analysis:
>
> 1. A discretionary retail development project that is 50,000 square feet or less. Does not apply to regional shopping centers that predominately serve customers that live outside of the City limits.

The retail portion of the Project is greater than 50,000 SF thus a VMT analysis is required.

VMT Thresholds

The Governor's Office of Planning and Research (OPR) published a Technical Advisory on Transportation that includes recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. The Technical Advisory provides the following guidance for analyzing mixed-use projects:

> **"**Mixed-Use Projects
>
> Lead agencies can evaluate each component of a mixed-use project independently and apply the significance threshold for each project type included (e.g., residential and retail). Alternatively, a lead agency may consider only the project's dominant use. In the analysis of each use, *a project should take credit for internal capture*. Combining different land uses and applying one threshold to those land uses may result in an inaccurate impact assessment."

The City of Santa Maria has updated their Environmental Procedures and Guidelines manual to provide thresholds and methodologies for assessing potential VMT impacts for Project's located in the City. Pursuant to guidance set forth in CEQA Guidelines Section 15064.3, for retail development projects, redevelopment projects, medical development projects, and infrastructure projects that require a VMT analysis, the City has adopted "net change" in VMT as the applicable threshold for determining a significant impact (i.e., if the with-project VMT is greater than the without-project VMT).

VMT Modeling

DKS Associates was retained to prepare a VMT analysis for the retail portion of the Project using the SBCAG model. The SBCAG model is considered the most appropriate tool for the analysis given that the City of Santa Maria SB 743 thresholds were developed using the SBCAG 2010 baseline. The net VMT change associated with the retail portion of the Project was analyzed by comparing daily origin-destination VMT with and without the Project. It is noted that the baseline model was updated to include the residential portion of the Project in order to account for the internal capture of trips that would occur in the mixed-use development, as directed in the OPR Technical Advisory.

VMT Analysis Results

Table 22 presents the VMT results of the "Baseline" and "Baseline With Project" model runs and shows the net VMT change associated with the retail portion of the Project.

Table 22
Retail Component – Net Change in VMT

Geography	Baseline VMT	Baseline With Retail VMT	Net VMT
Countywide (a)	11,051,821 (b)	11,008,518	-43,303

(a) Includes trips to, from, and within Santa Barbara County.
(b) Includes residential portion of the proposed project.

The data presented in Table 22 show that the retail portion of the Project would result in a net decrease of 43,303 VMT. Based on the City of Santa Maria's VMT thresholds, retail projects that result in a negative change in VMT indicate no VMT impacts. The results of the model analysis confirm the qualitative analysis contained in the ATE traffic study which concluded that the retail portion of the Project would result in a reduction in VMT due to the lack of retail services in the area and the mixed-use nature of the Project.

■ ■ ■

REFERENCES AND PERSONS CONTACTED

Associated Transportation Engineers

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Glenn Manaois, Transportation Engineer I
Richard Pool, Principal Engineer
Jiho Ha, Transportation Engineer II

Persons Contacted

Mark Mueller, PE, City of Santa Maria
Dana Eady, City of Santa Maria

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Technical Advisory on Evaluating Transportation Impacts in CEQA, Governor's Office of Planning and Research, December 2018.

TECHNICAL APPENDIX

CONTENTS:

LEVEL OF SERVICE DEFINITIONS

ASSOCIATED TRANSPORTATION ENGINEERS

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Since 1978

Richard L. Pool, P.E.
Scott A. Schell

Signalized Intersection Level of Service Definitions

LOS	Delay (a)	V/C Ratio	Definition
A	< 10.0	< 0.60	Progression is extremely favorable. Most vehicles arrive during the green phase. Many vehicles do not stop at all.
B	10.1 - 20.0	0.61 - 0.70	Good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.
C	20.1 - 35.0	0.71 - 0.80	Only fair progression, longer cycle lengths, or both, result in higher cycle lengths. Cycle lengths may fail to serve queued vehicles, and overflow occurs. Number of vehicles stopped is significant, though many still pass through intersection without stopping.
D	35.1 - 55.0	0.81 - 0.90	Congestion becomes more noticeable. Unfavorable progression, long cycle lengths and high v/c ratios result in longer delays. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	55.1 - 80.0	0.91 - 1.00	High delay values indicate poor progression, long cycle lengths and high v/c ratios. Individual cycle failures are frequent
F	> 80.0	> 1.00	Considered unacceptable for most drivers, this level occurs when arrival flow rates exceed the capacity of lane groups, resulting in many individual cycle failures. Poor progression and long cycle lengths may also contribute to high delay levels.

(a) Average control delay per vehicle in seconds.

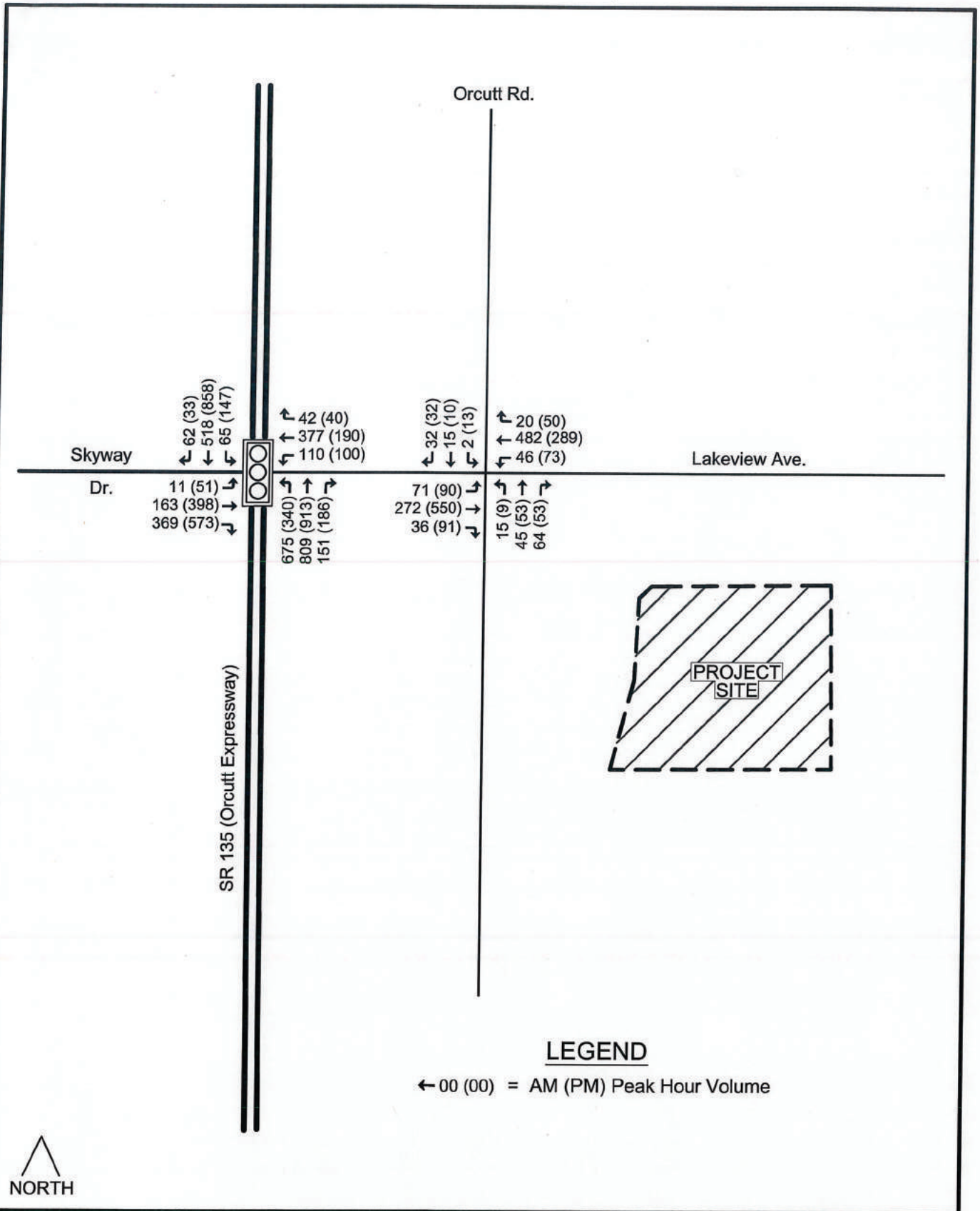
Unsignalized Intersection Level of Service Definitions

The HCM[1] uses *control delay* to determine the level of service at unsignalized intersections. Control delay is the difference between the travel time actually experienced at the control device and the travel time that would occur in the absence of the traffic control device. Control delay includes deceleration from free flow speed, queue move-up time, stopped delay and acceleration back to free flow speed.

LOS	Control Delay Seconds per Vehicle
A	< 10.0
B	10.1 - 15.0
C	15.1 - 25.0
D	25.1 - 35.0
E	35.1 - 50.0
F	> 50.0

[1] Highway Capacity Manual, National Research Board, 2016.

TRAFFIC COUNT DATA



PINNACLE TRAFFIC ENGINEERING

Orcutt Gas Station
- Traffic and Circulation Study -

FIGURE 2B
EXISTING
TRAFFIC VOLUMES

Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
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www.metrotrafficdata.com

Turning Movement Report

Prepared For:
Central Coast Transportation Consulting
895 Napa Avenue, Suite A-6
Morro Bay, CA 93442

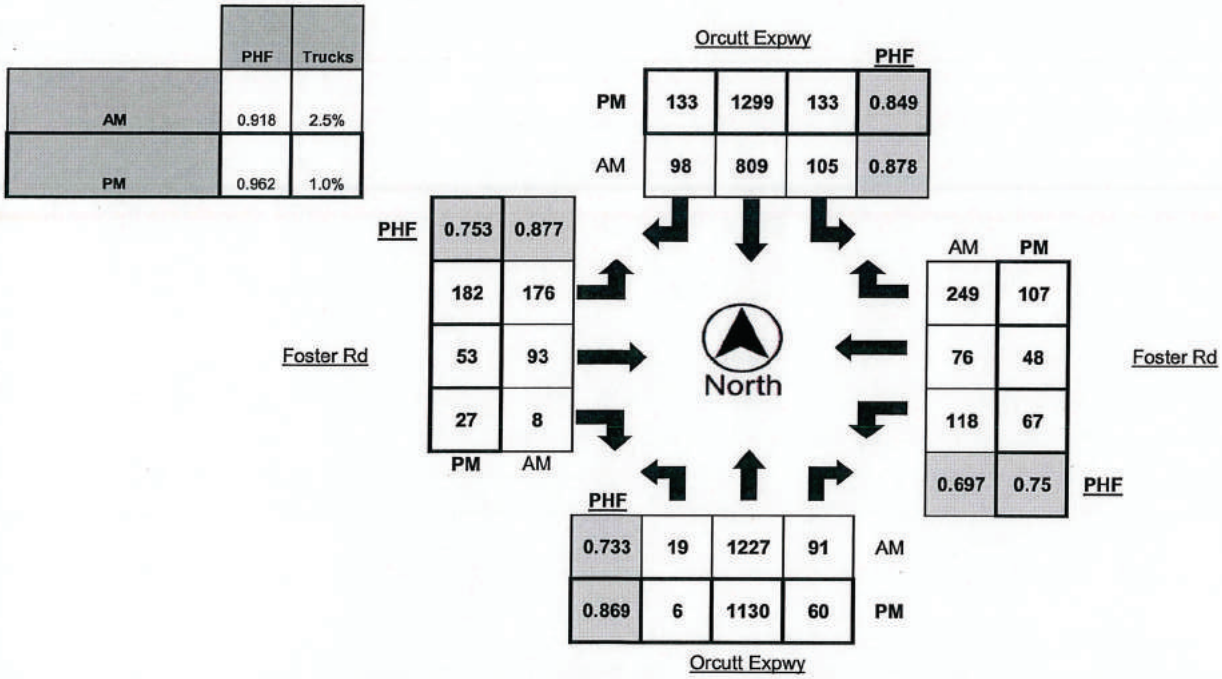
LOCATION Foster Rd @ Orcutt Expwy
LATITUDE 34.8831
COUNTY Santa Barbara
LONGITUDE -120.4366
COLLECTION DATE Tuesday, December 17, 2019
WEATHER Clear

	Northbound				Southbound				Eastbound				Westbound			
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	2	164	20	8	39	171	13	9	22	26	0	3	24	13	48	5
7:15 AM - 7:30 AM	5	234	41	7	52	195	18	9	35	42	2	3	35	25	88	3
7:30 AM - 7:45 AM	2	290	15	5	21	248	19	11	40	21	1	2	47	27	85	2
7:45 AM - 8:00 AM	4	432	20	7	15	194	32	9	53	13	2	3	19	13	39	1
8:00 AM - 8:15 AM	8	271	15	3	17	172	29	8	48	17	3	2	17	11	37	1
8:15 AM - 8:30 AM	4	248	18	5	42	160	31	13	47	17	1	1	12	9	55	3
8:30 AM - 8:45 AM	5	223	14	6	16	152	22	9	18	4	2	3	25	12	37	2
8:45 AM - 9:00 AM	4	247	7	10	16	156	30	9	38	18	0	2	20	14	37	3
TOTAL	34	2109	150	51	218	1448	194	77	301	158	11	19	199	124	426	20

	Northbound				Southbound				Eastbound				Westbound			
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
2:00 PM - 2:15 PM	0	248	15	10	41	222	12	4	37	14	3	2	31	23	60	7
2:15 PM - 2:30 PM	1	217	6	12	25	217	29	6	27	7	3	1	12	15	30	3
2:30 PM - 2:45 PM	3	229	13	4	35	231	29	14	26	10	5	2	8	8	21	0
2:45 PM - 3:00 PM	0	232	18	11	53	243	30	6	26	20	9	3	10	13	24	2
3:00 PM - 3:15 PM	3	237	17	9	23	255	32	10	39	11	3	2	27	29	59	4
3:15 PM - 3:30 PM	2	280	21	9	28	233	30	7	31	17	5	1	22	14	32	2
3:30 PM - 3:45 PM	2	272	18	11	28	260	24	8	54	12	1	4	23	13	35	1
3:45 PM - 4:00 PM	3	315	19	7	35	275	42	5	34	21	4	1	13	12	32	2
4:00 PM - 4:15 PM	2	262	25	7	37	295	42	2	48	16	6	1	11	12	16	0
4:15 PM - 4:30 PM	3	297	14	7	33	301	35	4	31	11	3	1	16	7	30	2
4:30 PM - 4:45 PM	2	291	12	2	24	258	33	0	44	15	11	1	12	10	18	1
4:45 PM - 5:00 PM	2	323	19	5	35	319	36	6	38	12	5	0	12	15	22	0
5:00 PM - 5:15 PM	1	279	18	4	34	334	31	4	60	19	8	0	23	13	23	0
5:15 PM - 5:30 PM	1	237	11	3	40	388	33	6	40	7	3	0	20	10	44	1
5:30 PM - 5:45 PM	1	222	14	6	27	315	22	4	31	9	4	1	11	8	24	0
5:45 PM - 6:00 PM	1	209	15	4	27	239	35	3	26	18	3	0	10	9	24	1
TOTAL	27	4150	255	111	525	4385	495	89	592	219	76	20	261	211	494	26

	Northbound				Southbound				Eastbound				Westbound			
PEAK HOUR	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:15 AM - 8:15 AM	19	1227	91	22	105	809	98	37	176	93	8	10	118	76	249	7
4:30 PM - 5:30 PM	6	1130	60	14	133	1299	133	16	182	53	27	1	67	48	107	2

	PHF	Trucks
AM	0.918	2.5%
PM	0.962	1.0%



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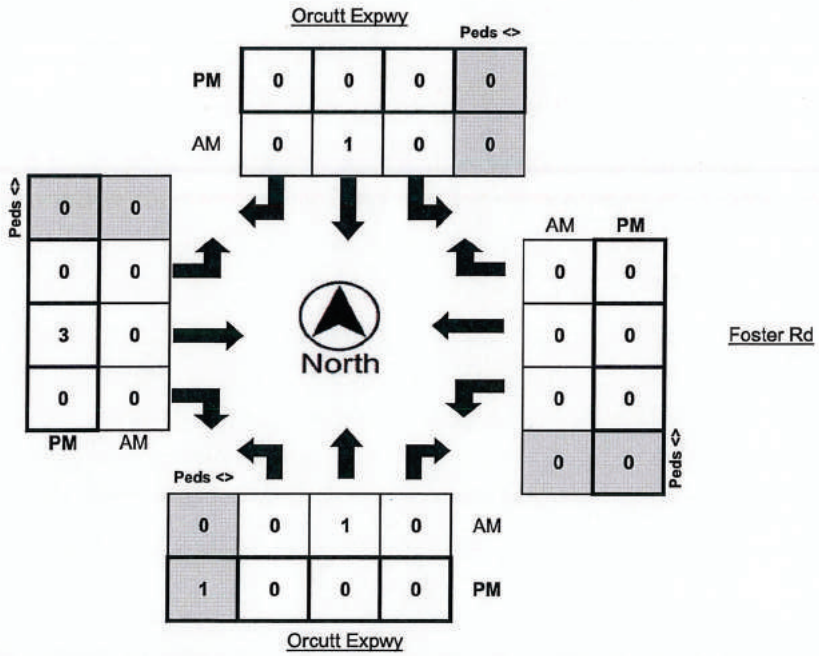
LATITUDE 34.8831
COUNTY Santa Barbara
LONGITUDE -120.4366
COLLECTION DATE Tuesday, December 17, 2019
WEATHER Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
TOTAL	0	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
2:00 PM - 2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM - 2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM - 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
3:00 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	2	0	0	0	1	0	4	0	0	0	1	0	0

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
PEAK HOUR	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:15 AM - 8:15 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	1	0	3	0	0	0	0	0	0

	Bikes	Peds
AM Peak Total	2	0
PM Peak Total	3	1



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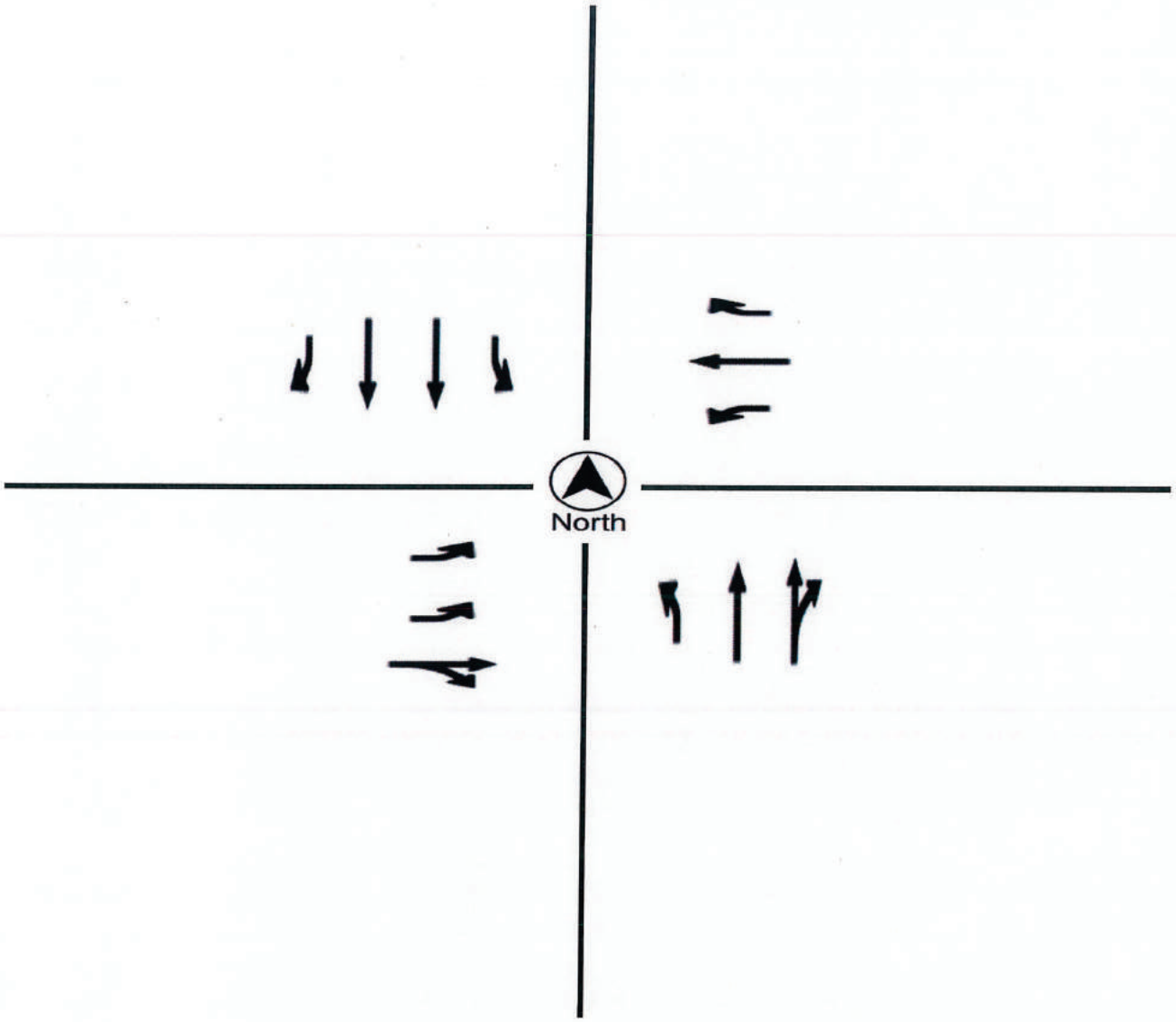
Turning Movement Report

Prepared For:
Central Coast Transportation Consulting
895 Napa Avenue, Suite A-6
Morro Bay, CA 93442

LOCATION	Foster Rd @ Orcutt Expwy	**N/S STREET**	Orcutt Expwy / Orcutt Expwy
COUNTY	Santa Barbara	**E/W STREET**	Foster Rd / Foster Rd
COLLECTION DATE	Tuesday, December 17, 2019	**WEATHER**	Clear
CYCLE TIME	102 Seconds	**CONTROL TYPE**	Signal

COMMENTS All approaches have protected left turns.



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Turning Movement Report

Prepared For:
Central Coast Transportation Consulting
895 Napa Avenue, Suite A-6
Morro Bay, CA 93442

LOCATION Union Valley Pkwy @ Foxenwood Ln
LATITUDE 34.8796
COUNTY Santa Barbara
LONGITUDE -120.4388
COLLECTION DATE Tuesday, December 17, 2019
WEATHER Clear

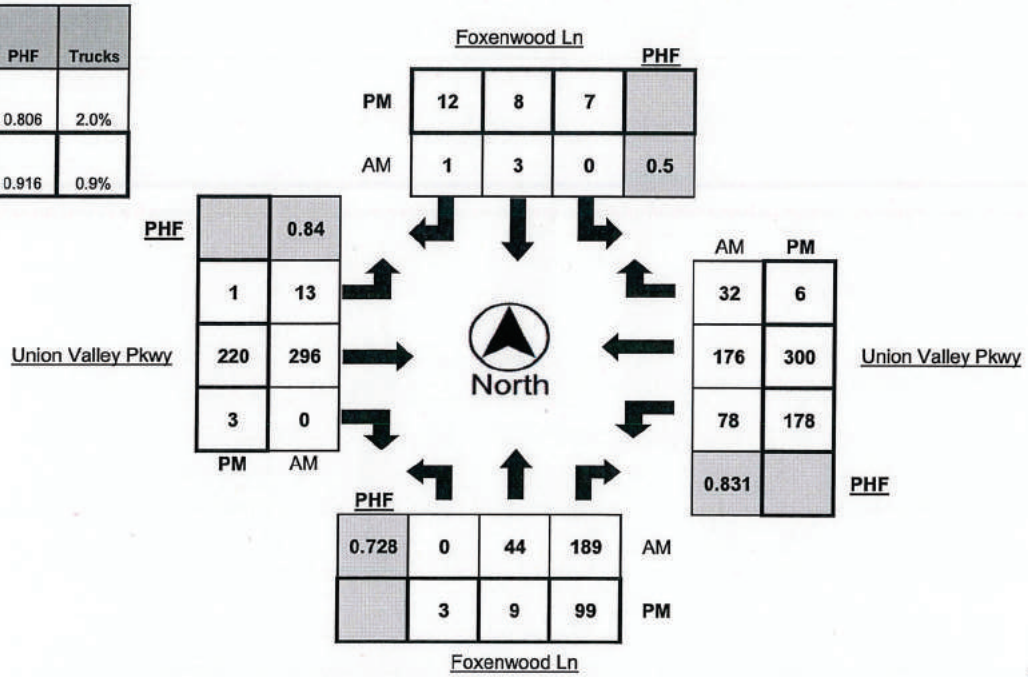
	Northbound				Southbound				Eastbound				Westbound			
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	0	7	42	0	0	0	0	0	2	49	0	0	8	27	2	1
7:15 AM - 7:30 AM	0	5	47	0	0	0	0	0	5	84	0	1	17	32	7	3
7:30 AM - 7:45 AM	0	12	45	2	0	2	0	0	3	76	0	2	17	39	6	0
7:45 AM - 8:00 AM	0	18	62	1	0	0	0	0	4	88	0	2	26	48	12	4
8:00 AM - 8:15 AM	0	9	35	0	0	1	1	0	1	48	0	1	18	57	7	1
8:15 AM - 8:30 AM	0	9	34	0	0	2	0	0	2	58	1	0	17	53	2	0
8:30 AM - 8:45 AM	0	2	35	0	0	1	0	0	1	44	0	2	22	55	3	1
8:45 AM - 9:00 AM	0	3	35	1	2	1	5	0	1	62	0	0	14	29	5	1
TOTAL	0	65	335	4	2	7	6	0	19	509	1	8	139	340	44	11

	Northbound				Southbound				Eastbound				Westbound			
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
2:00 PM - 2:15 PM	0	3	31	0	0	7	0	0	2	51	2	1	40	63	0	2
2:15 PM - 2:30 PM	0	2	21	0	0	3	2	0	1	64	1	0	37	50	0	2
2:30 PM - 2:45 PM	0	3	31	1	0	4	0	0	4	59	0	1	26	84	1	4
2:45 PM - 3:00 PM	0	3	29	0	0	5	1	0	2	47	0	1	35	67	1	2
3:00 PM - 3:15 PM	3	3	31	0	1	7	0	0	1	70	0	2	39	73	2	4
3:15 PM - 3:30 PM	0	4	37	0	0	7	3	0	3	45	0	1	35	77	3	1
3:30 PM - 3:45 PM	2	3	30	0	1	2	2	0	2	53	0	0	38	58	2	1
3:45 PM - 4:00 PM	0	2	22	0	1	3	2	0	0	57	1	1	30	68	0	1
4:00 PM - 4:15 PM	0	5	23	1	0	4	1	0	0	45	0	0	53	57	1	2
4:15 PM - 4:30 PM	0	2	21	0	0	2	2	0	0	62	0	0	37	76	0	1
4:30 PM - 4:45 PM	2	3	17	0	0	3	2	0	1	59	0	0	36	56	2	0
4:45 PM - 5:00 PM	0	2	33	1	1	2	1	0	0	48	0	0	38	77	1	2
5:00 PM - 5:15 PM	0	2	23	0	6	0	1	0	0	61	1	1	51	84	2	1
5:15 PM - 5:30 PM	1	2	26	1	0	3	8	0	0	52	2	1	53	83	1	1
5:30 PM - 5:45 PM	0	2	30	1	0	3	1	0	1	46	2	2	41	85	0	1
5:45 PM - 6:00 PM	0	1	25	0	5	2	0	0	2	42	2	0	39	57	1	2
TOTAL	8	42	430	5	15	57	26	0	19	861	11	11	628	1115	17	27

	Northbound				Southbound				Eastbound				Westbound			
PEAK HOUR	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:15 AM - 8:15 AM	0	44	189	3	0	3	1	0	13	296	0	6	78	176	32	8
4:30 PM - 5:30 PM*	3	9	99	2	7	8	12	0	1	220	3	2	178	300	6	4

*Uniform peak hour

	PHF	Trucks
AM	0.806	2.0%
PM	0.916	0.9%



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Turning Movement Report

Prepared For:
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895 Napa Avenue, Suite A-6
Morro Bay, CA 93442

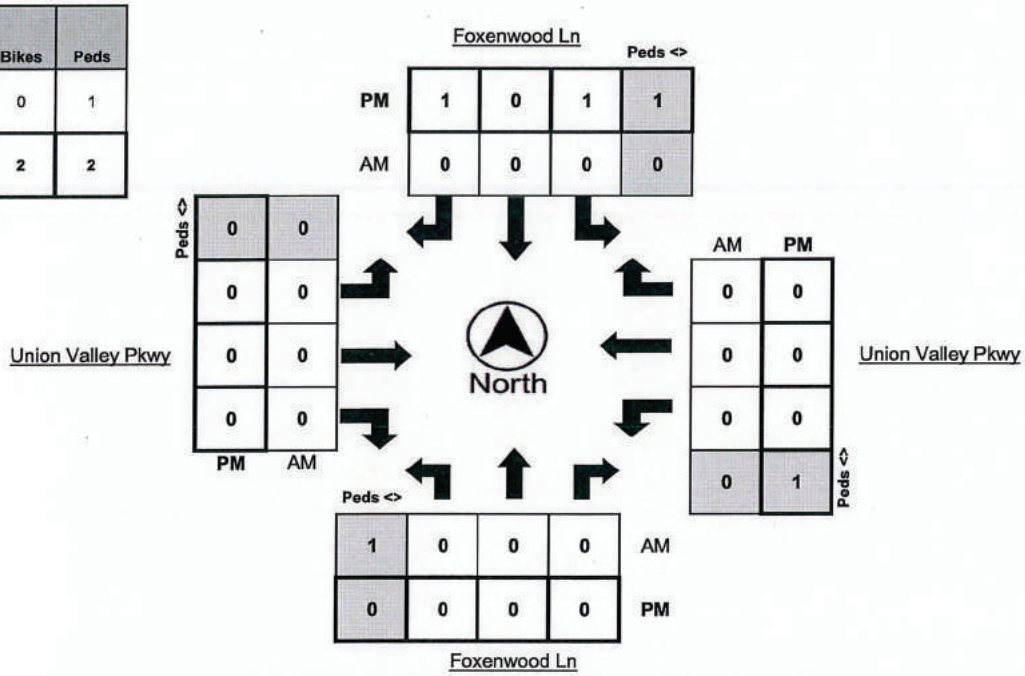
LOCATION Union Valley Pkwy @ Foxenwood Ln
LATITUDE 34.8796
COUNTY Santa Barbara
LONGITUDE -120.4388
COLLECTION DATE Tuesday, December 17, 2019
WEATHER Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
TOTAL	0	0	0	0	0	0	1	2	0	0	0	0	0	0	1	1

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
2:00 PM - 2:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
2:15 PM - 2:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
2:30 PM - 2:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
2:45 PM - 3:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
3:00 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 3:30 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
3:30 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	1	2	3	2	4	1	0	0	1	0	0	0	2

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
PEAK HOUR	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:15 AM - 8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
4:45 PM - 5:45 PM	0	0	0	1	1	0	1	0	0	0	0	1	0	0	0	0

	Bikes	Peds
AM Peak Total	0	1
PM Peak Total	2	2



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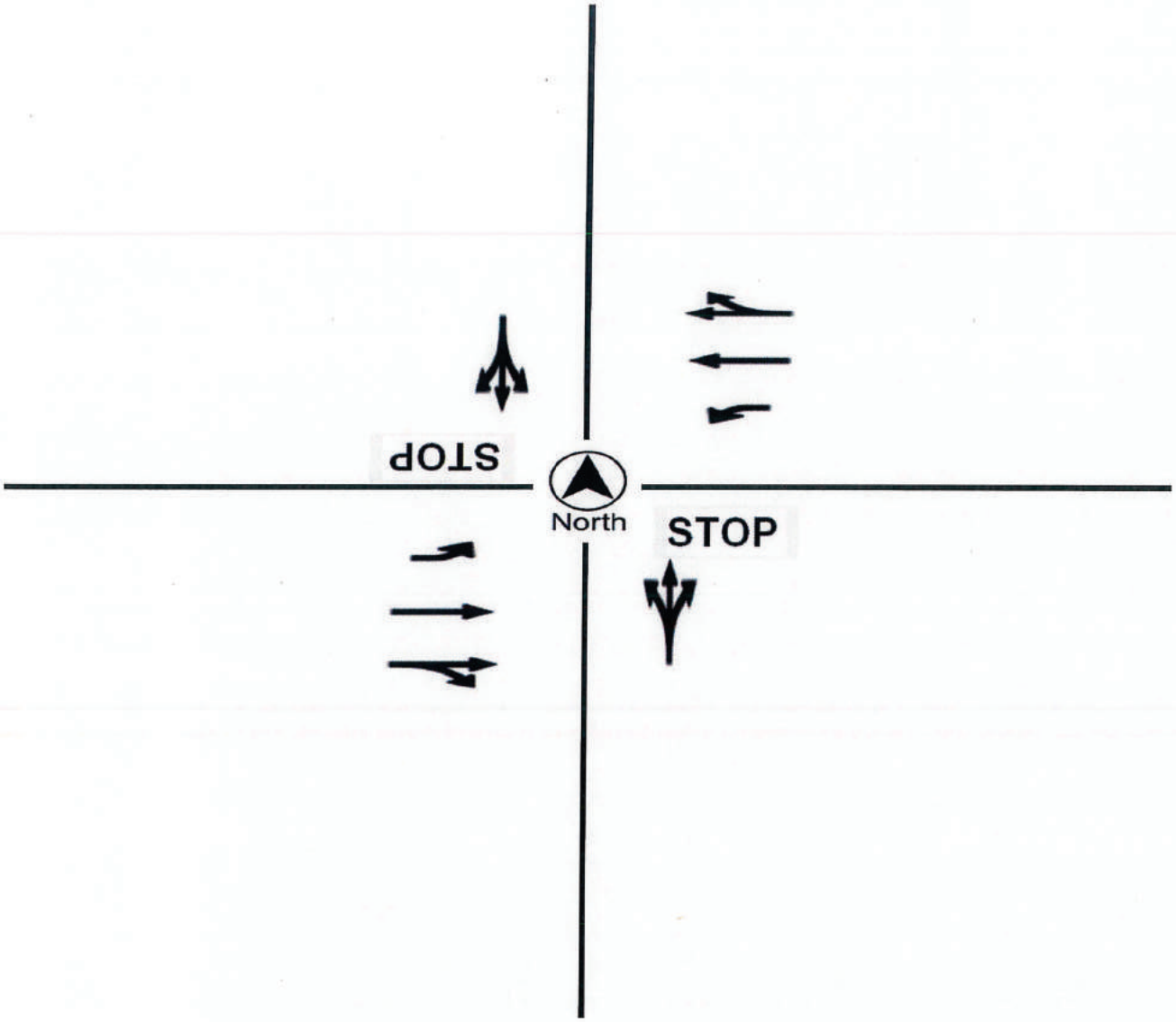
Turning Movement Report

Prepared For:
Central Coast Transportation Consulting
895 Napa Avenue, Suite A-6
Morro Bay, CA 93442

LOCATION	Union Valley Pkwy @ Foxenwood Ln	**N/S STREET**	Foxenwood Ln / Foxenwood Ln
COUNTY	Santa Barbara	**E/W STREET**	Union Valley Pkwy / Union Valley Pkwy
COLLECTION DATE	Tuesday, December 17, 2019	**WEATHER**	Clear
CYCLE TIME	N/A	**CONTROL TYPE**	Two-Way Stop

COMMENTS



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Turning Movement Report

Prepared For:
Central Coast Transportation Consulting
895 Napa Avenue, Suite A-6
Morro Bay, CA 93442

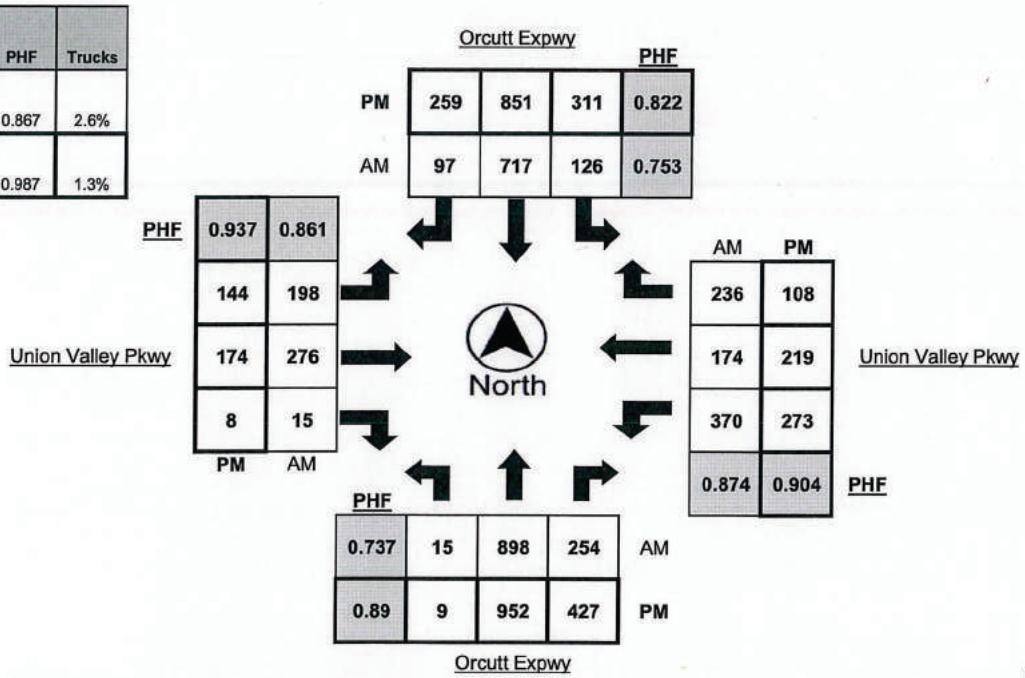
LOCATION Union Valley Pkwy @ Orcutt Expwy
LATITUDE 34.8796
COUNTY Santa Barbara
LONGITUDE -120.4366
COLLECTION DATE Tuesday, December 17, 2019
WEATHER Clear

	Northbound				Southbound				Eastbound				Westbound			
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	1	125	44	9	13	166	16	6	44	44	1	0	98	21	33	3
7:15 AM - 7:30 AM	1	172	47	4	23	177	22	8	57	76	3	1	107	32	48	9
7:30 AM - 7:45 AM	4	225	78	3	39	251	22	11	36	77	5	3	113	37	59	4
7:45 AM - 8:00 AM	4	317	75	5	28	153	31	12	62	77	3	3	95	52	76	6
8:00 AM - 8:15 AM	6	184	54	4	36	136	22	7	43	46	4	1	55	53	53	6
8:15 AM - 8:30 AM	1	178	62	3	30	111	29	10	48	39	2	0	37	42	31	3
8:30 AM - 8:45 AM	4	161	35	8	31	109	32	8	44	40	3	2	57	42	42	6
8:45 AM - 9:00 AM	0	179	33	4	33	119	23	10	45	47	3	1	40	18	38	8
TOTAL	21	1541	428	40	233	1222	197	72	379	446	24	11	602	297	380	45

	Northbound				Southbound				Eastbound				Westbound			
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
2:00 PM - 2:15 PM	0	179	42	8	49	138	65	5	26	56	1	0	41	36	38	3
2:15 PM - 2:30 PM	0	177	56	8	67	132	39	7	37	37	2	2	50	46	35	6
2:30 PM - 2:45 PM	3	159	44	5	54	138	40	7	43	47	3	2	44	67	37	8
2:45 PM - 3:00 PM	3	174	59	6	44	172	54	5	43	37	0	0	51	49	30	7
3:00 PM - 3:15 PM	3	172	51	8	52	174	56	8	41	59	2	3	52	51	48	6
3:15 PM - 3:30 PM	1	205	80	7	31	170	55	7	42	44	2	0	60	62	45	7
3:30 PM - 3:45 PM	3	238	82	6	66	165	61	6	36	38	3	0	52	35	32	6
3:45 PM - 4:00 PM	1	261	97	10	57	186	45	5	48	31	0	1	63	49	29	7
4:00 PM - 4:15 PM	1	217	113	4	48	192	61	3	31	42	0	0	53	46	23	6
4:15 PM - 4:30 PM	3	255	101	9	72	191	61	4	35	47	0	2	69	53	27	4
4:30 PM - 4:45 PM	2	270	118	4	73	185	51	3	27	43	2	0	64	43	26	1
4:45 PM - 5:00 PM	2	257	128	6	64	190	60	5	46	34	3	0	74	46	39	4
5:00 PM - 5:15 PM	4	229	94	6	74	225	67	3	33	54	0	1	68	73	25	1
5:15 PM - 5:30 PM	1	196	87	4	100	251	81	6	38	43	3	2	67	57	18	3
5:30 PM - 5:45 PM	0	178	81	3	49	185	70	2	44	30	2	3	54	58	20	3
5:45 PM - 6:00 PM	4	152	65	4	49	153	54	3	36	24	1	0	60	44	29	1
TOTAL	31	3319	1298	98	949	2847	920	79	606	666	24	16	922	815	501	73

	Northbound				Southbound				Eastbound				Westbound			
PEAK HOUR	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:15 AM - 8:15 AM	15	898	254	16	126	717	97	38	198	276	15	8	370	174	236	25
4:30 PM - 5:30 PM	9	952	427	20	311	851	259	17	144	174	8	3	273	219	108	9

	PHF	Trucks
AM	0.867	2.6%
PM	0.987	1.3%



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Morro Bay, CA 93442

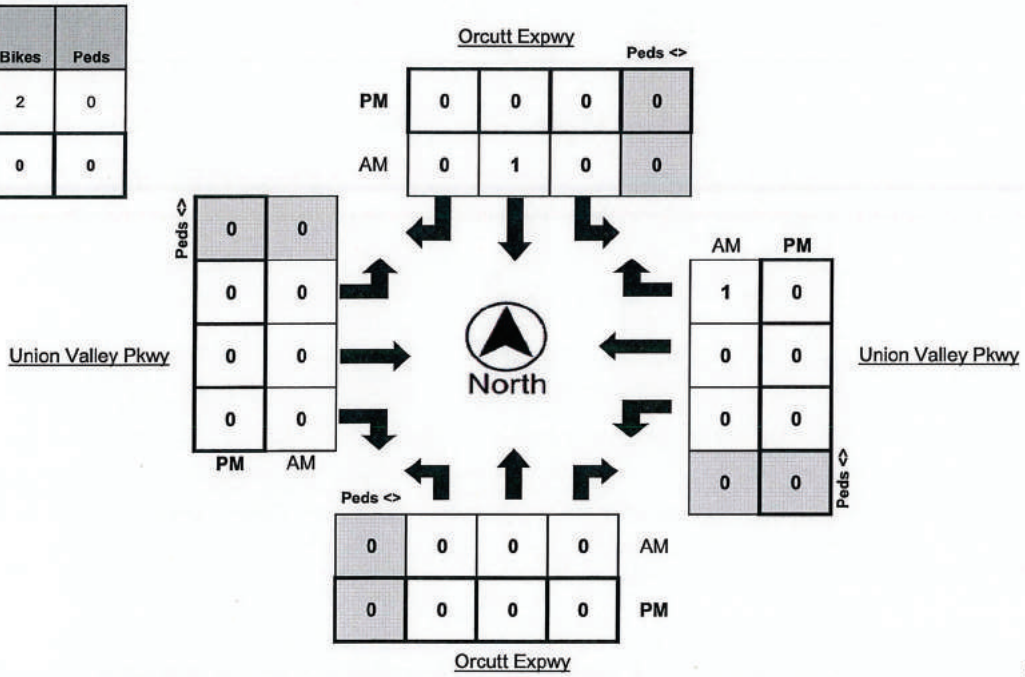
LOCATION Union Valley Pkwy @ Orcutt Expwy
LATITUDE 34.8796
COUNTY Santa Barbara
LONGITUDE -120.4366
COLLECTION DATE Tuesday, December 17, 2019
WEATHER Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM - 7:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
2:00 PM - 2:15 PM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0
2:15 PM - 2:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
2:30 PM - 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
3:00 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	1	0	0	0	0	3	0	0	0	2	0	0	0	0

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
PEAK HOUR	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:15 AM - 8:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Bikes	Peds
AM Peak Total	2	0
PM Peak Total	0	0



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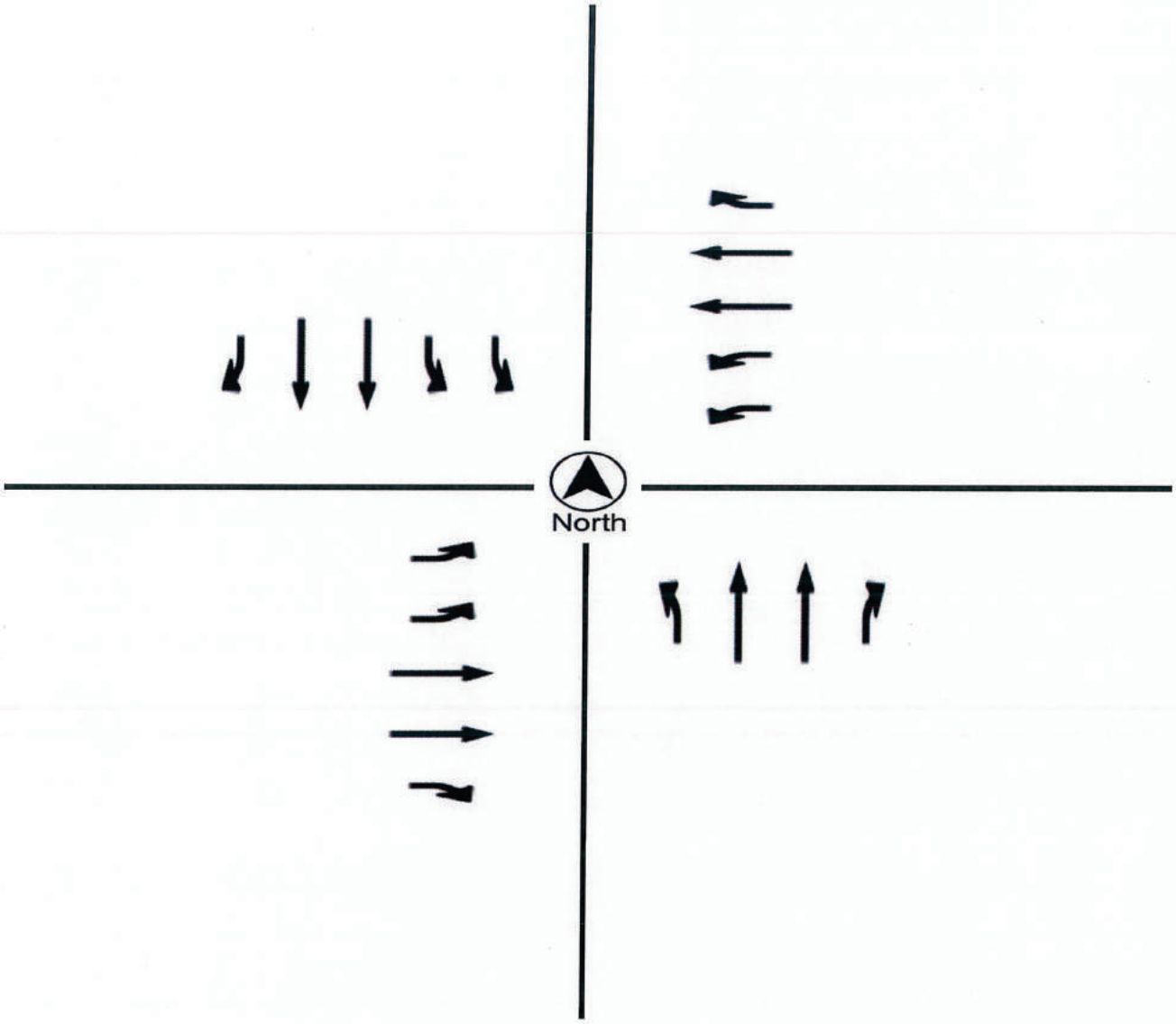
www.metrotrafficdata.com

Turning Movement Report

Prepared For:
Central Coast Transportation Consulting
895 Napa Avenue, Suite A-6
Morro Bay, CA 93442

LOCATION	Union Valley Pkwy @ Orcutt Expwy	**N/S STREET**	Orcutt Expwy / Orcutt Expwy
COUNTY	Santa Barbara	**E/W STREET**	Union Valley Pkwy / Union Valley Pkwy
COLLECTION DATE	Tuesday, December 17, 2019	**WEATHER**	Clear
CYCLE TIME	105 Seconds	**CONTROL TYPE**	Signal

COMMENTS All approaches have protected left turns.



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Turning Movement Report

Prepared For:
Central Coast Transportation Consulting
895 Napa Avenue, Suite A-6
Morro Bay, CA 93442

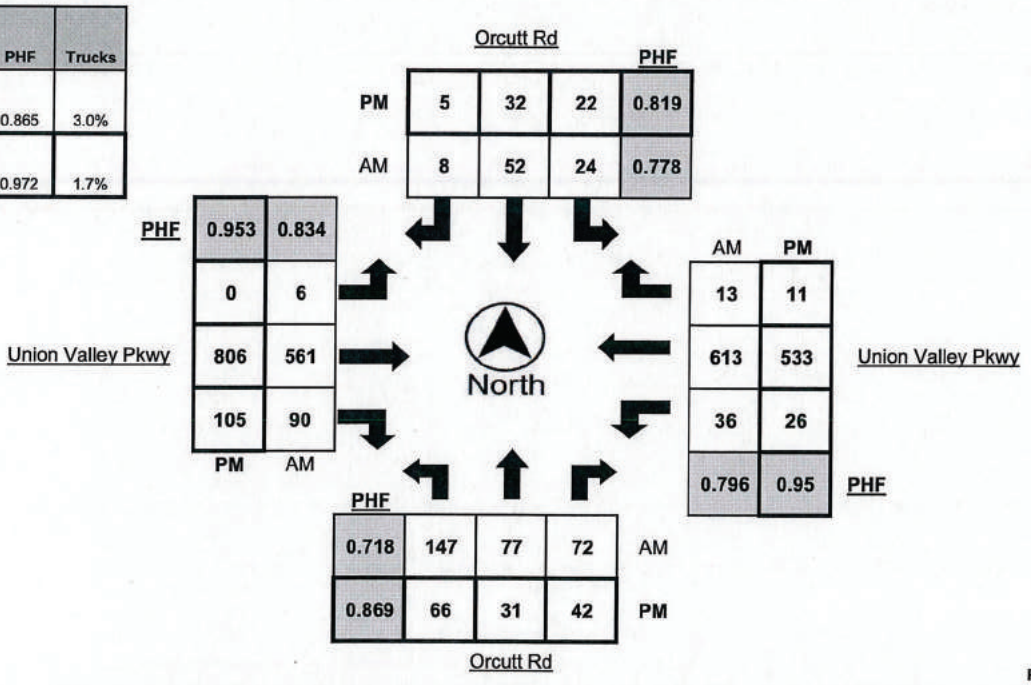
LOCATION Union Valley Pkwy @ Orcutt Rd
LATITUDE 34.8795
COUNTY Santa Barbara
LONGITUDE -120.4350
COLLECTION DATE Tuesday, December 17, 2019
WEATHER Clear

	Northbound				Southbound				Eastbound				Westbound			
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	16	12	10	0	2	4	2	2	0	97	5	5	3	147	2	3
7:15 AM - 7:30 AM	26	12	16	3	6	11	1	1	1	127	10	4	8	145	4	6
7:30 AM - 7:45 AM	37	12	16	3	5	14	2	1	3	162	32	9	16	189	3	3
7:45 AM - 8:00 AM	49	33	21	1	6	19	2	0	0	152	31	3	10	156	4	7
8:00 AM - 8:15 AM	35	20	19	0	7	8	3	1	2	120	17	4	2	123	2	5
8:15 AM - 8:30 AM	13	14	10	0	3	6	4	1	1	121	11	4	7	103	3	4
8:30 AM - 8:45 AM	15	8	11	1	3	8	1	0	0	93	11	8	3	114	2	4
8:45 AM - 9:00 AM	16	9	4	0	10	8	1	0	0	101	16	2	7	82	5	9
TOTAL	207	120	107	8	42	78	16	6	7	973	133	39	56	1059	25	41

	Northbound				Southbound				Eastbound				Westbound			
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
2:00 PM - 2:15 PM	16	6	10	0	9	15	1	2	0	105	31	3	12	96	2	4
2:15 PM - 2:30 PM	31	24	7	3	1	10	2	0	0	139	29	6	6	103	2	5
2:30 PM - 2:45 PM	24	10	19	3	4	5	0	0	0	129	10	6	1	123	2	5
2:45 PM - 3:00 PM	13	9	7	3	3	8	5	1	0	127	19	2	9	111	2	7
3:00 PM - 3:15 PM	33	12	23	3	4	8	3	1	0	145	19	6	14	127	3	6
3:15 PM - 3:30 PM	25	13	11	1	14	16	1	1	0	132	18	5	5	122	5	6
3:30 PM - 3:45 PM	17	12	12	1	2	9	0	0	0	161	29	4	10	106	4	5
3:45 PM - 4:00 PM	15	5	5	1	5	6	2	1	0	159	23	4	7	130	5	6
4:00 PM - 4:15 PM	15	12	3	0	8	11	4	1	0	193	16	2	14	103	6	5
4:15 PM - 4:30 PM	13	14	7	1	6	8	0	1	0	194	18	4	9	132	1	2
4:30 PM - 4:45 PM	13	6	12	0	2	8	1	0	0	222	17	2	9	123	1	2
4:45 PM - 5:00 PM	20	7	13	0	7	4	2	0	0	194	28	3	5	135	5	5
5:00 PM - 5:15 PM	22	6	8	1	7	9	1	0	0	190	28	5	5	134	3	1
5:15 PM - 5:30 PM	11	12	9	1	6	11	1	0	0	200	32	5	7	141	2	3
5:30 PM - 5:45 PM	9	7	12	1	5	11	1	1	0	153	18	3	10	136	3	2
5:45 PM - 6:00 PM	10	10	5	0	9	10	0	0	0	113	16	0	19	109	10	2
TOTAL	287	165	163	19	92	149	24	9	0	2556	351	60	142	1931	56	66

	Northbound				Southbound				Eastbound				Westbound			
PEAK HOUR	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:15 AM - 8:15 AM	147	77	72	7	24	52	8	3	6	561	90	20	36	613	13	21
4:30 PM - 5:30 PM	66	31	42	2	22	32	5	0	0	806	105	15	26	533	11	11

	PHF	Trucks
AM	0.865	3.0%
PM	0.972	1.7%



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Turning Movement Report

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Morro Bay, CA 93442

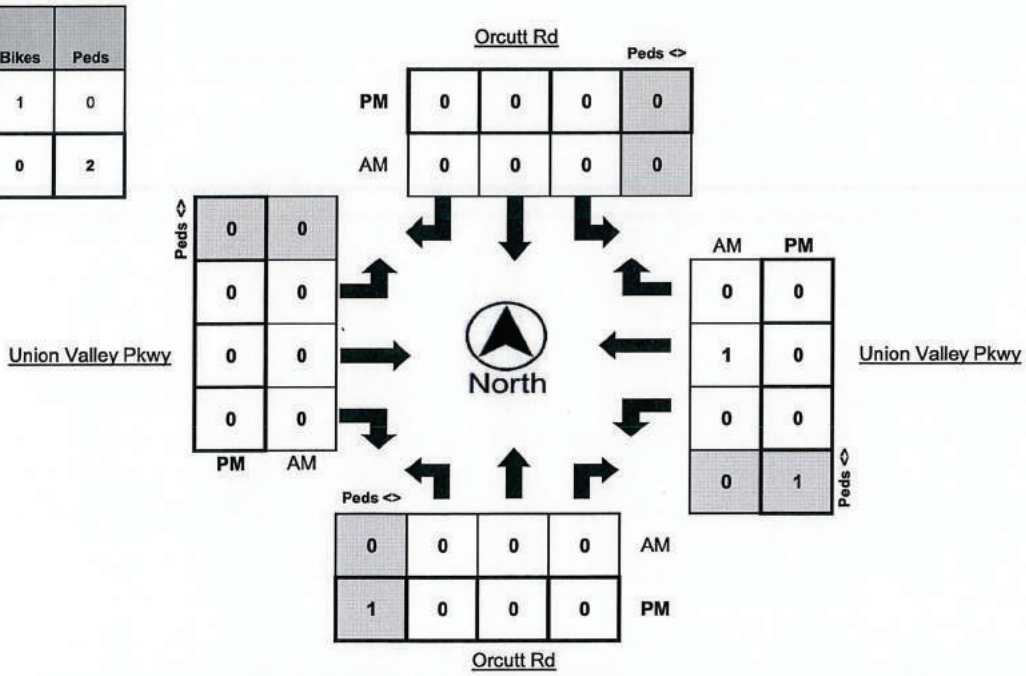
LOCATION Union Valley Pkwy @ Orcutt Rd
LATITUDE 34.8795
COUNTY Santa Barbara
LONGITUDE -120.4350
COLLECTION DATE Tuesday, December 17, 2019
WEATHER Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM - 7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
2:00 PM - 2:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
2:15 PM - 2:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
2:30 PM - 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
3:30 PM - 3:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
TOTAL	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
PEAK HOUR	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:15 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0

	Bikes	Peds
AM Peak Total	1	0
PM Peak Total	0	2



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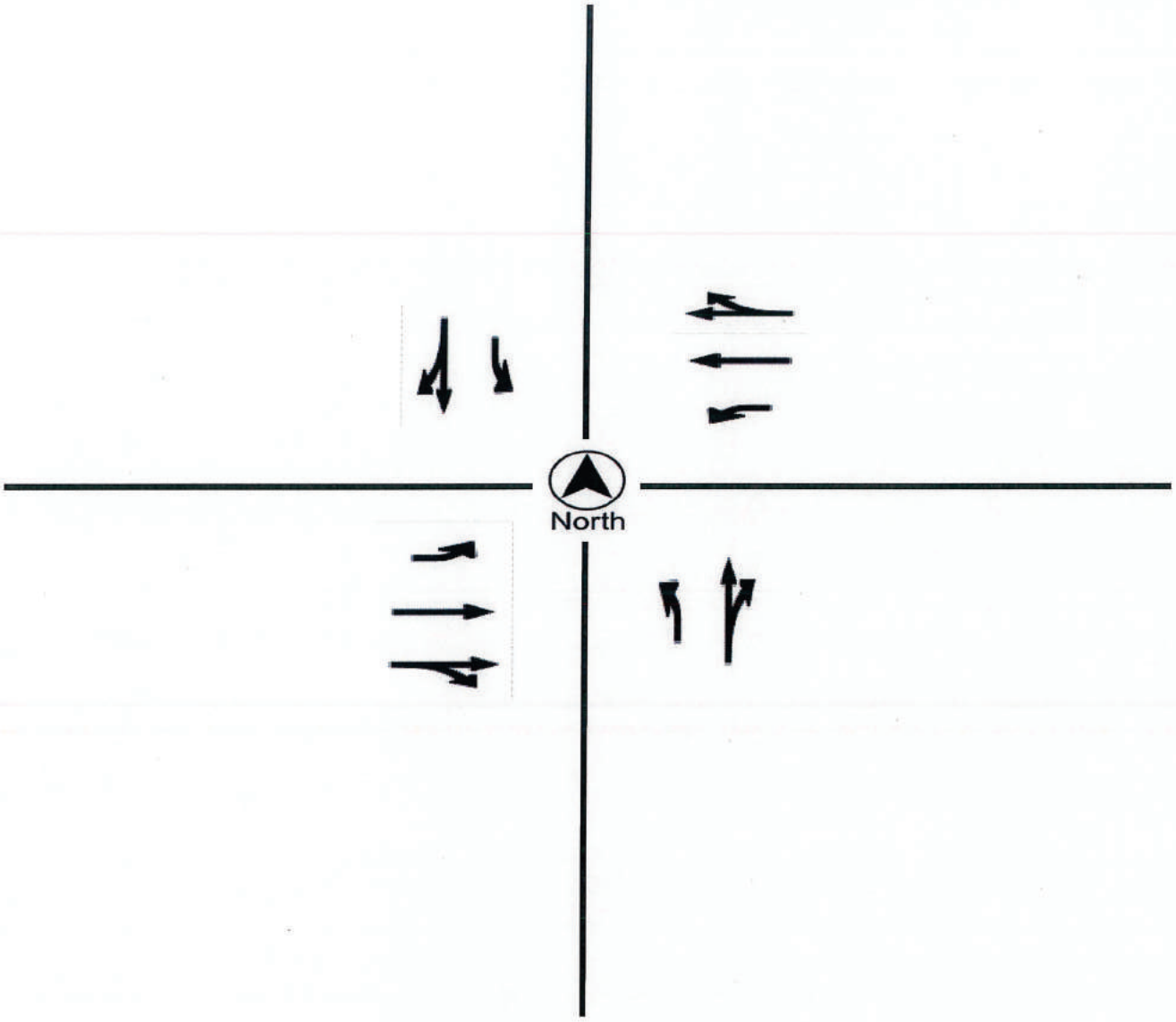
Turning Movement Report

Prepared For:
Central Coast Transportation Consulting
895 Napa Avenue, Suite A-6
Morro Bay, CA 93442

LOCATION	Union Valley Pkwy @ Orcutt Rd	**N/S STREET**	Orcutt Rd / Orcutt Rd
COUNTY	Santa Barbara	**E/W STREET**	Union Valley Pkwy / Union Valley Pkwy
COLLECTION DATE	Tuesday, December 17, 2019	**WEATHER**	Clear
CYCLE TIME	89 Seconds	**CONTROL TYPE**	Signal

COMMENTS All approaches have protected left turns.

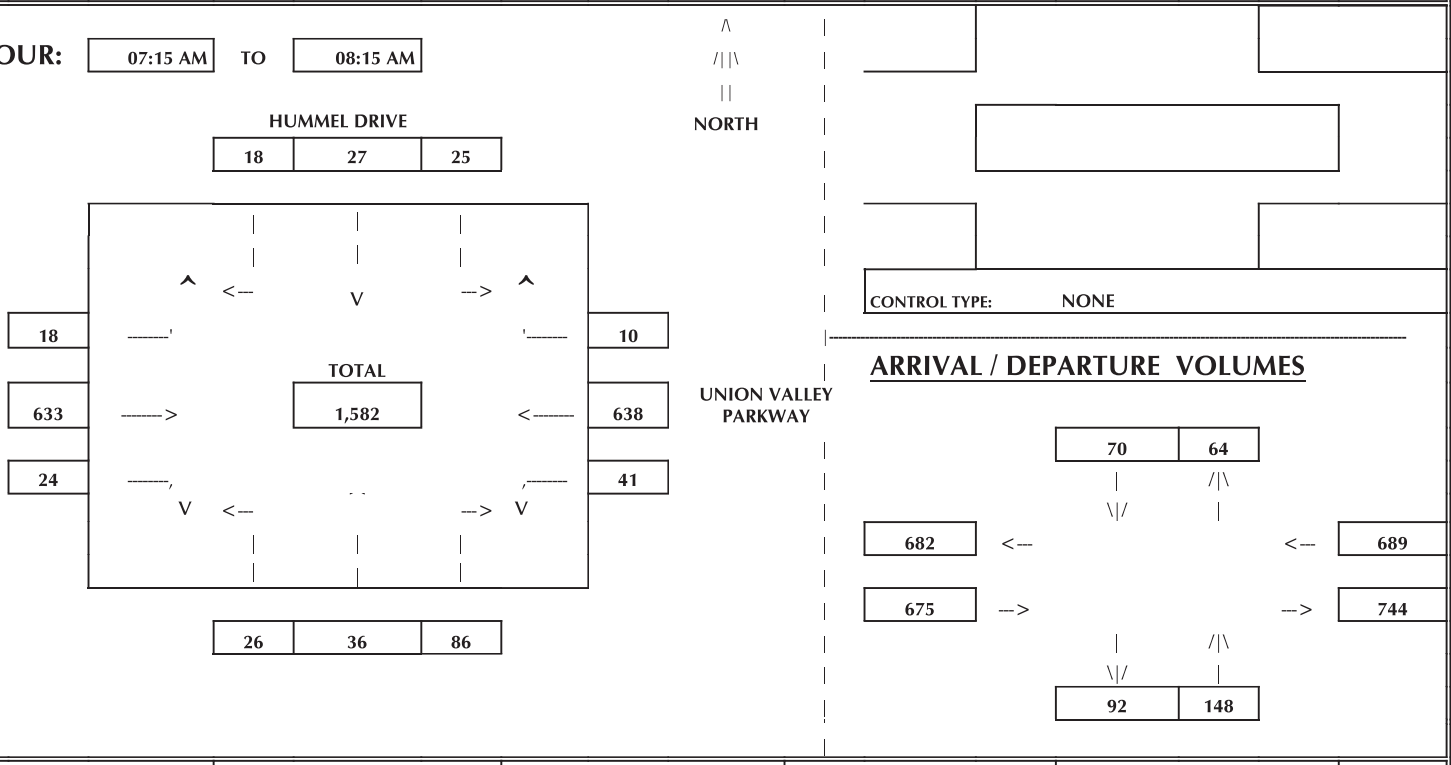


ASSOCIATED TRANSPORTATION ENGINEERS

INTERSECTION TURNING MOVEMENT SUMMARY

PROJECT: RICHARDS RANCH	PROJECT #: 21069	COUNT DATE: 4-27-22	FILE NAME: 06_AM
N-S Approach: HUMMEL DRIVE		COUNT TIME: 07:00 AM TO 8:30	
E-W Approach: UNION VALLEY PARKWAY		CITY: SANTA MARIA	WEATHER: SUNNY

PEAK HOUR: 07:15 AM TO 08:15 AM



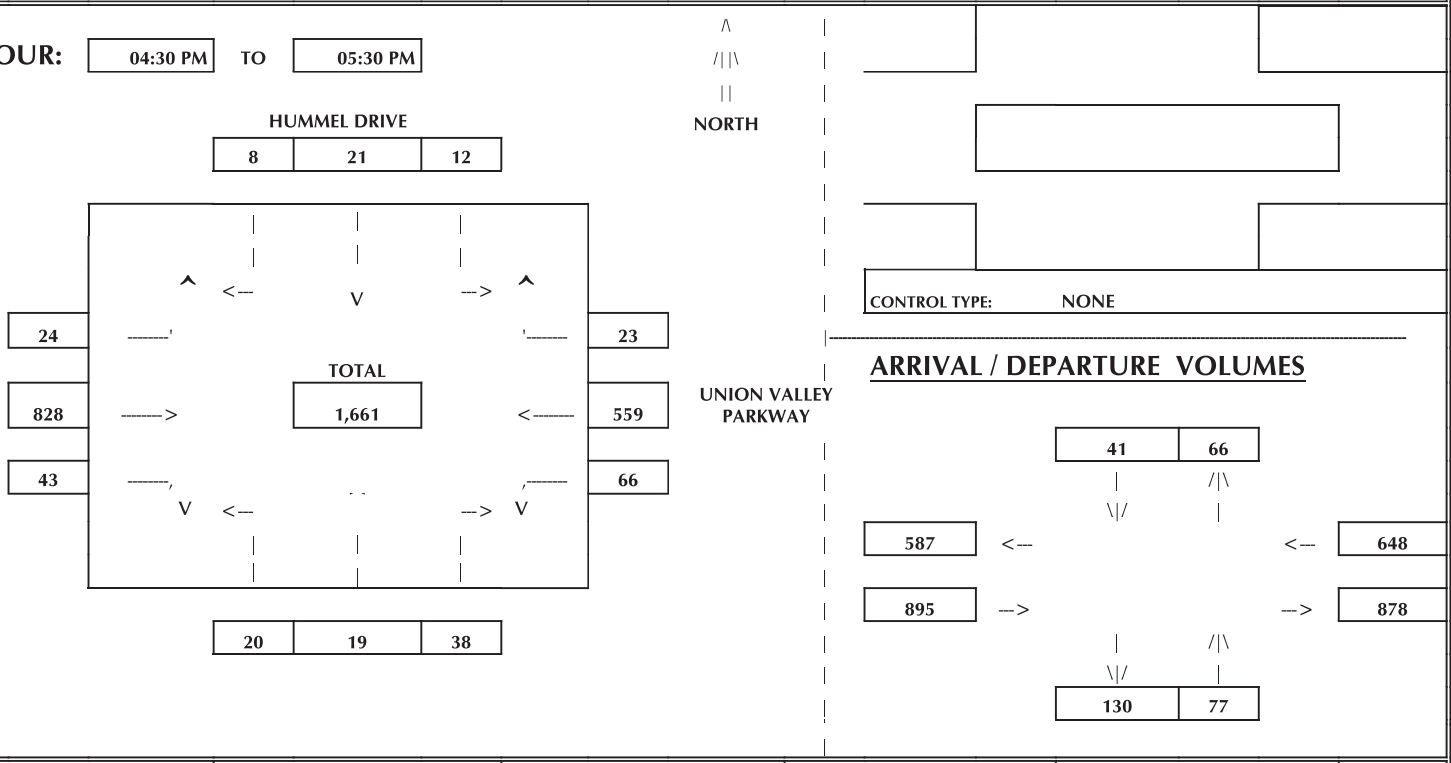
TIME PERIOD From	---	To	NORTHBOUND Left	Thru	Right	SOUTHBOUND Left	Thru	Right	EASTBOUND Left	Thru	Right	WESTBOUND Left	Thru	Right	TOTAL VOLUMES
COUNT DATA															
07:00 AM	---	07:15 AM	1	3	15	9	3	2	3	103	6	3	154	2	304
07:15 AM	---	07:30 AM	7	12	30	14	9	6	12	246	7	13	306	6	668
07:30 AM	---	07:45 AM	12	19	55	24	22	9	15	422	16	24	512	7	1137
07:45 AM	---	08:00 AM	20	30	83	28	26	15	17	595	25	39	673	8	1559
08:00 AM	---	08:15 AM	27	39	101	34	30	20	21	736	30	44	792	12	1886
08:15 AM	---	08:30 AM	29	43	119	36	34	21	27	863	35	50	905	14	2176
08:30 AM	---	08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	---	09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL BY PERIOD															
07:00 AM	---	07:15 AM	1	3	15	9	3	2	3	103	6	3	154	2	304
07:15 AM	---	07:30 AM	6	9	15	5	6	4	9	143	1	10	152	4	364
07:30 AM	---	07:45 AM	5	7	25	10	13	3	3	176	9	11	206	1	469
07:45 AM	---	08:00 AM	8	11	28	4	4	6	2	173	9	15	161	1	422
08:00 AM	---	08:15 AM	7	9	18	6	4	5	4	141	5	5	119	4	327
08:15 AM	---	08:30 AM	2	4	18	2	4	1	6	127	5	6	113	2	290
08:30 AM	---	08:45 AM	-29	-43	-119	-36	-34	-21	-27	-863	-35	-50	-905	-14	-2176
08:45 AM	---	09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
HOURLY TOTALS															
07:00 AM	---	08:00 AM	20	30	83	28	26	15	17	595	25	39	673	8	1559
07:15 AM	---	08:15 AM	26	36	86	25	27	18	18	633	24	41	638	10	1582
07:30 AM	---	08:30 AM	22	31	89	22	25	15	15	617	28	37	599	8	1508
07:45 AM	---	08:45 AM	-12	-19	-55	-24	-22	-9	-15	-422	-16	-24	-512	-7	-1137
08:00 AM	---	09:00 AM	-20	-30	-83	-28	-26	-15	-17	-595	-25	-39	-673	-8	-1559

ASSOCIATED TRANSPORTATION ENGINEERS

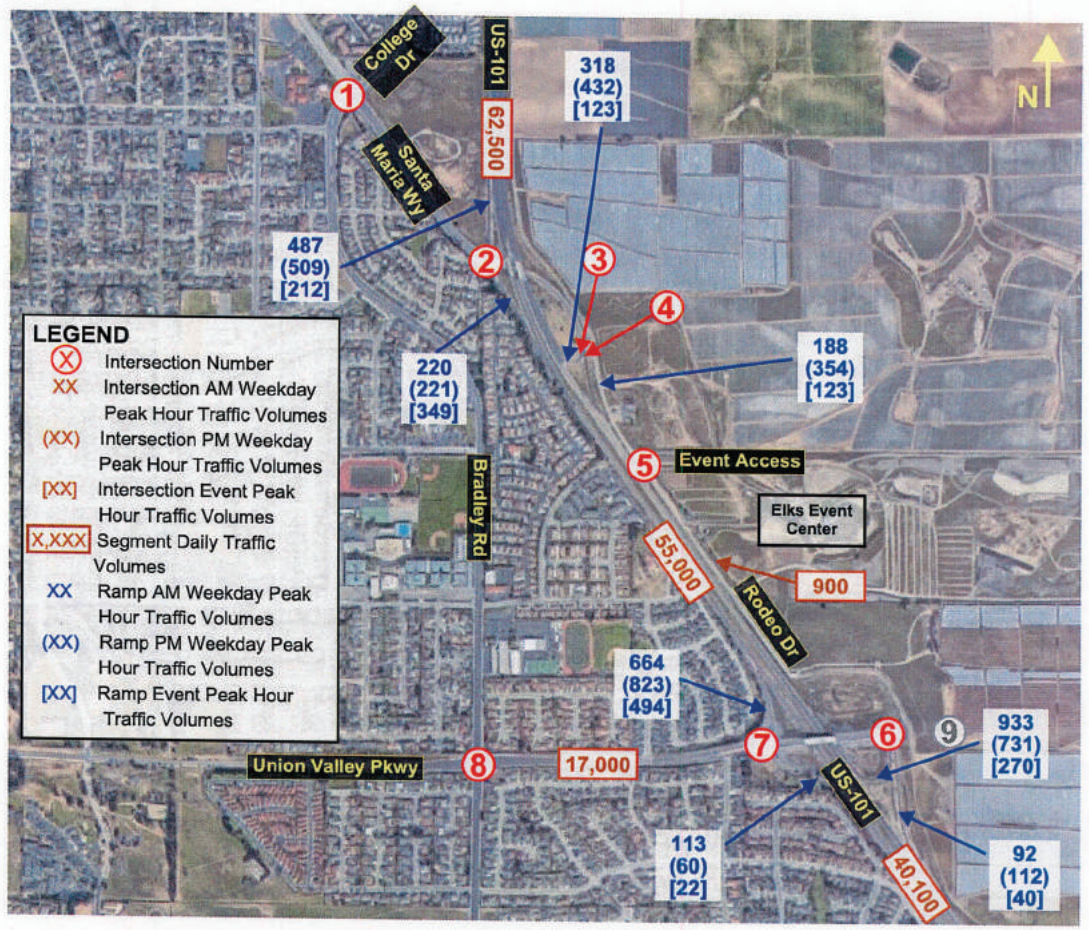
INTERSECTION TURNING MOVEMENT SUMMARY

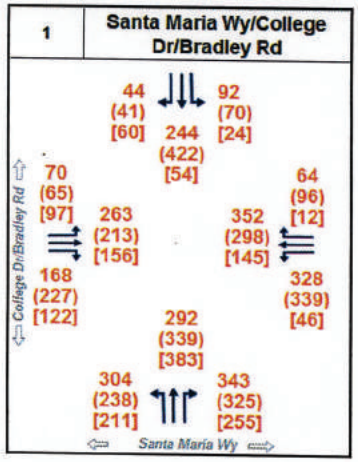
PROJECT: RICHARDS RANCH		PROJECT #: 21069	COUNT DATE: 4-28-22		FILE NAME: 06_PM
N-S Approach:	HUMMEL DRIVE		COUNT TIME:	04:00 PM TO 5:30	
E-W Approach:	UNION VALLEY PARKWAY		CITY: SANTA MARIA		WEATHER: SUNNY

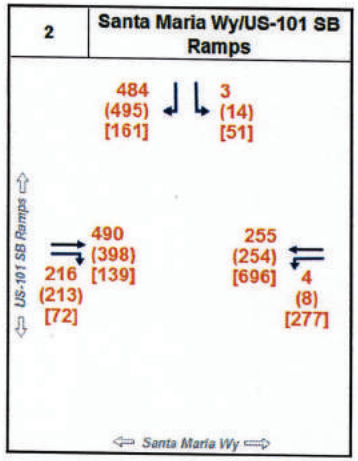
PEAK HOUR: 04:30 PM TO 05:30 PM

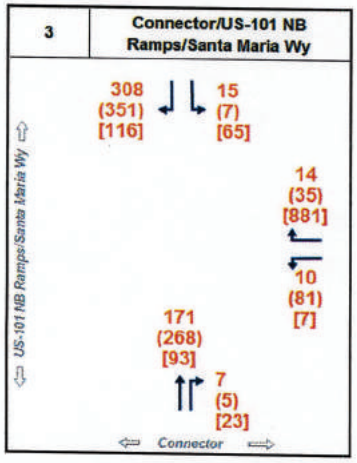


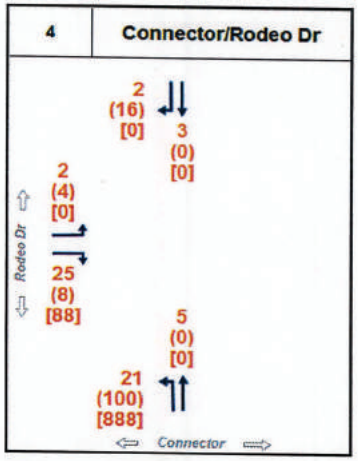
TIME PERIOD From	---	To	NORTHBOUND Left	Thru	Right	SOUTHBOUND Left	Thru	Right	EASTBOUND Left	Thru	Right	WESTBOUND Left	Thru	Right	TOTAL VOLUMES
COUNT DATA															
04:00 PM	---	04:15 PM	2	3	14	0	2	2	0	197	13	11	123	8	375
04:15 PM	---	04:30 PM	7	4	26	6	3	5	6	393	24	28	261	16	779
04:30 PM	---	04:45 PM	13	6	34	9	6	7	14	623	29	42	390	20	1193
04:45 PM	---	05:00 PM	22	12	41	12	8	10	21	822	43	58	527	26	1602
05:00 PM	---	05:15 PM	25	17	52	13	15	10	26	1019	52	76	670	34	2009
05:15 PM	---	05:30 PM	27	23	64	18	24	13	30	1221	67	94	820	39	2440
05:30 PM	---	05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	---	06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL BY PERIOD															
04:00 PM	---	04:15 PM	2	3	14	0	2	2	0	197	13	11	123	8	375
04:15 PM	---	04:30 PM	5	1	12	6	1	3	6	196	11	17	138	8	404
04:30 PM	---	04:45 PM	6	2	8	3	3	2	8	230	5	14	129	4	414
04:45 PM	---	05:00 PM	9	6	7	3	2	3	7	199	14	16	137	6	409
05:00 PM	---	05:15 PM	3	5	11	1	7	0	5	197	9	18	143	8	407
05:15 PM	---	05:30 PM	2	6	12	5	9	3	4	202	15	18	150	5	431
05:30 PM	---	05:45 PM	-27	-23	-64	-18	-24	-13	-30	-1,221	-67	-94	-820	-39	-2440
05:45 PM	---	06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
HOURLY TOTALS															
04:00 PM	---	05:00 PM	22	12	41	12	8	10	21	822	43	58	527	26	1602
04:15 PM	---	05:15 PM	23	14	38	13	13	8	26	822	39	65	547	26	1634
04:30 PM	---	05:30 PM	20	19	38	12	21	8	24	828	43	66	559	23	1661
04:45 PM	---	05:45 PM	-13	-6	-34	-9	-6	-7	-14	-623	-29	-42	-390	-20	-1193
05:00 PM	---	06:00 PM	-22	-12	-41	-12	-8	-10	-21	-822	-43	-58	-527	-26	-1602

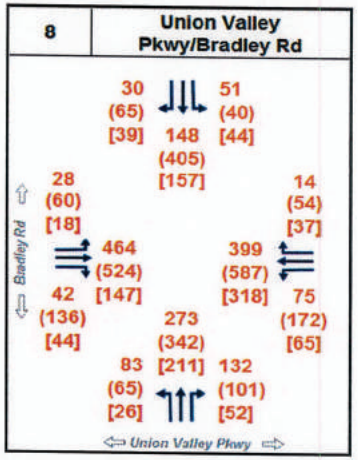


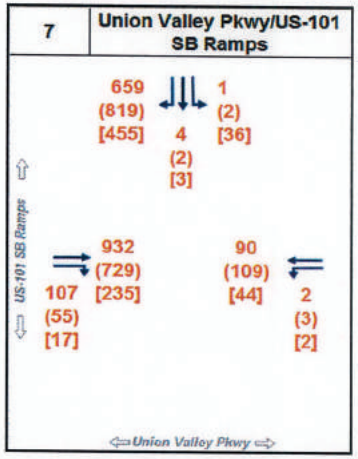


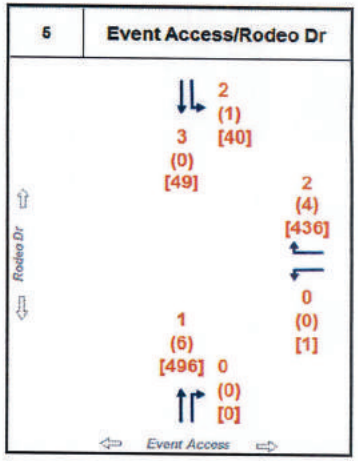


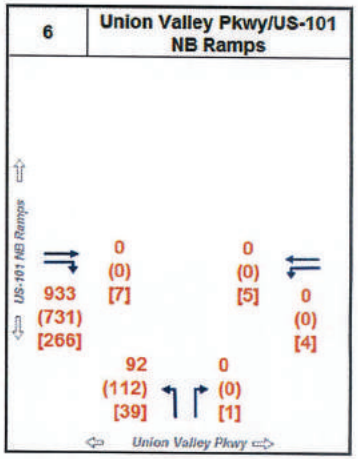












Orcutt Community Plan Amendment Traffic Study

Figure 4. Existing Traffic Volumes

PSOMAS May 2020

PROJECT TRIP GENERATION CALCULATION WORKSHEETS

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 1 WITH NO INTERNAL TRIP FACTOR

Use	Size	Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
			Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																
Gas Station with Mart	10 Fueling Positions	1.00	200.80	2,008	16.06	161	50%	81	50%	80	18.42	184	50%	92	50%	92
Lube Station	3 Bays	1.00	40.00	120	3.00	9	67%	6	33%	3	4.85	15	56%	8	44%	7
Totals:	**13 SF**			**2,128**		**170**		**87**		**83**		**199**		**100**		**99**

(a) Trip generation based on ITE rates for Convenience Store/Gas Station (ITE #945). Fitted Curve Equation for ADT. Average Rate for AM/PM Peak Hours.
(b) Trip generation based on ITE rates for Quick Lubrication Vehicle Shop (ITE #941) Average Rate.

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 2A WITH NO INTERNAL TRIP FACTOR

Use	Size	Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
			Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																
Shopping Center(a)	55,000 SF	1.00	94.49	5,197	3.53	194	62%	120	38%	74	9.84	541	48%	260	52%	281
Restaurant - Shopping Center (b)	5,000 SF	1.00	107.20	536	9.57	48	55%	26	45%	22	9.05	45	61%	27	39%	18
Restaurant Pad 1 - Drive Thru (c)	3,750 SF	1.00	467.48	1,753	44.61	167	51%	85	49%	82	33.03	124	52%	64	48%	60
Restaurant Pad 2 - Drive Thru (c)	3,500 SF	1.00	467.48	1,636	44.61	156	51%	80	49%	76	33.03	116	52%	60	48%	56
Restaurant Pad 3 - No Drive Thru (	3,000 SF	1.00	97.14	291	1.43	4	50%	2	50%	2	12.55	38	55%	21	45%	17
Restaurant Pad 4 - No Drive Thru (	3,000 SF	1.00	97.14	291	1.43	4	50%	2	50%	2	12.55	38	55%	21	45%	17
Restaurant Pad 5 - Drive Thru (c)	2,500 SF	1.00	467.48	1,169	44.61	112	51%	57	49%	55	33.03	83	52%	43	48%	40
Restaurant Pad 6 - Drive Thru (c)	3,000 SF	1.00	467.48	1,402	44.61	134	51%	68	49%	66	33.03	99	52%	51	48%	48
Restaurant Pad 7 - Drive Thru (c)	2,500 SF	1.00	467.48	1,169	44.61	112	51%	57	49%	55	33.03	83	52%	43	48%	40
Totals:	**81,250 SF**			**13,444**		**931**		**497**		**434**		**1,167**		**590**		**577**

(a) Trip generation based on ITE rates for Shopping Plaza (ITE #821). Average Rate for ADT and AM Peak Hour. Fitted Curve Equation for PM Peak Hour.
(b) Trip generation based on ITE rates for High-Turnover (Sit-Down) Restaurant (ITE #932) Average Rate.
(c) Trip generation based on ITE rates for Fast-Food Restaurant with Drive-Through Window (ITE #934) Average Rate.
(d) Trip generation based on ITE rates for Fast Casual Restaurant (ITE #930) Average Rate.

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 2B WITH NO INTERNAL TRIP FACTOR

Use	Size	Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
			Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																
Mini Storage(c)	39,500 SF	1.00	1.45	57	0.09	4	59%	2	41%	2	0.15	6	47%	3	53%	3
Totals:	**39,500 SF**			**57**		**4**		**2**		**2**		**6**		**3**		**3**

(a) Trip generation based on ITE rates for Mini-Warehouse (ITE #151).

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 3 WITH NO INTERNAL TRIP FACTOR

Use	Size	Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
			Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																
Car Wash-Automated (a)	1 Tunnel	1.00	249.00	249	8.50	9	50%	5	50%	4	23.70	24	50%	12	50%	12
Restaurant Pad 8 - Drive Thru (c)	3,500 SF	1.00	467.48	1,636	44.61	156	51%	80	49%	76	33.03	116	52%	60	48%	56
Totals:	**3,501 SF**			**1,885**		**165**		**85**		**80**		**140**		**72**		**68**

(a) Trip generation for Car Wash-Automated derived from local studies.
(b) Trip generation based on ITE rates for Fast-Food Restaurant with Drive-Through Window (ITE #934) Average Rate.

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 4A WITH NO INTERNAL TRIP FACTOR

Use	Size	Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
			Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
RESIDENTIAL																
Three Story Apartments(a)	400 DU	1.00	6.60	2,639	0.37	147	24%	35	76%	112	0.48	193	63%	122	37%	71
Totals:	**400 DU**			**2,639**		**147**		**35**		**112**		**193**		**122**		**71**

(a) Trip generation based on ITE rates for Multifamily Housing (Low-Rise) (ITE #220) Fitted Curve Equation.

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 4B WITH NO INTERNAL TRIP FACTOR

Use	Size	Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
			Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
RESIDENTIAL																
Two Story Townhomes(a)	95 DU	1.00	6.60	627	0.37	35	24%	8	76%	27	0.48	46	63%	29	37%	17
Totals:	**95 DU**			**627**		**35**		**8**		**27**		**46**		**29**		**17**

(a) Trip generation based on ITE rates for Multifamily Housing (Low-Rise) (ITE #220) Fitted Curve Equation.

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - WITH NO INTERNAL TRIP FACTOR

Use	Size	Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
			Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																
High Turnover Sit Down Restaurant (a)	5,000 SF	1.00	107.20	536	9.57	48	55%	26	45%	22	9.05	45	61%	27	39%	18
2 Restaurants without Drive Thru (b)	6,000 SF	1.00	97.14	583	1.43	9	50%	5	50%	4	12.55	75	55%	41	45%	34
6 Drive Thru Restaurants (c)	18,750 SF	1.00	467.48	8,765	44.61	836	51%	426	49%	410	33.03	619	52%	322	48%	297
Shopping Center (d)	55,000 SF	1.00	94.49	5,197	3.53	194	62%	120	38%	74	9.84	541	48%	260	52%	281
Gas Station with Mart (e)	10 Fueling Positions	1.00	200.80	2,008	16.06	161	50%	81	50%	80	18.42	184	50%	92	50%	92
Car Wash-Automated (f)	1 Tunnel	1.00	249.00	249	8.50	9	50%	5	50%	4	23.70	24	50%	12	50%	12
Lube Station (g)	3 Bays	1.00	40.00	120	3.00	9	67%	6	33%	3	4.85	15	56%	8	44%	7
Mini Storage (h)	39,500 SF	1.00	1.45	57	0.09	4	59%	2	41%	2	0.15	6	47%	3	53%	3
Subtotals:	**124,250 SF**			**17,515**		**1,270**		**671**		**599**		**1,509**		**765**		**744**
RESIDENTIAL																
Three Story Apartments (i)	400 DU	1.00	6.60	2,639	0.37	147	24%	35	76%	112	0.48	193	63%	122	37%	71
Two Story Townhomes (i)	95 DU	1.00	6.60	627	0.37	35	24%	8	76%	27	0.48	46	63%	29	37%	17
Subtotals:	**495 DU**			**3,266**		**182**		**43**		**139**		**239**		**151**		**88**
Totals:				**20,781**		**1,452**		**714**		**738**		**1,748**		**916**		**832**

(a) Trip generation based on ITE rates for High-Turnover (Sit-Down) Restaurant (ITE #932) Average Rate.
(b) Trip generation based on ITE rates for Fast Casual Restaurant (ITE #930) Average Rate.
(c) Trip generation based on ITE rates for Fast-Food Restaurant with Drive-Through Window (ITE #934) Average Rate.
(d) Trip generation based on ITE rates for Shopping Plaza (ITE #821). Average Rate for ADT and AM Peak Hour. Fitted Curve Equation for PM Peak Hour.
(e) Trip generation based on ITE rates for Convenience Store/Gas Station (ITE #945). Fitted Curve Equation for ADT. Average Rate for AM/PM Peak Hours.
(f) Trip generation for Car Wash-Automated derived from local studies.
(g) Trip generation based on ITE rates for Quick Lubrication Vehicle Shop (ITE #941) Average Rate.
(h) Trip generation based on ITE rates for Mini-Warehouse (ITE #151).
(i) Trip generation based on ITE rates for Multifamily Housing (Low-Rise) (ITE #220) Fitted Curve Equation.

TRIP TYPE	ADT	AM PEAK	PM PEAK
Internal (30% ADT, 13% AM, 45% PM) (45% for Car Wash)	6,272	192	787
External (70% ADT, 87% AM, 55% PM) (45% for Car Wash)	14,509	1,260	961

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 1 WITH INTERNAL TRIP FACTORS

Use	Size	ADT Internal Factor	AM Internal Factor	PM Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
					Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																		
Gas Station with Mart	10 Fueling Positions	0.70	0.87	0.55	200.80	1,406	16.06	140	50%	70	50%	70	18.42	101	50%	51	50%	50
Lube Station	3 Bays	0.70	0.87	0.55	40.00	84	3.00	8	67%	5	33%	3	4.85	8	56%	4	44%	4
Totals:						**1,490**		**148**		**75**		**73**		**109**		**55**		**54**

(a) Trip generation based on ITE rates for Convenience Store/Gas Station (ITE #945). Fitted Curve Equation for ADT. Average Rate for AM/PM Peak Hours.
(b) Trip generation based on ITE rates for Quick Lubrication Vehicle Shop (ITE #941) Average Rate.

GAS STATION PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Gas Station	1,406	140	70	70	101	51	50
75% Pass-By Trips - Applied to Gas Station	1,055	105	53	52	76	38	38
25% Primary Trips - Remainder Gas Station	352	35	17	18	25	13	12

TOTAL EXTERNAL PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External	352	35	17	18	25	13	12
Lube Station - External	84	8	5	3	8	4	4
Total External Trips	**436**	**43**	**22**	**21**	**33**	**17**	**16**

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 2A WITH INTERNAL TRIP FACTORS

Use	Size	ADT Internal Factor	AM Internal Factor	PM Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
					Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																		
Shopping Center(a)	55,000 SF	0.70	0.87	0.55	94.49	3,638	3.53	169	62%	105	38%	64	9.84	298	48%	143	52%	155
Restaurant - Shopping Center (b)	5,000 SF	0.70	0.87	0.55	107.20	375	9.57	42	55%	23	45%	19	9.05	25	61%	15	39%	10
Restaurant Pad 1 - Drive Thru (c)	3,750 SF	0.70	0.87	0.55	467.48	1,227	44.61	146	51%	74	49%	72	33.03	68	52%	35	48%	33
Restaurant Pad 2 - Drive Thru (c)	3,500 SF	0.70	0.87	0.55	467.48	1,145	44.61	136	51%	69	49%	67	33.03	64	52%	33	48%	31
Restaurant Pad 3 - No Drive Thru (d)	3,000 SF	0.70	0.87	0.55	97.14	204	1.43	4	50%	2	50%	2	12.55	21	55%	12	45%	9
Restaurant Pad 4 - No Drive Thru (d)	3,000 SF	0.70	0.87	0.55	97.14	204	1.43	4	50%	2	50%	2	12.55	21	55%	12	45%	9
Restaurant Pad 5 - Drive Thru (c)	2,500 SF	0.70	0.87	0.55	467.48	818	44.61	97	51%	49	49%	48	33.03	45	52%	23	48%	22
Restaurant Pad 6 - Drive Thru (c)	3,000 SF	0.70	0.87	0.55	467.48	982	44.61	116	51%	59	49%	57	33.03	54	52%	28	48%	26
Restaurant Pad 7 - Drive Thru (c)	2,500 SF	0.70	0.87	0.55	467.48	818	44.61	97	51%	49	49%	48	33.03	45	52%	23	48%	22
Totals:	**81,250 SF**					**9,411**		**811**		**432**		**379**		**641**		**324**		**317**

(a) Trip generation based on ITE rates for Shopping Plaza (ITE #821). Average Rate for ADT and AM Peak Hour. Fitted Curve Equation for PM Peak Hour.
(b) Trip generation based on ITE rates for High-Turnover (Sit-Down) Restaurant (ITE #932) Average Rate.
(c) Trip generation based on ITE rates for Fast-Food Restaurant with Drive-Through Window (ITE #934) Average Rate.
(d) Trip generation based on ITE rates for Fast Casual Restaurant (ITE #930) Average Rate.

SHOPPING CENTER PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Retail	3,638	169	105	64	298	143	155
40% Pass-By Trips - Applied to Retail	1,455	68	42	26	119	57	62
60% Primary Trips - Remainder Retail	2,183	101	63	38	179	86	93

SIT DOWN RESTAURANT PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Restaurant - Shopping Center and No Drive Thru	783	50	27	23	67	39	28
43% Pass-By Trips - Applied to Restaurant - Shopping Center and No Drive Thru	337	21	11	10	29	16	13
57% Primary Trips - Remainder Restaurant - Shopping Center and No Drive Thru	446	29	16	13	38	23	15

FAST FOOD RESTAURANT PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Restaurant Drive Thru	4,990	592	300	292	276	142	134
55% Pass-By Trips - Applied to Restaurant Drive Thru	2,745	326	165	161	152	78	74
45% Primary Trips - Remainder Restaurant Thru	2,246	266	135	131	124	64	60

TOTAL EXTERNAL PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External	4,875	397	214	183	341	173	168
Total External Trips	**4,875**	**397**	**214**	**183**	**341**	**173**	**168**

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 2B WITH INTERNAL TRIP FACTORS

Use	Size	ADT Internal Factor	AM Internal Factor	PM Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
					Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																		
Mini Storage(c)	39,500 SF	0.70	0.87	0.55	1.45	40	0.09	3	59%	2	41%	1	0.15	3	47%	1	53%	2
Totals:	**39,500 SF**					**40**		**3**		**2**		**1**		**3**		**1**		**2**

(a) Trip generation based on ITE rates for Mini-Warehouse (ITE #151).

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 3 WITH INTERNAL TRIP FACTORS

Use	Size	ADT Internal Factor	AM Internal Factor	PM Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
					Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																		
Car Wash-Automated (a)	1 Tunnel	0.55	0.55	0.55	249.00	137	8.50	5	50%	3	50%	2	23.70	13	50%	7	50%	6
Restaurant Pad 8 - Drive Thru (c)	3,500 SF	0.70	0.87	0.55	467.48	1,145	44.61	136	51%	69	49%	67	33.03	64	52%	33	48%	31
Totals:	**3,501 SF**					**1,282**		**141**		**72**		**69**		**77**		**40**		**37**

(a) Trip generation for Car Wash-Automated derived from local studies.
(b) Trip generation based on ITE rates for Fast-Food Restaurant with Drive-Through Window (ITE #934) Average Rate.

CAR WASH PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Car Wash	137	5	3	2	13	7	6
20% Pass-By Trips - Applied to Car Wash	27	1	1	0	3	2	1
80% Primary Trips - Remainder Car Wash	110	4	2	2	10	5	5

FAST FOOD RESTAURANT PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Restaurant Pads	1,145	136	69	67	64	33	31
55% Pass-By Trips - Applied to Restaurant Pads	630	75	38	37	35	18	17
45% Primary Trips - Remainder Restaurant Pads	515	61	31	30	29	15	14

TOTAL EXTERNAL PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External	625	65	33	32	39	20	19
Total External Trips	**625**	**65**	**33**	**32**	**39**	**20**	**19**

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 4A WITH INTERNAL TRIP FACTORS

Use	Size	ADT Internal Factor	AM Internal Factor	PM Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
					Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
RESIDENTIAL																		
Three Story Apartments(a)	400 DU	0.70	0.87	0.55	6.60	1,847	0.37	128	24%	31	76%	97	0.48	106	63%	67	37%	39
Totals:	**400 DU**					**1,847**		**128**		**31**		**97**		**106**		**67**		**39**

(a) Trip generation based on ITE rates for Multifamily Housing (Low-Rise) (ITE #220) Fitted Curve Equation.

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 4B WITH INTERNAL TRIP FACTORS

Use	Size	ADT Internal Factor	AM Internal Factor	PM Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
					Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
RESIDENTIAL																		
Two Story Townhomes(a)	95 DU	0.70	0.87	0.55	6.60	439	0.37	30	24%	7	76%	23	0.48	25	63%	16	37%	9
Totals:	**95 DU**					**439**		**30**		**7**		**23**		**25**		**16**		**9**

(a) Trip generation based on ITE rates for Multifamily Housing (Low-Rise) (ITE #220) Fitted Curve Equation.

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - WITH INTERNAL TRIP FACTORS

Use	Size	ADT Internal Factor	AM Internal Factor	PM Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
					Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																		
High Turnover Sit Down Restaurant (a)	5,000 SF	0.70	0.87	0.55	107.20	375	9.57	42	55%	23	45%	19	9.05	25	61%	15	39%	10
2 Restaurants without Drive Thru (b)	6,000 SF	0.70	0.87	0.55	97.14	408	1.43	7	50%	4	50%	3	12.55	41	55%	23	45%	18
6 Drive Thru Restaurants (c)	18,750 SF	0.70	0.87	0.55	467.48	6,136	44.61	728	51%	371	49%	357	33.03	341	52%	177	48%	164
Shopping Center (d)	55,000 SF	0.70	0.87	0.55	94.49	3,638	3.53	169	62%	105	38%	64	9.84	298	48%	143	52%	155
Gas Station with Mart (e)	10 Fueling Positions	0.70	0.87	0.55	200.80	1,406	16.06	140	50%	70	50%	70	18.42	101	50%	51	50%	50
Car Wash-Automated (f)	1 Tunnel	0.55	0.55	0.55	249.00	137	8.50	5	50%	3	50%	2	23.70	13	50%	7	50%	6
Lube Station (g)	3 Bays	0.70	0.87	0.55	40.00	84	3.00	8	67%	5	33%	3	4.85	8	56%	4	44%	4
Mini Storage (h)	39,500 SF	0.70	0.87	0.55	1.45	40	0.09	3	59%	2	41%	1	0.15	3	47%	1	53%	2
Subtotals:	**124,250 SF**					**12,224**		**1,102**		**583**		**519**		**830**		**421**		**409**
RESIDENTIAL																		
Three Story Apartments (i)	400 DU	0.70	0.87	0.55	6.60	1,847	0.37	128	24%	31	76%	97	0.48	106	63%	67	37%	39
Two Story Townhomes (i)	95 DU	0.70	0.87	0.55	6.60	439	0.37	30	24%	7	76%	23	0.48	25	63%	16	37%	9
Subtotals:	**495 DU**					**2,286**		**158**		**38**		**120**		**131**		**83**		**48**
Totals:						**14,510**		**1,260**		**621**		**639**		**961**		**504**		**457**

(a) Trip generation based on ITE rates for High-Turnover (Sit-Down) Restaurant (ITE #932) Average Rate.
(b) Trip generation based on ITE rates for Fast Casual Restaurant (ITE #930) Average Rate.
(c) Trip generation based on ITE rates for Fast-Food Restaurant with Drive-Through Window (ITE #934) Average Rate.
(d) Trip generation based on ITE rates for Shopping Plaza (ITE #821). Average Rate for ADT and AM Peak Hour. Fitted Curve Equation for PM Peak Hour.
(e) Trip generation based on ITE rates for Convenience Store/Gas Station (ITE #945). Fitted Curve Equation for ADT. Average Rate for AM/PM Peak Hours.
(f) Trip generation for Car Wash-Automated derived from local studies.
(g) Trip generation based on ITE rates for Quick Lubrication Vehicle Shop (ITE #941) Average Rate.
(h) Trip generation based on ITE rates for Mini-Warehouse (ITE #151).
(i) Trip generation based on ITE rates for Multifamily Housing (Low-Rise) (ITE #220) Fitted Curve Equation.

SHOPPING CENTER PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Retail	3,638	169	105	64	298	143	155
40% Pass-By Trips - Applied to Retail	1,455	68	42	26	119	57	62
60% Primary Trips - Remainder Retail	2,183	101	63	38	179	86	93

SIT DOWN RESTAURANT PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Restaurant - Shopping Center and No Drive Thru	783	49	27	22	66	38	28
43% Pass-By Trips - Applied to Restaurant - Shopping Center and No Drive Thru	337	21	12	9	28	16	12
57% Primary Trips - Remainder Restaurant - Shopping Center and No Drive Thru	446	28	15	13	38	22	16

FAST FOOD RESTAURANT PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Restaurant Pads	6,136	728	371	357	341	177	164
55% Pass-By Trips - Applied to Restaurant Pads	3,375	400	204	196	188	98	90
45% Primary Trips - Remainder Restaurant Pads	2,761	328	167	161	153	79	74

GAS STATION PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Gas Station	1,406	140	70	70	101	51	50
75% Pass-By Trips - Applied to Gas Station	1,055	105	53	52	76	38	38
25% Primary Trips - Remainder Gas Station	352	35	17	18	25	13	12

CAR WASH PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Car Wash	137	5	3	2	13	7	6
20% Pass-By Trips - Applied to Car Wash	27	1	1	0	3	2	1
80% Primary Trips - Remainder Car Wash	110	4	2	2	10	5	5

TOTAL PASS-BY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Shopping Center	1,455	68	42	26	119	57	62
Sit Down Restaurant and Fast Casual Restaurant	337	21	12	9	28	16	12
Fast Food Restaurant	3,375	400	204	196	188	98	90
Gas Station	1,055	105	53	52	76	38	38
Car Wash	27	1	1	0	3	2	1
Total Primary Trips	**6,249**	**595**	**312**	**283**	**414**	**211**	**203**

TOTAL EXTERNAL PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External	5,852	496	264	232	405	205	200
Lube Station - External	84	8	5	3	8	4	4
Mini Storage - External	40	3	2	1	3	1	2
Residential - External	2,286	158	38	120	131	83	48
Total External Trips	**8,262**	**665**	**309**	**356**	**547**	**293**	**254**

CAR-WASH TRIP GENERATION CALCULATION WORKSHEETS

TRIP GENERATION AT 2 LOCAL FUEL DEPOT SITES (Walnut & Mesa)

WALNUT CAR WASH

	Pay at Pump/Store	Pay at Pedestal	Pay TOTAL	Pay % Pump/Store	Pay % Pedestal
May-18	1,038	836	1,874	55%	45%
Jun-18	1,653	1,591	3,244	51%	49%
Jul-18	1,774	1,712	3,486	51%	49%
Aug-18	1,754	1,624	3,378	52%	48%
Sep-18	1,667	1,529	3,196	52%	48%
Oct-18	1,164	1,157	2,321	50%	50%
Nov-18	1,115	987	2,102	53%	47%
Dec-18	0	0	0		
Jan-19	392	319	711	55%	45%
Feb-19	227	185	412	55%	45%
Mar-19	409	313	722	57%	43%
Apr-19	1,271	1,105	2,376	53%	47%
May-19	848	718	1,566	54%	46%
Totals >	13,312	12,076	25,388	52%	48%

MESA CAR WASH

	Pay at Pump/Store	Pay at Pedestal	Pay TOTAL	Pay % Pump/Store	Pay % Pedestal
May-18	2,727	4,103	6,830	40%	60%
Jun-18	2,970	4,029	6,999	42%	58%
Jul-18	3,193	4,293	7,486	43%	57%
Aug-18	3,143	4,321	7,464	42%	58%
Sep-18	3,220	4,438	7,658	42%	58%
Oct-18	2,458	3,212	5,670	43%	57%
Nov-18	2,133	2,789	4,922	43%	57%
Dec-18	1,288	1,709	2,997	43%	57%
Jan-19	882	1,164	2,046	43%	57%
Feb-19	571	925	1,496	38%	62%
Mar-19	1,394	2,278	3,672	38%	62%
Apr-19	2,581	3,789	6,370	41%	59%
Totals >	26,560	37,050	63,610	42%	58%
TOTAL BOTH >	**39,872**	**49,126**	**88,998**	**45%**	**55%**

TRIP GENERATION RATES

# Days in 2-Year Period >	716	(number of days data was collected)
Car Washes Per Day>	124.30	(88,998 washes / 716 days)

ADT =	249	(a)
AM Peak Hour =	8.5	(b)
PM Peak Hour =	23.7	(c)

(a) ADT rate based on local studies (124.3 cars per day x 2 = 249).

(b) AM peak hour rate based on local studies (3.4% of car washes occurred during the AM peak hour).

(c) PM peak hour rate based on local studies (9.5% of car washes occurred during the PM peak hour).

ITE MIXED – USE MODEL

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	RICHARDS RANCH	**Organization:**	ATE
Project Location:	SANTA MARIA	**Performed By:**	GOM
Scenario Description:	WITHOUT PASS-BY	**Date:**	18-May-22
Analysis Year:		**Checked By:**	SAS
Analysis Period:	**AM Street Peak Hour**	**Date:**	18-May-22

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	821/945/941	55,000	SF	205	118	87
Restaurant	930/932/934	29,750	SF	408	209	199
Cinema/Entertainment				0		
Residential	220	495	DU	182	43	139
Hotel				0		
All Other Land Uses[2]	151	39,500	SF	4	2	2
				799	372	427

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		11	0	1	0
Restaurant	0	9		0	2	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	1	28	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	799	372	427
Internal Capture Percentage	13%	14%	12%
External Vehicle-Trips[5]	695	320	375
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	8%	14%
Restaurant	19%	6%
Cinema/Entertainment	N/A	N/A
Residential	7%	21%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	RICHARDS RANCH	**Organization:**	ATE
Project Location:	SANTA MARIA	**Performed By:**	GOM
Scenario Description:	WITHOUT PASS-BY	**Date:**	18-May-22
Analysis Year:		**Checked By:**	SAS
Analysis Period:	**PM Street Peak Hour**	**Date:**	18-May-22

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	821/945/941	55,000	SF	432	210	222
Restaurant	930/932/934	29,750	SF	347	184	163
Cinema/Entertainment				0		
Residential	220	495	DU	239	151	88
Hotel				0		
All Other Land Uses[2]	151	39,500	SF	6	3	3
				1,024	548	476

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		53	0	58	0
Restaurant	0	67		0	24	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	21	18	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	1,024	548	476
Internal Capture Percentage	47%	44%	51%
External Vehicle-Trips[5]	542	307	235
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	42%	50%
Restaurant	39%	56%
Cinema/Entertainment	N/A	N/A
Residential	54%	44%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

CITY OF SANTA MARIA APPROVED AND PENDING PROJECTS LIST

Associated Transportation Engineers
Pending and Approved Projects - Trip Generation Worksheet

RICHARDS RANCH PROJECT - CUMULATIVE CITY LIST (#21069)																	
Land-Use		Size		Multi-Trip	AM Peak						PM Peak						
					Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
18	BONITA PACKING EXPANSION (a)	173,270	SF	1.00	0.11	19	77%	15	23%	4	0.12	21	28%	6	72%	15
19	MAXCO BOX FACILITY (n)	167,850	SF	1.00	-	39	-	32	-	7	-	40	-	9	-	31
21	BLOSSER SOUTHEAST (b)	-	-	1.00	-	-19	-	-19	-	0	-	-202	-	-103	-	-99
23	VANDENBERG SENIOR RESIDENCES (c)	52	DU	1.00	0.20	10	34%	3	66%	7	0.25	13	56%	7	44%	6
24	SEASIDE PACKAGING WAREHOUSE (d)	40,854	SF	1.00	0.17	7	77%	5	23%	2	0.19	8	28%	2	72%	6
26	CENTENNIAL SQUARE APARTMENTS (e)	184	DU	1.00	0.36	66	29%	19	71%	47	0.46	85	59%	50	41%	35
27	BARCELLUS SENIOR APARTMENTS (c)	80	DU	1.00	0.20	16	34%	5	66%	11	0.25	20	56%	11	44%	9
28	WESTGATE MARKETPLACE (f)	68,000	SF	1.00	3.53	240	62%	149	38%	91	9.03	614	48%	295	52%	319
29	JOSHI COMMERCIAL (g)	3,200	SF	1.00	3.10	10	79%	8	21%	2	3.93	13	30%	4	70%	9
30	CENTENNIAL GARDENS (e)	160	DU	1.00	0.36	58	29%	17	71%	41	0.46	74	59%	44	41%	30
32	NEWLOVE EAST APARTMENTS (h)	16	DU	1.00	0.40	6	24%	1	76%	5	0.51	8	63%	5	37%	3
38	SERRAMONTE TOWNHOMES (h)	81	DU	1.00	0.40	32	24%	8	76%	24	0.51	41	63%	26	37%	15
39	BETTERAVIA PLAZA (i)	-	-	1.00	-	1,810	-	994	-	816	-	2,293	-	1,126	-	1,167
41	CELEBRATION I, II, III (j)	56	DU	1.00	0.70	39	26%	10	74%	29	0.94	53	63%	33	37%	20
41	CELEBRATION I, II, III (c)	33	DU	1.00	0.20	7	34%	2	66%	5	0.25	8	56%	4	44%	4
41	CELEBRATION I, II, III (k)	7,000	SF	1.00	1.67	12	82%	10	18%	2	2.16	15	34%	5	66%	10
42	ENOS RANCH WEST SHOPPING CENTER (f)	80,900	SF	1.00	3.53	286	62%	177	38%	109	9.03	731	48%	351	52%	380
45	TAVA CORP (l)	33,000	SF	1.00	1.52	50	88%	44	12%	6	1.44	48	17%	8	83%	40
49	2811 CENTER (m)	51,200	SF	1.00	-	60	-	52	-	8	-	60	-	10	-	50
50	PLATINO DEVELOPMENT (m)	48,717	SF	1.00	-	34	-	30	-	4	-	31	-	4	-	27
52	SANTA MARIA STUDIOS (e)	150	DU	1.00	0.36	54	29%	16	71%	38	0.46	69	59%	41	41%	28
53	PARK EDGE APARTMENTS (RESIDENTIAL) (h)	140	DU	1.00	0.40	56	24%	13	76%	43	0.51	71	63%	45	37%	26
53	PARK EDGE APARTMENTS (COMMERCIAL) (o)	5,435	SF	1.00	-	96	-	50	-	46	-	71	-	37	-	34
55	NORTHMAN RESIDENTIAL (m)	63	DU	1.00	-	47	-	12	-	35	-	62	-	39	-	23
56	PEOPLE'S SELF HELP HOUSING (q)	49	DU	1.00	-	36	-	9	-	27	-	49	-	31	-	18
58	LAKEVIEW MIXED USE (m)	164	DU	1.00	-	102	-	26	-	76	-	143	-	86	-	57
59	AIRPORT BUSINESS PARK SPECIFIC PLAN AMENDMENT (p	264,500	SF	1.00	-	574	-	373	-	201	-	505	-	217	-	288
60	DMV SANTA MARIA (r)	3,500	SF	1.00	-	53	-	31	-	22	-	52	-	20	-	32

(a) Trip generation based on ITE Code #157 (High-Cube Cold Storage Warehouse). AM/PM inbound/outbound splits from ITE Code #154 (High-Cube trasnload and Short-Term Storage Warehouse).

(b) Traffic and Circulation Study, ATE, June 2019

(c) Trip generation rate derived from ITE Trip Generation Manual - Senior Adult Housing - Multifamily (#252).

(d) Traffic and VMT Analysis, ATE, April 2021

(e) Trip generation rate derived from ITE Trip Generation Manual - Affordable Housing (#223).

(f) Trip generation rate derived from ITE Trip Generation Manual - Shopping Plaza (40-150k) (#821).

(g) Trip generation rate derived from ITE Trip Generation Manual - Medical-Dental Office Building (#720).

(h) Trip generation rate derived from ITE Trip Generation Manual - Multifamily Housing (Low-Rise) (#220).

(i) Traffic and Circulation Study, ATE, December 2014

(j) Trip generation rate derived from ITE Trip Generation Manual - Single-Family Detached Housing (#210).

(k) Trip generation rate derived from ITE Trip Generation Manual - Small Office Building (#712).

(l) Trip generation rate derived from ITE Trip Generation Manual - General Office Building (#710).

(m) Traffic Impact Study, PSOMAS, May 2020

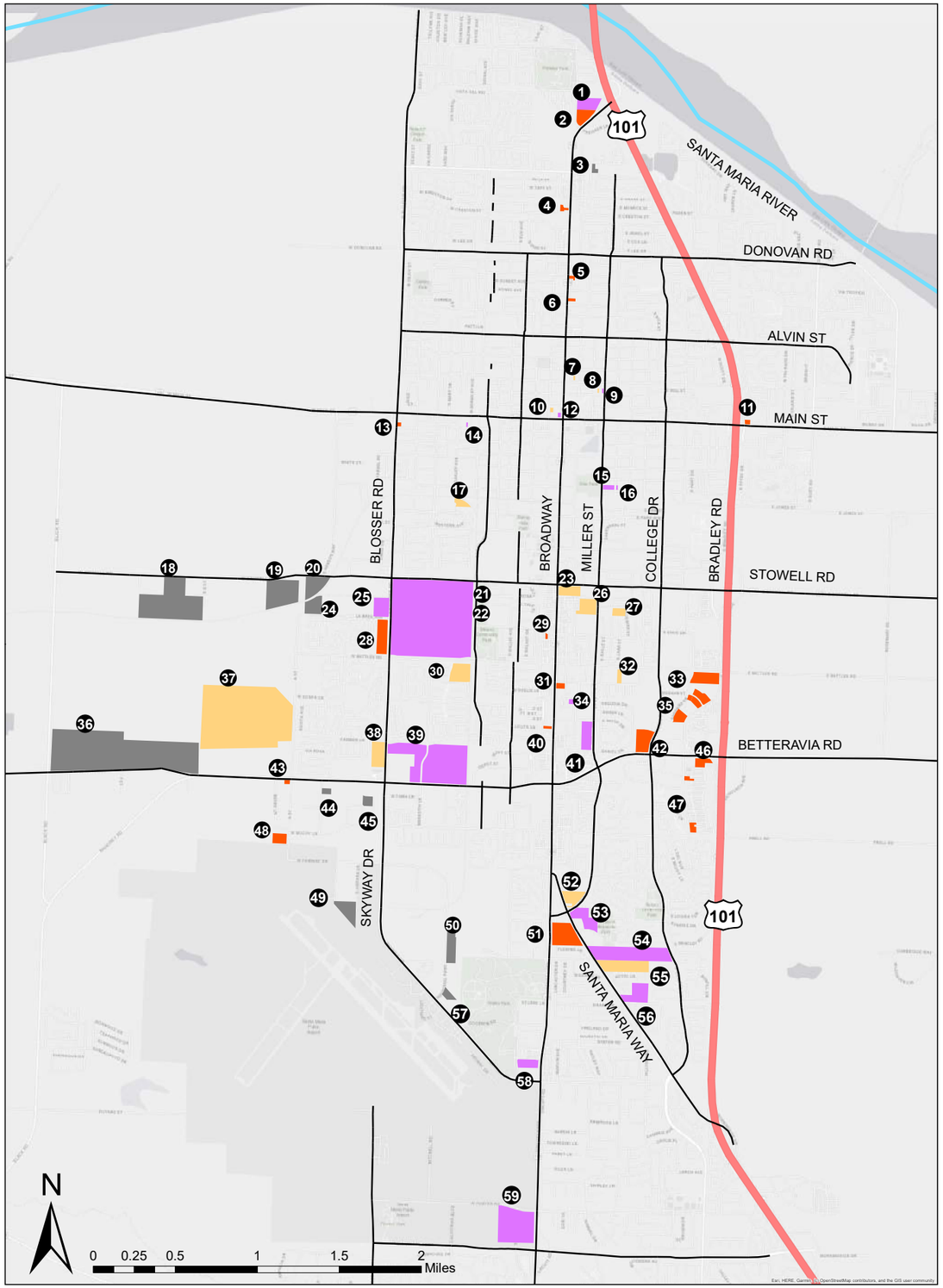
(n) Traffic and Circulation Study, ATE, January 2021

(o) Drive-Through Queue Study, ATE, January 2022

(p) Traffic Study, Central Coast Transportation Consulting, October 2020

(q) Traffic and Circulation Study, ATE, December 2020

(r) Traffic Study, LSA, October 2018



City of Santa Maria
MAJOR DEVELOPMENTS (JULY 2021)

RESIDENTIAL
COMMERCIAL
INDUSTRIAL
MIXED USE/OTHER

Residential

7 **123 Fesler Apartments**
123 E Fesler St
23 unit apartments

8 **309 Mill Apartments**
309 E Mill St
23 unit apartments

10 **Vino Bella Apartments**
120 W Chapel St
32 unit apartments

17 **Oakley Court Apartments**
600 Block S Oackley Ct
30 unit apartments

23 **Vandenberg Senior**
1314 S Broadway
52 unit senior apartment addition

26 **Centennial Square**
SW/c Miller St at Plaza Dr
164 unit affordable apartments

27 **Barcellus Senior Apartments**
502 E Barcellus Ave
80 unit senior apartments

30 **Centennial Gardens**
SW/c Battles Rd & Depot St
160 unit affordable apartments

32 **Newlove East Apartments**
575 E Newlove Dr
16 unit apartments

37 **Workforce Dormitories**
1900 Block of S A Street
Workforce housing dormitories

38 **SerraMonte Townhomes**
2065 S Blosser Rd
81 unit townhomes

52 **Santa Maria Studios**
2660 Santa Maria Way
Affordable units

55 **Northman Residential**
SM Way btw Sunrise Dr & E Dauphin St
63 single family residences

Commercial

2 **Preisker Commercial Center**
N Broadway at Preisker Ln
108 rm hotel, drive thru rest, retail

4 **North Broadway Shell Building**
1700 block of N Broadway
4,473 sq ft commercial space

5 **Orchard Street Corner Market**
1334 N Broadway
1,043 sq ft addition

6 **Superior Sound Systems**
1108 N Broadway
1,800 sq ft building

11 **Starbucks Drive-Thru**
1201 E Main St Ste 1
Coffe shop & drive-thru

13 **Blosser Coin Laundry**
122 S Blosser Rd
4,410 sq ft coin laundry facility

28 **Westgate Marketplace**
S Blosser Rd & W Battles Rd
68,000 sq ft commercial center

29 **Joshi Commercial**
116 W Enos Dr
3,200 sq ft retail

31 **McDonald's**
1710 S Broadway Ave
4,554 sq ft drive thru restaurant

33 **Enos Auto Center North**
Lots 2-7 of Enos Ranchos
Design/layout of auto center

33 **Lot 5 Auto**
Lot 5 Enos Ranchos
29,000 sq ft auto dealership

33 **Home Motors**
1004 E Battles Rd
52,000 sq ft auto dealership

35 **Enos Auto Center South**
Lots 8-11 Enos Ranchos
Design/layout of auto center

35 **Lot 11 Auto**
Lot 11 Enos Ranchos
28,000 sq ft auto dealership

35 **Splash N Dash**
Lot 8 Enos Ranchos
8,200 sq ft car wash

40 **Smile Santa Maria Dental**
1925 S Broadway
7,750 sq ft dental office

42 **Enos Ranch West Shopping Center**
NW/c E Betteravia Rd at S College Dr
80,900 sq ft shopping center

43 **A Street Deli**
W Betteravia Rd at A St
4,420 sq ft retail bldg

46 **Santa Maria Freeway Center**
1000 E Betteravia Rd
23,455 sq ft retail center

47 **Crossroads Expansion Pads**
2100-2300 S Bradley Rd
27,700 sq ft retail on 3 pads

48 **VTC Enterprises (Phase 2)**
2445 A St
6,187 sq ft vocational training bldg

51 **U-Haul**
2875 Santa Maria Way
Ministorage and Office

Industrial

3 **SMOOTH Bus Wash**
240 E Roemer Wy
1,134 sq ft bus wash building

18 **Bonita Packing Expansion**
1850 W Stowell Rd
173,270 sq ft cooler addition

19 **Maxco Box Facility**
1550 W Stowell Rd
60,000 sq ft & outdoor storage

20 **Central Coast Truck Center**
W Stowell & Hanson Way
37,300 sq ft sales & repair facility

24 **Seaside Warehouse**
La Brea Avenue
40, 854 sq ft facility

36 **Windset Farms Greenhouse**
1650 Black Rd
4.3 mil sq ft greenhouse & 93k bldg

44 **DMS Electric**
2224 S Westgate Rd
10,000 sq ft bldg

45 **Tava Corp**
2329 Thompson Way
33,000 sq ft mult-tenant complex

49 **2811 Center**
2811 Airpark Dr
51,200 sq ft of office in 2 bldgs

50 **Platino Development**
2900 block Industrial Pkwy
48,717 sq ft in 4 bldgs on 4 lots

57 **The Gas Company**
3138 Industrial Pkwy
Natural gas fueling station

Mixed Use/Other

1 **Carpenter's Union Training**
2210 N Preisker Ln
30,000 sq ft vocational training

9 **Bathia Mixed Use**
311 N Miller St
1,533 sq ft comm. & 6 res. units

12 **Gateway Mixed Use**
101 N Broadway
33,700 sq ft 4 story mixed use bldg

14 **D&J Sober Living Facility**
819 W Church, 113 S Benwiley
mixed-use w/trans housing & off

15 **Miller & Boone Mixed Use**
501 E Boone St
33,600 sq ft mixed use building

16 **Boone Street Market**
501 E Boone St
2,280 sq ft add & 2 units

21 **Blosser Southeast**
NE/c Blosser Rd & W Battles Rd
Amen. to Specific Plan

22 **Aquistapace Tentative Map**
Blosser SE (Area 5A) SP
16 lots (res, comm, pf & os)

25 **Manriquez Commercial**
NW/c S Blosser Rd & La Brea Ave
Gen. Plan Amen. & Zone Change

34 **Crucified Life Church**
NW/c S McClelland Street
11,700 sq ft church bldg

39 **Betteravia Plaza**
W Betteravia Rd at SMVRR
272 apts & 381,250 sq ft retail/off

41 **Celebration I, II, III**
S Miller St at E Inger Dr
56 homes/33 senior/7,000 sqft comm

53 **Park Edge Apartments**
SE/c Santa Maria Way & S Miller St
140 apt units & 5,435 sq ft comm.

54 **First Baptist Church Master Plan**
2970 Santa Maria Way
Site Master Plan

56 **People's Self Help Housing Land Use Map/Zone Change**
3170 Santa Maria Way
Gen. Plan Amen. & Zone Change

58 **Lakeview Mixed Use**
NW/c S Broadway & Skyway Dr
164 apts & 11,000 sq ft comm

59 **Airport Business Park Specific Plan**
NWC of Orcutt Expressway & Union Pkwy
Specific Plan w/ multiple land uses

City of Santa Maria

MAJOR DEVELOPMENTS (JULY 2021)

1	*Project*	**Carpenter's Union Training Center**	*Category*	**Mixed/Other**	*File #s*	*Approved*	*Status*
	Description	30,000 sq. ft. vocational training center	*Acreage*	6.2	**PD2018-0010**	**10/17/2018**	Building permits approved. Planning permit expiration on 10/17/2021.
	Location	2210 N. Preisker Ln	*District*	PD/C-2	**GPZ2018-0002**	**12/4/2018**	
	APN(s)	128-002-035	*Planner*	Dana Eady	**TR2018-0001**	**10/17/2018**	
	Contact	Christopher Horstman, Architect, 805-544-4334 x104					
2	*Project*	**Preisker Commercial Center**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	108 rm hotel, 15,000 sq. ft. drive thru, rest., retail	*Acreage*	5	**PD2015-0011**	**5/18/2016**	Under construction.
	Location	NW/c N. Broadway and Preisker Ln	*District*	PD-f/C-2	**TR2016-0001**	**9/7/2016**	
	APN(s)	128-002-048, -049 & -050	*Planner*	Carol Ziesenhenne	**A2019-0004**	**2/18/2019**	
	Contact	Jody Walker Belsick, Applicant, 702-786-1829					
3	*Project*	**SMOOTH Bus Wash**	*Category*	**Industrial**	*File #s*	*Approved*	*Status*
	Description	1,134 sq. ft. bus wash building	*Acreage*	1.2	**PD2017-0023**	**5/16/2018**	Planning permit expiration on 5/16/2023
	Location	240 E. Roemer Way	*District*	PD/C-2	**A2021-0004**		
	APN(s)	128-003-046	*Planner*	Dana Eady			
	Contact	Tom Martinez, Architect, 805-934-5737					
4	*Project*	**North Broadway Shell Building**	*Category*	**Commercial**	**PD2007-014**	**7/2/2008**	*Status*
	Description	4,473 commercial space	*Acreage*	3	**TR5996-0001**	**9/3/2014**	Under construction.
	Location	1700 block of N. Broadway	*District*	PD/C-2	**A2015-0031**	**11/6/2015**	
	APN(s)	117-040-038, 039, and 040	*Planner*	Cody Graybehl			
	Contact	Ellen Goodwin, Architect					
5	*Project*	**Orchard Street Corner Market**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	1,043 sq ft addition to existing corner market	*Acreage*	0.45	**PD2019-0005**	**10/2/2019**	Planning permit expiration on 10/2/2022.
	Location	1334 N. Broadway	*District*	PD/C-2			
	APN(s)	121-031-004	*Planner*	Cody Graybehl			
	Contact	Rami Zakour, Applicant					
6	*Project*	**Superior Sound Systems**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	1,800 sq. ft. building	*Acreage*	0.5	**PD2018-0015**	**5/15/2019**	Planning permit expiration on 5/15/2022.
	Location	1108 N. Broadway	*District*	PD/C-2			
	APN(s)	121-051-002	*Planner*	Carol Ziesenhenne			
	Contact	Paul Knutson, Engineer, 805-922-4777					
7	*Project*	**123 Fesler Apartments**	*Category*	**Residential**	*File #s*	*Approved*	*Status*
	Description	Construct a 23 unit, 9750 sq. ft. apartment building	*Acreage*	0.2	**DT2020-0016**	**Pending**	Planning permits under review.
	Location	123 E Fesler St	*District*	DTSP - Bungalow District			
	APN(s)	121-152-014	*Planner*	Frank Albro			
	Contact	Jason Heyward, Consultant, 805-928-8948					

8	*Project*	**309 Mill Apartments**	*Category*	**Residential**	*File #s*	*Approved*	*Status*
	Description	Construct a 23 unit, 9750 sq. ft. apartment building	*Acreage*	0.2	**DT2020-0015**	**Pending**	Planning permits under review.
	Location	309 E Mill St	*District*	DTSP - Bungalow District			
	APN(s)	121-193-011	*Planner*	Frank Albro			
	Contact	Jason Heyward, Consultant, 805-928-8948					
9	*Project*	**Bathia Mixed Use**	*Category*	**Mixed/Other**	*File #s*	*Approved*	*Status*
	Description	1,533 sq. ft. commercial & 6 residential units	*Acreage*	0.2	**DT2017-0088**	**1/30/2018**	Building permits submitted. Planning permit expiration on 7/30/2021
	Location	311 N. Miller St	*District*	Downtown SP	**A2019-0027**	**7/30/2019**	
	APN(s)	121-193-008	*Planner*	Frank Albro			
	Contact	Chris Thomas Pasco, Consultant, 805-703-0380					
10	*Project*	**Vino Bella Apartments**	*Category*	**Residential**	*File #s*	*Approved*	*Status*
	Description	Construct a 32 unit, 3-story apartment building	*Acreage*	0.3	**DT2020-0017**	**12/16/2020**	Planning permit expiration on 12/16/2023.
	Location	120 W Chapel St	*District*	DTSP - Bungalow District			
	APN(s)	119-276-015	*Planner*	Frank Albro			
	Contact	Ben Nikfarjam, Applicant, 310-215-4882					
11	*Project*	**Starbucks Drive-Thru**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	Coffee shop and drive-thru	*Acreage*	0.56	**PD2021-0001**	**Pending**	Planning permits under review.
	Location	1201 E Main St Ste 1	*District*	PD/HC	**U2021-0003**		
	APN(s)	128-120-004	*Planner*	Carol Ziesenhenne			
	Contact	Joey Ly, Applicant, 714-560-8673					
12	*Project*	**Gateway Mixed Use**	*Category*	**Mixed/Other**	*File #s*	*Approved*	*Status*
	Description	33,700 sq. ft., four-story mixed use development	*Acreage*	0.3	**DT2017-0033**	**1/16/2018**	Building permits submitted. Planning permit expiration on 7/16/2020.
	Location	101 N. Broadway	*District*	Downtown SP	**A2019-0032**	**9/4/2019**	
	APN(s)	119-276-019	*Planner*	Dana Eady			
	Contact	Ben Nikfarjam, Developer, 310-251-4882					
13	*Project*	**Blosser Coin Laundry**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	4,410 sq. ft. coin laundry facility	*Acreage*	0.4	**PD2017-0018**	**8/15/2018**	Under construction
	Location	122 S. Blosser Rd	*District*	PD/C-2			
	APN(s)	123-011-023	*Planner*	Carol Ziesenhenne			
	Contact	Irina Tudorache, Applicant, 213-388-5807					
14	*Project*	**D&J's Sober Living Facility**	*Category*	**Mixed/Other**	*File #s*	*Approved*	*Status*
	Description	Mixed-use facility w/transitional housing and offices	*Acreage*	0.4	**PD2017-0011**	**11/1/2017**	123-024-007 parcel has been built. Building permits submitted for 123-024-008.
	Location	819 W. Church St, 113 S. Benwiley Ave	*District*	PD/C-2	**A2018-0010**	**9/19/2018**	
	APN(s)	123-024-008, 007	*Planner*	Frank Albro			
	Contact	Jeff Jeffery, Applicant, 619-301-1846					
15	*Project*	**Miller & Boone Mixed Use**	*Category*	**Mixed Use/Other**	*File #s*	*Approved*	*Status*
	Description	Construct a 33,600 sq. ft. mixed use building	*Acreage*	1.19	**DT2020-0013**	**Pending**	Planning permits under review.
	Location	417 E Boone St	*District*	DTSP- Bungalow District			
	APN(s)	125-112-011	*Planner*	Cody Graybehl			
	Contact	Rami Zakour, Applicant, 805-403-2195					

16	*Project*	**Boone Street Market**	*Category*	**Mixed/Other**	*File #s*	*Approved*	*Status*
	Description	2,280 sq. ft. addition to market, and 2 new units	*Acreage*	0.2	**GPZ2016-0004**	**5/2/2017**	Planning permit expiration on 3/20/2022.
	Location	501 E. Boone St	*District*	Downtown SP	**SPZ2016-0003**	**5/2/2017**	
	APN(s)	125-114-015	*Planner*	Carol Ziesenhenne	**DT2016-0040**	**8/21/2017**	
	Contact	Brian Schwartz, Consultant, 805-934-5760			**A2019-0006**	**3/4/2019**	
					A2020-0012	**6/8/2020**	
17	*Project*	**Oakley Court Apartments**	*Category*	**Residential**	*File #s*	*Approved*	*Status*
	Description	30 apartment units with on-site manager's unit	*Acreage*	2.1	**GPZ2019-0001**	**10/1/2019**	Planning permit expiration on 7/17/2022
	Location	600 Block S. Oakley Ct	*District*	PD/R-3	**PD2019-0002**	**7/17/2019**	
	APN(s)	123-140-036	*Planner*	Frank Albro			
	Contact	Lupe & Gustavo, Applicant, 805-937-1108					
18	*Project*	**Bonita Packing Expansion**	*Category*	**Industrial**	*File #s*	*Approved*	*Status*
	Description	173,270 sq. ft. cooler addition in 4 phases	*Acreage*	45.4	**PD2012-0007**	**5/1/2013**	Phase 1 (45,935 sq. ft.) is completed.
	Location	1850 W. Stowell Rd	*District*	PD/CM			
	APN(s)	117-820-028	*Planner*	Dana Eady			
	Contact	John Smith, Engineer, 805-466-5660					
19	*Project*	**Maxco Box Facility**	*Category*	**Industrial**	*File #s*	*Approved*	*Status*
	Description	Construct a new 60,000 sq. ft. box facility and outdoor storage yard	*Acreage*	19.8	**PD2020-0003**	**Pending**	Planning permits under review.
	Location	1550 W Stowell Rd	*District*	PD/CM-AG			
	APN(s)	117-820-015	*Planner*	Cody Graybehl			
	Contact	Steve Rigor, Applicant, (503) 477-8328 x 112					
20	*Project*	**Central Coast Truck Center**	*Category*	**Industrial**	*File #s*	*Approved*	*Status*
	Description	37,300 sq ft building for the sales and repair of semi-trucks	*Acreage*	8.3	**U2019-0010**	**12/18/2019**	Under construction.
	Location	W. Stowell Rd & Hanson Way	*District*	M-2			
	APN(s)	117-240-021	*Planner*	Frank Albro			
	Contact	RRM Design, Consultant, 805-543-1794					
21	*Project*	**Blosser Southeast**	*Category*	**Mixed/Other**	*File #s*	*Approved*	*Status*
	Description	Amendment to Blosser Southeast Specific Plan	*Acreage*	155.5	**GPZ2016-0003**	**10/20/2020**	Planning permits aproved.
	Location	NE/c of S. Blosser Rd and W. Battles Rd	*District*	Blosser SE SP	**SPZ2016-0002**	**10/20/2020**	
	APN(s)	117-240-028	*Planner*	Dana Eady	**TR2019-0003**	**10/20/2020**	
	Contact	Laurie Tamura, Consultant, 805-934-5760					
22	*Project*	**Aquistapace Tentitive Map**	*Category*	**Mixed/Other**	*File #s*	*Approved*	*Status*
	Description	16 lots (residential, commercial, public facility, open space)	*Acreage*	146.5	**TR2019-0003**	**Pending**	Planning permit under review.
	Location	Blosser Southeast (Area 5A) Specific Plan	*District*	Blosser Southeast SP			
	APN(s)	117-240-028	*Planner*	Dana Eady			
	Contact	Jason Tamura , 805-934-5737					
23	*Project*	**Vandenberg Senior Residences**	*Category*	**Residential**	*File #s*	*Approved*	*Status*
	Description	52 unit senior apartment addition	*Acreage*	4.9	**PD2017-0002**	**7/18/2018**	Building permit submitted. Planning permit expiration on 7/18/2021.Time extension under review.
	Location	1314 S. Broadway	*District*	PD/C-1	**A2021-0008**	**Pending**	
	APN(s)	128-065-008	*Planner*	Carol Ziesenhenne			
	Contact	Barry Williams, Architect, 805-459-7353					

24	*Project*	**Seaside Packaging Warehouse**	*Category*	**Industrial**	*File #s*	*Approved*	*Status*
	Description	40, 854 square-foot packaging warehouse	*Acreage*	6.18	**U2021-0002**	**Pending**	Planning permit under review.
	Location	La Brea Avenue	*District*	M-2			
	APN(s)	117-240-034	*Planner*	Cody Graybehl			
	Contact	Suzanne D. Winslow, Applicant, (805) 544-9700					
25	*Project*	**Manriquez Commercial Land Use Map/Zone Change**	*Category*	**Mixed Use/Other**	*File #s*	*Approved*	*Status*
	Description	Revise the land use and zone designations from GI, M-2 to CC, PD/C-2	*Acreage*	6.74	**GPZ2020-0002**	**Pending**	Planning permits under review.
	Location	NW/c S. Blosser Rd and La Brea Ave.	*District*	M-2			
	APN(s)	117-240-024	*Planner*	Cody Graybehl			
	Contact	Manriquez Commercial Real Estate, Applicant					
26	*Project*	**Centennial Square Apartments**	*Category*	**Residential**	*File #s*	*Approved*	*Status*
	Description	184 affordable apartments	*Acreage*	6.35	**PD2020-0009**	**8/4/2021**	Planning permit expiration on 8/4/2024.
	Location	SW/c Miller St and Plaza Dr	*District*	PD/R-3			
	APN(s)	128-066-003	*Planner*	Carol Ziesenhenne			
	Contact	Brian Schwartz, Consultant, 805-934-5760					
27	*Project*	**Barcellus Senior Apartments**	*Category*	**Residential**	*File #s*	*Approved*	*Status*
	Description	80 unit senior apartments	*Acreage*	2.3	**GPZ2016-0002**	**12/7/2016**	Planning permit expiration on 6/6/2023.
	Location	502 E. Barcellus Ave	*District*	CPO	**PD2016-0005**	**12/7/2016**	
	APN(s)	128-067-032, -033, -034	*Planner*	Cody Graybehl	**A2018-0005**	**7/18/2018**	
	Contact	Brian Schwartz, Consultant, 805-934-5760			**A2019-0037**	**11/6/2019**	
					A2021-0005	**6/2/2021**	
28	*Project*	**Westgate Marketplace**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	68,000 sq. ft. commercial center	*Acreage*	7.6	**PD2007-012**	**7/2/2008**	Planning permit expiration on 12/15/2021.
	Location	NW/c S. Blosser Rd and W. Battles Rd	*District*	PD/CC	**A2016-0011**	**6/15/2016**	
	APN(s)	117-240-046, -045	*Planner*	Dana Eady	**A2017-0029**	**2/7/2018**	
	Contact	Craig Minus, Developer, 805-962-2121			**A2018-0023**	**1/16/2019**	
					A2020-0003	**5/20/2020**	
29	*Project*	**Joshi Commercial**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	3,200 sq. ft. of retail	*Acreage*	0.3	**PD2016-0015**	**6/7/2017**	Planning permit expiration on 12/7/2021.
	Location	116 W. Enos Dr	*District*	PD/C-1	**A2018-0024**	**2/6/2019**	
	APN(s)	117-300-084	*Planner*	Frank Albro	**A2020-0001**	**5/6/2020**	
	Contact	Tom Martinez, Architect, 805-934-5737					
30	*Project*	**Centennial Gardens**	*Category*	**Residential**	*File #s*	*Approved*	*Status*
	Description	Construct 160 affordable apartment units	*Acreage*	8.36	**PD2020-0006**	**11/18/2020**	Building permits submitted. Planning permit expiration 11/18/2023
	Location	SW/c Battles and Depot	*District*	PD/R-3			
	APN(s)	118-010-058	*Planner*	Frank Albro			
	Contact	Templeton Santa Barbara, LLC, Applicant, 805-598-1825					
31	*Project*	**McDonald's**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	4,554 sq ft drive thru restaurant	*Acreage*	0.8	**PD2019-0006**	**11/6/2019**	Building permits submitted. Planning permit expiration 11/6/2022.
	Location	1710 S. Broadway Ave	*District*	PD/C-2,R-2			
	APN(s)	128-075-001	*Planner*	Carol Ziesenhenne			
	Contact	Robert Preece, Consultant, 909-821-6703					

32	*Project*	**Newlove East Apartments**	*Category*	**Residential**	*File #s*	*Approved*	*Status*
	Description	16 apartment units	*Acreage*	1.4	**U2016-0016**	**2/21/2018**	Building permits submitted. Planning permit expiration on 5/6/2023.
	Location	575 E. Newlove Dr	*District*	R-2	**A2019-0044**	**5/6/2020**	
	APN(s)	128-073-016	*Planner*	Frank Albro			
	Contact	Tom Martinez, Architect, 805-934-5737					
33	*Project*	**Enos Auto Center North Campus**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	Overall site design and layout of an auto center	*Acreage*	17.7	**PD2018-0006**	**5/16/2018**	Under construction.
	Location	Lots 2-7 of Enos Ranchos Specific Plan	*District*	Enos Ranchos SP	**TU2019-0153**	**6/17/2020**	
	APN(s)	128-189-002, 003, 004, 005, 006, 007	*Planner*	Carol Ziesenhenne			
	Contact	Jacob Weintraub, Consultant, 805-441-0332					
33(a)	*Project*	**Lot 5 Auto**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	A 29,000 sq. ft. auto dealership	*Acreage*	2	**PD2017-0020**	**5/16/2018**	Under construction.
	Location	Lot 5 & 6	*District*	Enos Ranchos SP			
	APN(s)	128-189-005	*Planner*	Carol Ziesenhenne			
	Contact	Jacob Weintraub, Consultant, 805-441-0332					
33(b)	*Project*	**Home Motors**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	52,000 sq. ft. auto dealership	*Acreage*	7.2	**PD2018-0004**	**5/16/2018**	Under construction.
	Location	1004 E. Battles Rd	*District*	Enos Ranchos SP			
	APN(s)	128-189-002	*Planner*	Carol Ziesenhenne			
	Contact	Jacob Weintraub, Consultant, 805-441-0332					
34	*Project*	**Crucified Life Church**	*Category*	**Mixed/Other**	*File #s*	*Approved*	*Status*
	Description	11,700 sq. ft. building	*Acreage*	0.6	**PD2017-0017**	**2/21/2018**	Building permits submitted. Planning permit expiration on 2/21/2023.
	Location	NW/c S. McClelland St	*District*	PD/C-2	**A2019-0041**	**12/18/2019**	
	APN(s)	128-114-069	*Planner*	Frank Albro	**A2020-0017**	**2/3/2021**	
	Contact	Cordelia Raymond, Architect, 805-786-4391					
35	*Project*	**Enos Auto Center South Campus**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	Overall site design and layout of an auto center	*Acreage*	15.2	**PD2018-0007**	**5/16/2018**	Under construction.
	Location	Lots 8-11 of the Enos Ranch Specific Plan	*District*	Enos Ranchos SP			
	APN(s)	128-189-008, 009, 010, 011	*Planner*	Carol Ziesenhenne			
	Contact	Jacob Weintraub, Consultant, 805-441-0332					
35(a)	*Project*	**Lot 11 Auto**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	A 28,000 sq. ft. auto dealership	*Acreage*	3	**PD2017-0021**	**7/18/2018**	Under construction.
	Location	Lot 11	*District*	Enos Ranchos SP			
	APN(s)	128-189-011	*Planner*	Carol Ziesenhenne			
	Contact	Jacob Weintraub, Consultant, 805-441-0332					
35(b)	*Project*	**Splash N Dash**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	8,200 sq ft carwash	*Acreage*	1.6	**PD2018-0005**	**9/4/2019**	Grading permits submitted. Planning permit expiration on 9/4/2022.
	Location	Lot 8	*District*	Enos Ranchos SP			
	APN(s)	128-189-008	*Planner*	Dana Eady			
	Contact	Jacob Weintraub, Consultant, 805-441-0332					

36	*Project*	**Windset Farms Greenhouses 7-9**	*Category*	**Industrial**	*File #s*	*Approved*	*Status*
	Description	4.3 mil sq. ft. greenhouse and 93,000 sq. ft. bldg.	*Acreage*	49	**PD2017-0009**	**Pending**	Planning permit under review.
	Location	1650 Black Rd	*District*	Area 9 SP			
	APN(s)	117-310-004 thru -010	*Planner*	Dana Eady			
	Contact	Brian Schwartz, Consultant, 805-934-5760					
37	*Project*	**Workforce Dormitories**	*Category*	**Residential**	*File #s*	*Approved*	*Status*
	Description	Workforce Housing Dormitories	*Acreage*	127.96	**PD2019-0011**	**Pending**	Planning permit under review.
	Location	1900 Block of S. A Street	*District*	Area 9 Specific Plan	**SPZ2020-0001**		
	APN(s)	128-003-019	*Planner*	Frank Albro			
	Contact	Dan Blough, Applicant, 805-4937-1108					
38	*Project*	**SerraMonte Townhomes**	*Category*	**Residential**	*File #s*	*Approved*	*Status*
	Description	81 townhome units	*Acreage*	6.5	**GPZ2018-0003**	**6/4/2019**	Planning permit expiration on 3/20/2022.
	Location	2065 S. Blosser Rd	*District*	PD/R-3	**PD2018-0012**	**3/20/2019**	
	APN(s)	117-770-016, -017, -018, -047	*Planner*	Dana Eady	**TR2018-0002**	**3/20/2019**	
	Contact	Laurie Tamura, Consultant, 805-934-5760					
39	*Project*	**Betteravia Plaza**	*Category*	**Mixed/Other**	*File #s*	*Approved*	*Status*
	Description	Up to 272 apts. and 381,250 sq. ft. of retail/office	*Acreage*	55.2	**GPZ2015-0002**	**2/2/2016**	Tentative map expiration on
	Location	NW/c of W. Betteravia Rd & SMVRR tracks	*District*	Multiple	**DA2015-0001**	**2/2/2016**	8/3/2021. Master PD approved.
	APN(s)	117-330-082	*Planner*	Dana Eady	**TR2018-0002**	**11/21/2018**	Grading permit approved.
	Contact				**PD2015-0006**	**2/3/2016**	Final map under review.
40	*Project*	**Smile Santa Maria Dental**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	7,750 sq. ft. dental office building	*Acreage*	0.9	**PD2018-0016**	**9/19/2018**	Building permits submitted. Planning permit expiration 9/19/2021.
	Location	1925 S. Broadway	*District*	PD/C-2			
	APN(s)	117-500-029	*Planner*	Carol Ziesenhenne			
	Contact	Cordelia Raymond, Architect, 805-786-4391					
41	*Project*	**Celebration I, II, III**	*Category*	**Mixed/Other**	*File #s*	*Approved*	*Status*
	Description	56 single family units, 33 unit senior apt,	*Acreage*	6.8	**Tract 5893, 5921**	**Recorded**	Phase III (rooftop gardens) building
		7,000 sq. ft. office bldg, 1 mixed use bldg	*District*	PD/R-2	**PD2005-023**	**12/21/2005**	permits submitted and planning
	Location	NW/c S. Miller St and E. Inger Dr	*Planner*	Cody Graybehl	**PD2006-019**	**9/20/2006**	permits expiration on 8/15/2021.
	APN(s)	128-177 (all) and 128-178 (all)			**PD2013-0010**	**7/1/2014**	
	Contact	Frances Romero, Agent, 805-469-9510			**Tract 5993**	**7/1/2014**	
					PD2018-0001	**8/15/2018**	
42	*Project*	**Enos Ranch West Shopping Center**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	80,900 sq. ft. shopping center in 6 buildings	*Acreage*	7.8	**PD2011-005**	**8/1/2012**	Building permits submitted. Planning permit expiration 8/19/2023.
	Location	NW/c E. Betteravia Rd and S. College Dr	*District*	Enos Ranchos SP	**A2016-0006**	**3/30/2016**	
	APN(s)	128-078-010	*Planner*	Carol Ziesenhenne	**A2017-0008**	**3/7/2018**	
	Contact	Clifford Rhea, Consultant, 805-260-4154			**A2019-0013**	**6/19/2019**	
					PD2020-0004	**8/19/2020**	
43	*Project*	**A Street Deli**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	4,420 sq. ft. retail building	*Acreage*	0.5	**GPZ2015-0005**	**9/20/2016**	Building permits issued. Planning permit expiration 6/28/2020.
	Location	SW/c Betteravia Rd and A St	*District*	PD/M-1	**PD2015-0019**	**9/21/2016**	
	APN(s)	111-040-006	*Planner*	Dana Eady	**A2018-0002**	**3/21/2018**	
	Contact	Gil Rodriguez, Applicant, 805-478-1674			**A2019-0025**	**9/4/2019**	

44	*Project*	**DMS Electric**	*Category*	**Industrial**	*File #s*	*Approved*	*Status*
	Description	10,000 sq. ft. new construction	*Acreage*	1.26	**PD96-17**	**1/22/1997**	Phase 1 (5,000 sq. ft.) is complete, no building permit submittal for Phase 2 (5,000 sq. ft.)
	Location	2224 S. Westgate Rd	*District*	PD/CM			
	APN(s)	111-400-050	*Planner*	Dana Eady			
	Contact	David Shahrabani, Owner, 805-922-6033 *					
45	*Project*	**Tava Corp**	*Category*	**Industrial**	*File #s*	*Approved*	*Status*
	Description	33,000 sq. ft. multi-tenant complex	*Acreage*	3	**PD2016-0012**	**8/16/2017**	Under construction.
	Location	2329 Thompson Way	*District*	PD/M-1			
	APN(s)	111-400-018	*Planner*	Frank Albro			
	Contact	Kevin Moore, Architect, 805-455-0574					
46	*Project*	**Santa Maria Freeway Center**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	23,455 sq. ft. retail on five pads	*Acreage*	4.7	**PD2002-020**	**6/4/2003**	1,898 sq. ft. gas station and Popeye's restaurant complete.
	Location	1000 E. Betteravia Rd	*District*	Entrada Este SP	**A2014-0012**	**12/5/2015**	
	APN(s)	128-136-043, -056	*Planner*	Frank Albro	**A2016-0019**	**11/23/2016**	
	Contact	Jim Lichacz, Consultant, 323-874-3370			**A2019-0021**	**8/5/2019**	
47	*Project*	**Crossroads Expansion Pads**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	27,700 sq. ft. on three new pads	*Acreage*	47.8	**PD2012-0001**	**8/1/2012**	Under construction, two of the three pads completed.
	Location	2100 - 2300 S. Bradley Rd	*District*	Entrada Este SP	**Tract 5997**	**Recorded**	
	APN(s)	128-136-050, -053, 128-137-060	*Planner*	Cody Graybehl	**A2014-0008**	**9/17/2014**	
	Contact	Ryan Best, Developer, 714-241-0400			**A2018-0020**	**12/10/2018**	
48	*Project*	**VTC Enterprises (Phase 2)**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	6,187 sq. ft. vocational training buildings	*Acreage*	3.3	**U2008-004 (PR)**	**7/2/2008**	Classroom building built (12,023 sq. ft.). Building permits submitted for phase 2.
	Location	2445 A St	*TAZ*	30091			
	APN(s)	111-040-043, -044	*District*	PF			
	Contact	Gil Palacios, Architect, 805-928-8008	*Planner*	Cody Graybehl			
49	*Project*	**2811 Center**	*Category*	**Industrial**	*File #s*	*Approved*	*Status*
	Description	51,200 sq. ft. of office in 2 buildings	*Acreage*	7	**PD2017-0003**	**6/7/2017**	One 25,600 sq. ft. building constructed. Under construction.
	Location	2811 Airpark Dr	*District*	PD/M-1	**TR2017-0002**	**3/21/2018**	
	APN(s)	111-231-003	*Planner*	Carol Ziesenhenne			
	Contact	Steve Simoulis, Developer, 805-541-9004					
50	*Project*	**Platino Development**	*Category*	**Industrial**	*File #s*	*Approved*	*Status*
	Description	48,717 sq. ft. in 4 buildings on 4 lots	*Acreage*	5.1	**PD2010-006**	**2/16/2011**	Planning permit under review
	Location	2900 block Industrial Parkway	*District*	PD/M-1	**A2015-0032**	**9/2/2015**	
	APN(s)	111-291-035, -036, -038, -039	*Planner*	Dana Eady	**A2016-0034**	**Closed**	
	Contact	Chris Mathys, Developer, 559-438-9999 ext. 11			**A2019-0016**	**Pending**	
51	*Project*	**U-Haul Ministorage and Office**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	Exterior improvements to the building and interior remodel to include mini-storage	*Acreage*	13	**U2019-0008**	**6/19/2019**	Building permits submitted. Planning permits expiration on 6/17/2023.
	Location	2875 Santa Maria Way	*District*	PD/C-2	**U2019-0021**	**6/17/2020**	
	APN(s)	109-010-008	*Planner*	Cody Graybehl	**PD2020-0002**	**6/17/2020**	
	Contact	Tom Martinez, Architect, 805-934-5737					

52	*Project*	**Santa Maria Studios**	*Category*	**Residential**	*Files #s*	*Approved*	*Status*
	Description	Affordable Housing Project	*Acreage*	5.5	**PD2020-0001**	**N/A**	Building permits submitted.
	Location	2660 Santa Maria Way, Santa Maria, CA	*District*	PD/C-2			
	APN(s)	128-090-011	*Planner*	Dana Eady			
	Contact	AMG & Associates, LLC, 818-380-2600					
53	*Project*	**Park Edge Apartments**	*Category*	**Mixed Use/Other**	**PD2020-0008**	**Pending**	Planning permits under review.
	Description	140 apt units, clubhouse and 5,435 sq. ft. multi-tenant commercial	*Acreage*	7.45	**U2020-0012**	**Pending**	
	Location	SE/corner of Santa Maria Way & Miller Street	*District*	PD/C-2 & PD/R-3	**SUB2021-0001**	**Pending**	
	APN(s)	128-090-022, -023 & 109-010-039	*Planner*	Cody Graybehl			
	Contact	Brian Schwartz, Consultant, 805-934-5760					
54	*Project*	**First Baptist Church Master Plan**	*Category*	**Mixed Use/Other**	*File #s*	*Approved*	*Status*
	Description	Site Master Plan	*Acreage*	25.5	**U2019-0005**	**Pending**	Planning permits under review.
	Location	2970 Santa Maria Way	*District*	PD/R-1			
	APN(s)	109-010-019	*Planner*	Carol Ziesenhenne			
	Contact	John Kemlo, Applicant, 805-937-8405					
55	*Project*	**Northman Residential**	*Category*	**Residential**	*File #s*	*Approved*	*Status*
	Description	63 single family residences	*Acreage*	13.2	**GPZ2018-0004**	**8/6/2019**	Building permits submitted. Planning permit expiration 6/19/2022.
	Location	Santa Maria Wy btw Sunrise Dr & E Dauphin St	*District*	PD/R-1	**TR2018-0003**	**7/16/2019**	
	APN(s)	109-010-005, -006	*Planner*	Dana Eady	**PD2018-0013**	**6/19/2019**	
	Contact	Brian Schwartz, Consultant					
56	*Project*	**People's Self Help Housing Land Use Map/Zone Change**	*Category*	**Mixed Use/Other**	*File #s*	*Approved*	*Status*
	Description	From CC, PD/C-2 to LMDR-8, PD/R-1	*Acreage*	8.89	**GPZ2021-0001**	**Pending**	Planning permits under review.
	Location	3170 Santa Maria Way	*District*	PD/C-2			
	APN(s)	109-010-012	*Planner*	Frank Albro			
	Contact	Sheryl Flores, Applicant, 805-540-2465					
57	*Project*	**The Gas Company**	*Category*	**Industrial**	*File #s*	*Approved*	*Status*
	Description	A natural gas fueling station	*Acreage*	1.9	**U2017-0013**	**3/7/2018**	Building permits submitted. Planning permit expiration on 9/7/2019.
	Location	3138 Industrial Parkway	*District*	PD/M-1	**U2019-0004**	**9/23/2019**	
	APN(s)	111-291-020	*Planner*	Dana Eady	**A2019-0033**	**Pending**	
	Contact	Steven Ly, Applicant, 213-244-3175					
58	*Project*	**Lakeview Mixed Use**	*Category*	**Mixed/Other**	*File #s*	*Approved*	*Status*
	Description	164 unit apartments and 11,000 sq. ft. commercial	*Acreage*	4	**PD2018-0008**	**4/2/2019**	Building permits submitted. Planning permit expiration on 4/2/2022.
	Location	NW/corner of S. Broadway and Skyway Dr.	*District*	PD/R-3 + PD/C-2			
	APN(s)	111-100-008	*Planner*	Frank Albro			
	Contact	Laurie Tamura, Consultant, 805-934-5760					
59	*Project*	**Airport Business Park Specific Plan Amendment**	*Category*	**Mixed/Other**	*File #s*	*Approved*	*Status*
	Description	Specific Plan with multiple land uses	*Acreage*	19.3	**SPZ2019-0001**	**Pending**	Planning permits under review.
	Location	NWC of Orcutt Expressway (Highway 135) and Union Valley Parkway	*District*	Airport Specific Plan	**GPZ2019-0002**	**Pending**	
	APN(s)	111-231-011	*Planner*	Frank Albro			
	Contact	Erik P Justesen, (805) 543-1794					

COUNTY OF SANTA BARBARA APPROVED AND PENDING PROJECTS LIST

Associated Transportation Engineers
Trip Generation Worksheet - With In/Out Splits

RICHARDS RANCH PROJECT (#21069) - CUMULATIVE COUNTY PROJECTS

	Land-Use	Size	Units	Mixed-Use	ADT		AM PEAK HOUR						PM PEAK HOUR					
					Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
1	ADDAMO WINERY/DIAMANTE - RANCH HOMES (a)	5	SFD	1.00	9.43	47	0.70	4	26%	1	74%	3	0.94	5	63%	3	37%	2
	ADDAMO WINERY/DIAMANTE - WINERY (b)	33,210	SF	1.00	-	110	-	15	50%	8	50%	7	-	15	50%	8	50%	7
2	OUSD SENIOR HOUSING PROJECT (KEY SITE #17 - ATE #20051)	-	-	1.00	-	672	-	55	-	31	-	24	-	60	-	27	-	33
3	MULTI-FAMILY RESDENTIAL (KEY SITE #3) (d)	160	UNITS	1.00	6.74	1,078	0.40	64	24%	15	76%	49	0.51	82	63%	52	37%	30
4	MESA NEIGHBORHOOD (KEY SITE #3) (a)	125	SFD	1.00	9.43	1,179	0.70	88	26%	23	74%	65	0.94	118	63%	74	37%	44
5	KEY SITE #30 (ATE #11084)	69	UNITS	1.00	-	837	-	75	-	24	-	51	-	86	-	52	-	34
6	MR O APARTMENTS (KEY SITE #30) (d)	214	UNITS	1.00	6.74	1,442	0.40	86	24%	21	76%	65	0.51	109	63%	69	37%	40
7	KEY SITE #21-NEIGHBORHOOD WILLOW CREEK/HIDDEN CANYON (a)	146	UNITS	1.00	9.43	1,377	0.70	102	26%	27	74%	75	0.94	137	63%	86	37%	51
8	NORTH COUNTY JAIL (ATE #07114)	-	-	1.00	-	2,772	-	232	-	125	-	107	-	232	-	125	-	107
9	OASIS COMMUNITY CENTER PROJECT (ATE #18106)	15,333	SF	1.00	28.82	442	1.76	27	67%	18	33%	9	2.31	35	45%	16	55%	19
10	VINTAGE RANCH TRACT MAP (a)	41	UNITS	1.00	9.43	387	0.70	29	26%	8	74%	21	0.94	39	63%	25	37%	14
11	ORCUTT GATEWAY RETAIL CENTER (KEY SITE #2) (f)	-	-	1.00	-	3,350	-	47	-	29	-	18	-	190	-	91	-	99
12	ORCUTT UNION PLAZA PHASE II - APTS (d)	19	UNITS	1.00	6.74	128	0.40	8	24%	2	76%	6	0.51	10	63%	6	37%	4
13	ORCUTT UNION PLAZA PHASE II (c)	16,880	SF	1.00	54.45	919	2.36	40	60%	24	40%	16	6.59	111	50%	56	50%	55
14	ORCUTT GAS STATION (g)	8	Fueling Positions	1.00	257.13	2,057	16.06	128	50%	64	50%	64	18.42	147	50%	74	50%	73
15	GUY TENATIVE PARCEL MAP (a)	2	SFD	1.00	9.43	19	0.70	1	26%	0	74%	1	0.94	2	63%	1	37%	1
16	TERRACE VILLAS (a)	16	SFD	1.00	9.43	151	0.70	11	26%	3	74%	8	0.94	15	63%	9	37%	6
17	CLARK AVENUE COMMERCIAL (KEY SITE #4) (f)	4,000	SF	1.00	-	-	-	3	-	2	-	1	-	10	-	5	-	5
18	ORCUTT PUBLIC MARKETPLACE (KEY SITE #1) (f)	252	SFD	1.00	-	-	-	187	-	47	-	140	-	249	-	157	-	92
18	ORCUTT PUBLIC MARKETPLACE (KEY SITE #1) (f)	211,264	SF	1.00	-	-	-	111	-	76	-	35	-	506	-	239	-	267
19	SKYWAY OFFICE BUILDING (f)	19,800	SF	1.00	-	-	-	23	-	20	-	3	-	23	-	4	-	19
20	AGRICULTURAL EDUCATION AND CAREER TECHNICAL CENTER (f)	198	Students	1.00	-	-	-	103	-	69	-	34	-	27	-	13	-	14

(a) Trip generation based on ITE code for Single Family Dwelling (#210)
(b) Addamo Winery, Diamonte Estates Tract Map, General Plan Amendment & Rezone, Proposed Final Draft Negative Declaration, County of Santa Barbara, April 2005.
(c) Trip generation based on ITE code for Strip Retail Plaza (#822)
(d) Trip generation based on ITE code for Multifamily Low-Rise Housing (#220)
(e) Trip generation based on ITE code for Convenience Store/Gas Station (Land-Use #945 - GFA > 4-5.5 SF)
(f) Traffic Impact Study, PSOMAS, May 2020
(g) Trip generation based on ITE code for Convenience Store/Gas Station (#945)

UVP QUEUE ANALYSIS WORKSHEETS

Intersection: 4: Orcutt Expressway & Union Valley Parkway

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	R	L	L	T	T	R	L	T
Maximum Queue (ft)	90	134	129	121	88	219	195	110	109	197	110	233
Average Queue (ft)	53	72	71	79	33	124	130	73	65	153	96	196
95th Queue (ft)	95	134	129	136	79	207	188	113	140	197	137	244
Link Distance (ft)			552	552				390	390			758
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	270	270			150	223	223			210	315	
Storage Blk Time (%)						0				0		
Queuing Penalty (veh)						0				0		

Intersection: 4: Orcutt Expressway & Union Valley Parkway

Movement	NB	NB	SB	SB	SB	SB	SB
Directions Served	T	R	L	L	T	T	R
Maximum Queue (ft)	185	149	183	207	211	153	45
Average Queue (ft)	168	122	142	174	148	128	28
95th Queue (ft)	189	149	211	231	215	158	47
Link Distance (ft)	758				826	826	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		315	615	615			380
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 5: Orcutt Rd & Union Valley Parkway

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	116	156	290	118	333	252	162	96	53	210
Average Queue (ft)	90	105	184	49	251	184	102	75	24	121
95th Queue (ft)	114	155	289	109	336	277	156	97	60	219
Link Distance (ft)		390	390		1431	1431		462		405
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	185			270			245		175	
Storage Blk Time (%)					6					2
Queuing Penalty (veh)					7					1

Zone Summary

Zone wide Queuing Penalty: 8

Intersection: 4: Orcutt Expressway & Union Valley Parkway

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	R	L	L	T	T	R	L	T
Maximum Queue (ft)	69	88	89	108	62	153	110	110	105	190	339	365
Average Queue (ft)	43	61	61	74	22	96	95	53	59	122	180	307
95th Queue (ft)	71	96	103	109	56	155	121	120	110	204	396	399
Link Distance (ft)			552	552				390	390			758
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	270	270			150	223	223			210	315	
Storage Blk Time (%)												6
Queuing Penalty (veh)												6

Intersection: 4: Orcutt Expressway & Union Valley Parkway

Movement	NB	NB	SB	SB	SB	SB	SB
Directions Served	T	R	L	L	T	T	R
Maximum Queue (ft)	304	232	285	326	268	191	46
Average Queue (ft)	256	163	204	246	211	171	35
95th Queue (ft)	320	242	314	339	277	223	54
Link Distance (ft)	758				826	826	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		315	615	615			380
Storage Blk Time (%)	0						
Queuing Penalty (veh)	1						

Intersection: 5: Orcutt Rd & Union Valley Parkway

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	133	333	338	53	245	214	116	94	53	94
Average Queue (ft)	104	209	253	39	177	172	77	56	27	62
95th Queue (ft)	135	369	384	56	238	230	118	91	66	89
Link Distance (ft)		390	390		1431	1431		462		405
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	185			270			245		175	
Storage Blk Time (%)		8								
Queuing Penalty (veh)		10								

Zone Summary

Zone wide Queuing Penalty: 16

ACCIDENT DATA AND CALCULATION WORKSHEETS

ASSOCIATED TRANSPORTATION ENGINEERS

100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110 ● (805) 687-4418 ● (805) 682-8509-F

ACCIDENT RATE CALCULATION SHEET - FOR INTERSECTIONS

Project: Richards Ranch
Project #: 021069
Analyst: GOM
Date: 1/17/2022

File Name: Accident Rate Worksheet 3 Year

N/S Street: Foxenwood Lane
E/W Street: Union Valley Parkway
Weekday:
PM Peak Hour Entering Volume: 846
Peak Hour Factor: 10
----------OR----------
Total Approach ADT: N/A
Weekend:
PM Peak Hour Entering Volume OR ADT: 75% (as a percentage of Weekday PM Peak Hour Entering Volume OR ADT)

Period Analyzed (years): 3

Number of Accidents: 1

Million Entering Vehicle Miles: 8.6 million entering vehicle miles (mevm)

Accident Rate: **.12 accidents per million entering vehicle miles (mevm)**

Intersection Rate Group: I09
California State Average Collision Rate: 0.24

ASSOCIATED TRANSPORTATION ENGINEERS

100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110 ● (805) 687-4418 ● (805) 682-8509-F

ACCIDENT RATE CALCULATION SHEET - FOR INTERSECTIONS

Project: Richards Ranch
Project #: 021069
Analyst: GOM
Date: 1/17/2022

File Name: Accident Rate Worksheet 3 Year

N/S Street: Orcutt Expressway
E/W Street: Union Valley Parkway
Weekday:
PM Peak Hour Entering Volume: 3735
Peak Hour Factor: 9
----------OR----------
Total Approach ADT: N/A
Weekend:
PM Peak Hour Entering Volume OR ADT: 75% (as a percentage of Weekday PM Peak Hour Entering Volume OR ADT)

Period Analyzed (years): 3

Number of Accidents: 12

Million Entering Vehicle Miles: 34.19 million entering vehicle miles (mevm)

Accident Rate: **.35 accidents per million entering vehicle miles (mevm)**

Intersection Rate Group: I09
California State Average Collision Rate: 0.42

ASSOCIATED TRANSPORTATION ENGINEERS

100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110 ● (805) 687-4418 ● (805) 682-8509-F

ACCIDENT RATE CALCULATION SHEET - FOR INTERSECTIONS

Project: Richards Ranch
Project #: 021069
Analyst: GOM
Date: 1/17/2022

File Name: Accident Rate Worksheet 3 Year

N/S Street: Orcutt Road
E/W Street: Union Valley Parkway
Weekday:
PM Peak Hour Entering Volume: 1679
Peak Hour Factor: 10
----------OR----------
Total Approach ADT: N/A
Weekend:
PM Peak Hour Entering Volume OR ADT: 75% (as a percentage of Weekday PM Peak Hour Entering Volume OR ADT)

Period Analyzed (years): 3

Number of Accidents: 9

Million Entering Vehicle Miles: 17.08 million entering vehicle miles (mevm)

Accident Rate: **.53 accidents per million entering vehicle miles (mevm)**

Intersection Rate Group: I09
California State Average Collision Rate: 0.42

ASSOCIATED TRANSPORTATION ENGINEERS

100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110 ● (805) 687-4418 ● (805) 682-8509-F

ACCIDENT RATE CALCULATION SHEET - FOR INTERSECTIONS

Project: Richards Ranch
Project #: 021069
Analyst: GOM
Date: 1/17/2022

File Name: Accident Rate Worksheet 3 Year

N/S Street: Hummel Drive
E/W Street: Union Valley Parkway
Weekday:
PM Peak Hour Entering Volume: 1596
Peak Hour Factor: 10
----------OR----------
Total Approach ADT: N/A
Weekend:
PM Peak Hour Entering Volume OR ADT: 75% (as a percentage of Weekday PM Peak Hour Entering Volume OR ADT)

Period Analyzed (years): 3

Number of Accidents: 5

Million Entering Vehicle Miles: 16.23 million entering vehicle miles (mevm)

Accident Rate: **.31 accidents per million entering vehicle miles (mevm)**

Intersection Rate Group: I09
California State Average Collision Rate: 0.24

ASSOCIATED TRANSPORTATION ENGINEERS

100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110 ● (805) 687-4418 ● (805) 682-8509-F

ACCIDENT RATE CALCULATION SHEET - FOR INTERSECTIONS

Project: Richards Ranch
Project #: 021069
Analyst: GOM
Date: 1/17/2022

File Name: Accident Rate Worksheet 3 Year

N/S Street: Bradley Road
E/W Street: Union Valley Parkway
Weekday:
PM Peak Hour Entering Volume: 2551
Peak Hour Factor: 10
----------OR----------
Total Approach ADT: N/A
Weekend:
PM Peak Hour Entering Volume OR ADT: 75% (as a percentage of Weekday PM Peak Hour Entering Volume OR ADT)

Period Analyzed (years): 3

Number of Accidents: 4

Million Entering Vehicle Miles: 25.94 million entering vehicle miles (mevm)

Accident Rate: **.15 accidents per million entering vehicle miles (mevm)**

Intersection Rate Group: I09
California State Average Collision Rate: 0.42

DEFINITIONS

$$\text{Number Expected} = \frac{\text{ADT} \times \text{Time} \times \text{Rate Expected} \times \text{Length}}{1000000}$$

$$\text{Number Significant} = \text{Number Expected} + (2.576 \times (\text{Number Expected})^{1/2}) + 1.329$$

NOTES: Number Significant using 99.5% confidence level.

For intersections, use annual number of entering vehicles in place of ADT and delete length. The NR is the same as for roadway segments.

CALCULATIONS - ORCUTT ROAD/UVP INTERSECTION (Three Year Period)

$$\text{Number Expected} = \frac{5{,}693{,}333 \times 3 \times 0.42 \times 1}{1000000} = 7.1736$$

$$\text{Number Significant} = 15.40205$$

DEFINITIONS

$$\text{Number Expected} = \frac{\text{ADT} \times \text{Time} \times \text{Rate Expected} \times \text{Length}}{1000000}$$

$$\text{Number Significant} = \text{Number Expected} + (2.576 \times (\text{Number Expected})^{1/2}) + 1.329$$

NOTES: Number Significant using 99.5% confidence level.

For intersections, use annual number of entering vehicles in place of ADT and delete length. The NR is the same as for roadway segments.

CALCULATIONS - HUMMEL DRIVE/UVP INTERSECTION (Three Year Period)

$$\text{Number Expected} = \frac{5{,}410{,}000 \times 3 \times 0.24 \times 1}{1000000} = 3.8952$$

$$\text{Number Significant} = 10.30826$$

SIGNAL WARRANT WORKSHEETS

EXISTING TRAFFIC VOLUMES

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 1 of 5)

COUNT DATE 4/27/22

DIST ____ CO ____ RTE ____ PM ____

CALC GOM DATE 10/3/22

CHK SAS DATE 10/3/22

Major St: Union Valley Parkway — Critical Approach Speed 50 mph

Minor St: Hummel Drive — Critical Approach Speed 35 mph

Speed limit or critical speed on major street traffic > 40 mph..... ☒
or
In built up area of isolated community of < 10,000 population..... ☐ } RURAL (R)

☐ URBAN (U)

WARRANT 1 - Eight Hour Vehicular Volume SATISFIED YES ☐ NO ☐
(Condition A or Condition B or combination of A and B must be satisfied)

Condition A - Minimum Vehicle Volume 100% SATISFIED YES ☐ NO ☐
80% SATISFIED YES ☐ NO ☐

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)									
	U	R	U	R						Hour
APPROACH LANES	1		2 or More							
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)						
Highest Approach Minor Street	150 (120)	105 (84)	200 (160)	140 (112)						

Condition B - Interruption of Continuous Traffic 100% SATISFIED YES ☐ NO ☐
80% SATISFIED YES ☐ NO ☐

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)									
	U	R	U	R						Hour
APPROACH LANES	1		2 or More							
Both Approaches Major Street	750 (600)	525 (420)	900 (720)	630 (504)						
Highest Approach Minor Street	75 (60)	53 (42)	100 (80)	70 (56)						

Combination of Conditions A & B SATISFIED YES ☐ NO ☐

REQUIREMENT	CONDITION	✓	FULFILLED
TWO CONDITIONS SATISFIED 80%	A. MINIMUM VEHICULAR VOLUME		Yes ☐ No ☐
	AND, B. INTERRUPTION OF CONTINUOUS TRAFFIC		
AND, AN ADEQUATE TRIAL OF OTHER ALTERNATIVES THAT COULD CAUSE LESS DELAY AND INCONVENIENCE TO TRAFFIC HAS FAILED TO SOLVE THE TRAFFIC PROBLEMS			Yes ☐ No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

EXISTING TRAFFIC VOLUMES

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 2 of 5)

WARRANT 2 - Four Hour Vehicular Volume **SATISFIED* YES ☐ NO ☐**

Record hourly vehicular volumes for any four hours of an average day.

APPROACH LANES	One	2 or More				Hour
Both Approaches - Major Street						
Higher Approach - Minor Street						

*All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS)	Yes ☐ No ☐
OR, All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS)	Yes ☐ No ☐

WARRANT 3 - Peak Hour **SATISFIED YES ☒ NO ☐**
(Part A or Part B must be satisfied)

PART A **SATISFIED YES ☐ NO ☐**

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; AND	Yes ☐ No ☐
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes ☐ No ☐
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes ☐ No ☐

PART B **SATISFIED YES ☒ NO ☐**

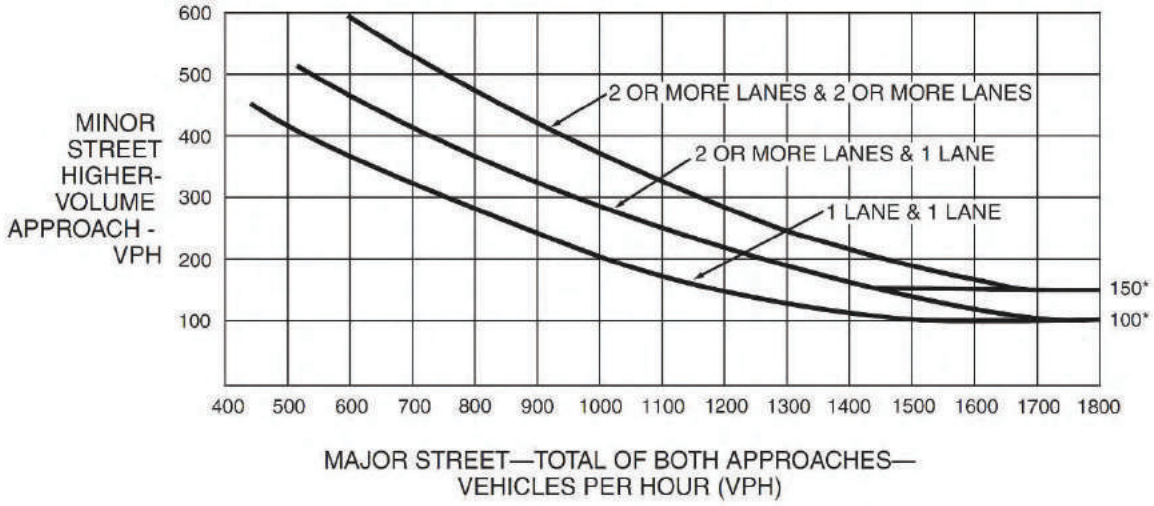
APPROACH LANES	One	2 or More	7:15 AM	Hour
Both Approaches - Major Street		X	1364	
Higher Approach - Minor Street		X	148	

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes ☐ No ☐
OR, The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes ☒ No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

EXISTING TRAFFIC VOLUMES

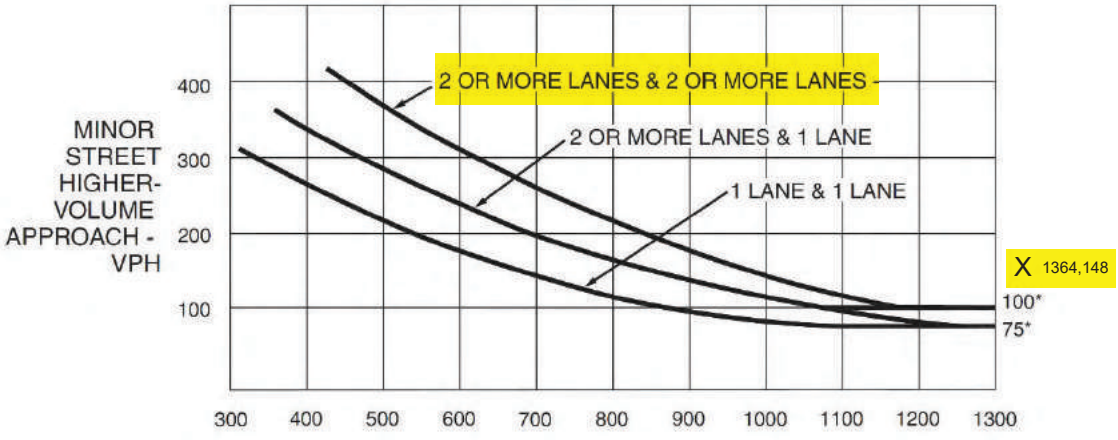
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*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 approach with one lane.

CUMULATIVE + PROJECT

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 1 of 5)

COUNT DATE 4/27/22

DIST ____ CO ____ RTE ____ PM ____

CALC GOM DATE 10/3/22

CHK SAS DATE 10/3/22

Major St: Union Valley Parkway — Critical Approach Speed 50 mph

Minor St: Hummel Drive — Critical Approach Speed 35 mph

Speed limit or critical speed on major street traffic > 40 mph..... ☒
or
In built up area of isolated community of < 10,000 population..... ☐ } **RURAL (R)**

☐ **URBAN (U)**

WARRANT 1 - Eight Hour Vehicular Volume **SATISFIED YES ☐ NO ☐**
(Condition A or Condition B or combination of A and B must be satisfied)

Condition A - Minimum Vehicle Volume **100% SATISFIED YES ☐ NO ☐**
80% SATISFIED YES ☐ NO ☐

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)									
	U	R	U	R						Hour
APPROACH LANES	1		2 or More							
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)						
Highest Approach Minor Street	150 (120)	105 (84)	200 (160)	140 (112)						

Condition B - Interruption of Continuous Traffic **100% SATISFIED YES ☐ NO ☐**
80% SATISFIED YES ☐ NO ☐

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)									
	U	R	U	R						Hour
APPROACH LANES	1		2 or More							
Both Approaches Major Street	750 (600)	525 (420)	900 (720)	630 (504)						
Highest Approach Minor Street	75 (60)	53 (42)	100 (80)	70 (56)						

Combination of Conditions A & B **SATISFIED YES ☐ NO ☐**

REQUIREMENT	CONDITION	✓	FULFILLED
TWO CONDITIONS SATISFIED 80%	A. MINIMUM VEHICULAR VOLUME		Yes ☐ No ☐
	AND, B. INTERRUPTION OF CONTINUOUS TRAFFIC		
AND, AN ADEQUATE TRIAL OF OTHER ALTERNATIVES THAT COULD CAUSE LESS DELAY AND INCONVENIENCE TO TRAFFIC HAS FAILED TO SOLVE THE TRAFFIC PROBLEMS			Yes ☐ No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

CUMULATIVE + PROJECT

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 2 of 5)

WARRANT 2 - Four Hour Vehicular Volume **SATISFIED* YES ☐ NO ☐**

Record hourly vehicular volumes for any four hours of an average day.

APPROACH LANES	One	2 or More				Hour
Both Approaches - Major Street						
Higher Approach - Minor Street						

*All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS)	Yes ☐ No ☐
OR, All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS)	Yes ☐ No ☐

WARRANT 3 - Peak Hour **SATISFIED YES ☒ NO ☐**
(Part A or Part B must be satisfied)

PART A **SATISFIED YES ☐ NO ☐**

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; AND	Yes ☐ No ☐
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes ☐ No ☐
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes ☐ No ☐

PART B **SATISFIED YES ☒ NO ☐**

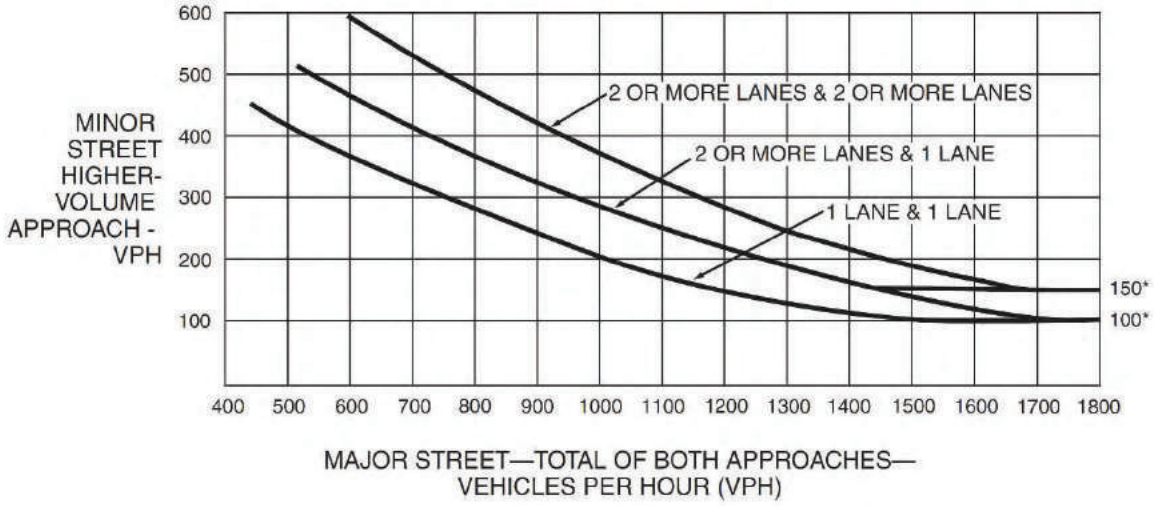
APPROACH LANES	One	2 or More	7:15 AM	Hour
Both Approaches - Major Street		X	1796	
Higher Approach - Minor Street		X	162	

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes ☐ No ☐
OR, The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes ☒ No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

CUMULATIVE + PROJECT

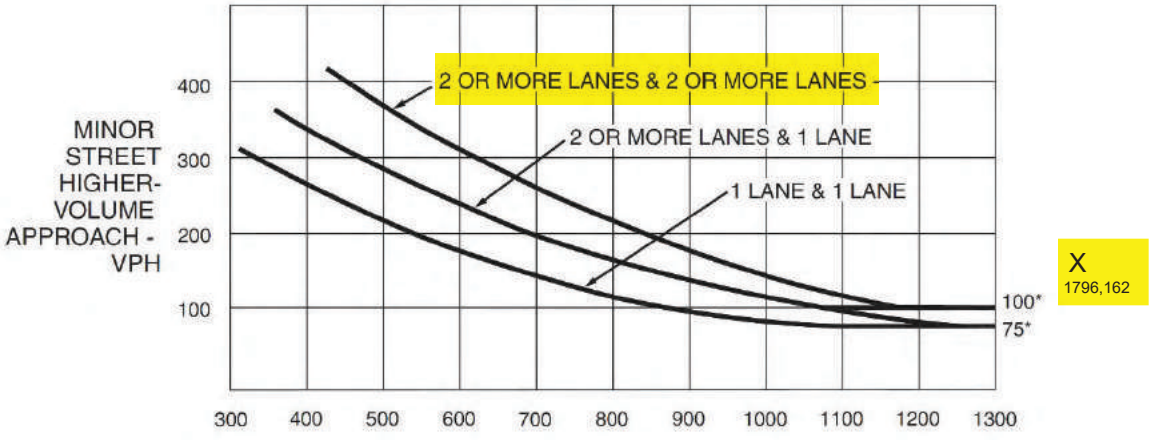
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



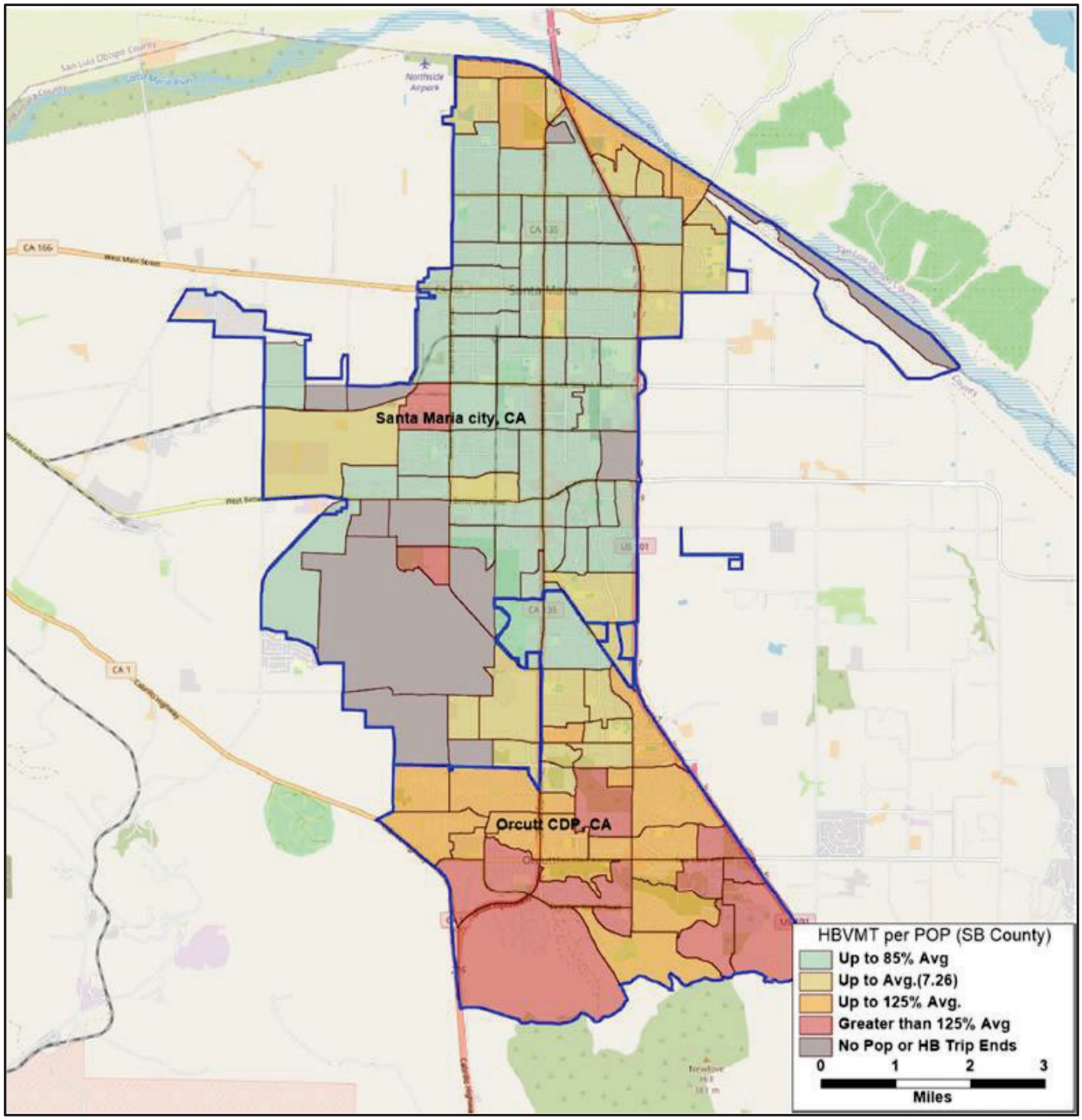
X
1796,162

*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 approach with one lane.

VMT SCREENING MAP – RESIDENTIAL PROJECTS

Appendix B

Countywide Average: Home-Based VMT per Population (Residential Land Uses)



INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS

Reference 1 - Orcutt Expressway/Lakeview Road
Reference 2 - Orcutt Expressway/Foster Road
Reference 3 - UVP/Foxenwood Lane
Reference 4 - UVP/Orcutt Expressway
Reference 5 - UVP/Orcutt Road
Reference 6 - UVP/Hummel Drive
Reference 7 - UVP/Bradley Road
Reference 8 - UVP/US 101 SB Ramps
Reference 9 - UVP/US 101 NB Ramps

#21069 - RICHARDS RANCH PROJECT REF: 01 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *8/1/2016*

TIME PERIOD: *AM PEAK HOUR*

N/S STREET: *ORCUTT EXPRESSWAY (SR 135)*

E/W STREET: *SKYWAY DRIVE-LAKEVIEW ROAD*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	675	809	151	65	518	62	11	163	369	110	377	42
(B)	PROJECT-ADDED:	18	66	10	0	45	0	0	0	16	9	0	0
(C)	CUMULATIVE:	714	969	175	84	742	62	11	187	432	133	391	62

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	LL TT R	L TT R	L TT R	L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	2	3200	675	693	714	732	0.211 *	0.217 *	0.223 *	0.229 *
NBT	2	3200	809	875	969	1035	0.253	0.273	0.303	0.323
NBR (a)	1	1600	107	114	124	131	0.067	0.071	0.078	0.082
SBL	1	1600	65	65	84	84	0.041	0.041	0.053	0.053
SBT	2	3200	518	563	742	787	0.162 *	0.176 *	0.232 *	0.246 *
SBR (b)	1	1600	39	39	39	39	0.024	0.024	0.024	0.024
EBL	1	1600	11	11	11	11	0.007 *	0.007 *	0.007 *	0.007
EBT	2	3200	163	163	187	187	0.051	0.051	0.058	0.058 *
EBR (c)	1	1600	162	169	190	197	0.101	0.106	0.119	0.123
WBL	1	1600	110	119	133	142	0.069	0.074	0.083	0.089 *
WBT	2	3200	377	377	391	391	0.128 *	0.128 *	0.137 *	0.137
WBR (d)	0	0	33	33	48	48	-	-	-	-
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.608**	**0.628**	**0.699**	**0.722**
					SCENARIO LEVEL OF SERVICE:		**B**	**B**	**B**	**C**

NOTES:

RTOR: *(a) 29%*
(b) 37%
(c) 56%. Not critical due to overlap arrow.
(d) 22%

Printed: 05/24/22

#21069 - RICHARDS RANCH PROJECT REF: 01 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *8/1/2016*

TIME PERIOD: *PM PEAK HOUR*

N/S STREET: *ORCUTT EXPRESSWAY (SR 135)*

E/W STREET: *SKYWAY DRIVE-LAKEVIEW ROAD*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	340	913	186	147	858	33	51	398	573	100	190	40
(B)	PROJECT-ADDED:	12	40	7	0	52	0	0	0	15	8	0	0
(C)	CUMULATIVE:	400	1141	216	157	1140	33	51	421	663	117	214	53

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	LL TT R	L TT R	L TT R	L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	2	3200	340	352	400	412	0.106	0.110 *	0.125 *	0.129 *
NBT	2	3200	913	953	1141	1181	0.285 *	0.298	0.357	0.369
NBR (a)	1	1600	132	137	153	158	0.083	0.086	0.096	0.099
SBL	1	1600	147	147	157	157	0.092 *	0.092	0.098	0.098
SBT	2	3200	858	910	1140	1192	0.268	0.284 *	0.356 *	0.373 *
SBR (b)	1	1600	18	18	18	18	0.011	0.011	0.011	0.011
EBL	1	1600	51	51	51	51	0.032	0.032	0.032	0.032
EBT	2	3200	398	398	421	421	0.124 *	0.124 *	0.132 *	0.132 *
EBR (c)	1	1600	281	288	325	332	0.176	0.180	0.203	0.208
WBL	1	1600	100	108	117	125	0.063 *	0.068 *	0.073 *	0.078 *
WBT	2	3200	190	190	214	214	0.068	0.068	0.078	0.078
WBR (d)	0	0	26	26	34	34	-	-	-	-
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.664**	**0.686**	**0.786**	**0.812**
					SCENARIO LEVEL OF SERVICE:		**B**	**B**	**C**	**D**

NOTES:

RTOR: *(a) 29%*
(b) 44%
(c) 51%. Not critical due to overlap arrow.
(d) 36%

Printed: 05/24/22

#21069 - RICHARDS RANCH PROJECT REF: 02 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *12/7/2019*

TIME PERIOD: *AM PEAK HOUR*

N/S STREET: *ORCUTT EXPRESSWAY (SR 135)*

E/W STREET: *FOSTER ROAD*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	19	1227	91	105	809	98	176	93	8	118	76	249
(B)	PROJECT-ADDED:	7	94	0	0	70	0	0	0	5	0	0	0
(C)	CUMULATIVE:	47	1304	91	106	871	275	321	117	45	118	121	250

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L T TR	L TT R	LL TR	L T R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	19	26	47	54	0.012	0.016	0.029	0.034
NBT	2	3200	1227	1321	1304	1398	0.405 *	0.435 *	0.429 *	0.459 *
NBR (a)	0	0	70	70	70	70	-	-	-	-
SBL	1	1600	105	105	106	106	0.066 *	0.066 *	0.066 *	0.066 *
SBT	2	3200	809	879	871	941	0.253	0.275	0.272	0.294
SBR (b)	1	1600	68	68	190	190	0.043	0.043	0.119	0.119
EBL	2	3200	176	176	321	321	0.055 *	0.055 *	0.100 *	0.100 *
EBT	1	1600	93	93	117	117	0.061	0.063	0.089	0.091
EBR (c)	0	0	5	8	26	29	-	-	-	-
WBL	1	1600	118	118	118	118	0.074	0.074	0.074	0.074
WBT	1	1600	76	76	121	121	0.048	0.048	0.076	0.076
WBR (d)	1	1600	132	132	133	133	0.083 *	0.083 *	0.083 *	0.083 *
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.709**	**0.739**	**0.778**	**0.808**
					SCENARIO LEVEL OF SERVICE:		C	C	C	D

NOTES:

RTOR: *(a) 23%*
(b) 31%
(c) 42%
(d) 47%

Printed: 05/24/22

#21069 - RICHARDS RANCH PROJECT REF: 02 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *12/7/2019*

TIME PERIOD: *PM PEAK HOUR*

N/S STREET: *ORCUTT EXPRESSWAY (SR 135)*

E/W STREET: *FOSTER ROAD*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	6	1130	60	133	1299	133	182	53	27	67	48	107
(B)	PROJECT-ADDED:	5	59	0	0	75	0	0	0	6	0	0	0
(C)	CUMULATIVE:	31	1266	60	135	1464	263	362	88	71	67	74	109

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L T TR	SOUTH BOUND L TT R	EAST BOUND LL TR	WEST BOUND L T R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	6	11	31	36	0.004	0.007	0.019	0.023
NBT	2	3200	1130	1189	1266	1325	0.368 *	0.386 *	0.410 *	0.428 *
NBR (a)	0	0	46	46	46	46	-	-	-	-
SBL	1	1600	133	133	135	135	0.083 *	0.083 *	0.084 *	0.084 *
SBT	2	3200	1299	1374	1464	1539	0.406	0.429	0.458	0.481
SBR (b)	1	1600	94	94	187	187	0.059	0.059	0.117	0.117
EBL	2	3200	182	182	362	362	0.057	0.057	0.113 *	0.113 *
EBT	1	1600	53	53	88	88	0.046 *	0.048 *	0.088	0.090
EBR (c)	0	0	20	24	52	56	-	-	-	-
WBL	1	1600	67	67	67	67	0.042 *	0.042 *	0.042	0.042
WBT	1	1600	48	48	74	74	0.030	0.030	0.046 *	0.046 *
WBR (d)	1	1600	43	43	44	44	0.027	0.027	0.028	0.028
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.639**	**0.659**	**0.753**	**0.771**
					SCENARIO LEVEL OF SERVICE:		**B**	**B**	**C**	**C**

NOTES:

RTOR: *(a) 23%*
(b) 29%
(c) 27%
(d) 60%

Printed: 05/24/22

HCS Two-Way Stop-Control Report

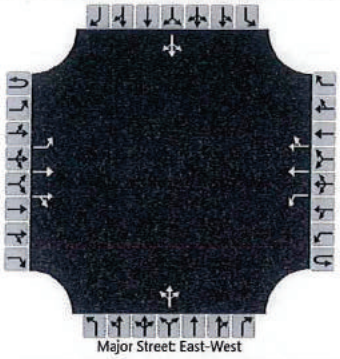
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING CONDTIONS

Site Information

Intersection	UVP/FOXENWOOD LANE
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	FOXENWOOD LANE
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	13	296	0	0	78	176	32		0	44	189		0	3	1
Percent Heavy Vehicles (%)	3	3			3	3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Left Only								2						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.96
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		16				96					288				5	
Capacity, c (veh/h)		1298				1183					593				333	
v/c Ratio		0.01				0.08					0.49				0.01	
95% Queue Length, Q_{95} (veh)		0.0				0.3					2.6				0.0	
Control Delay (s/veh)		7.8				8.3					16.7				16.0	
Level of Service (LOS)		A				A					C				C	
Approach Delay (s/veh)	0.3				2.3				16.7				16.0			
Approach LOS	A				A				C				C			

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AWD = 14.3 SEC = LOS B

HCS Two-Way Stop-Control Report

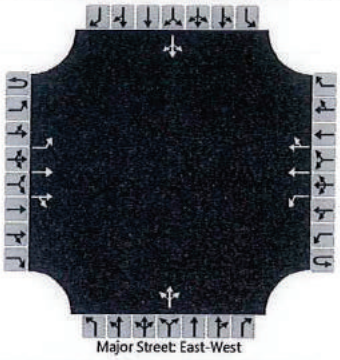
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING + PROJECT CONDITIONS

Site Information

Intersection	UVP/FOXENWOOD LANE
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	FOXENWOOD LANE
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	13	325	0	0	88	206	32		0	44	198		0	3	1
Percent Heavy Vehicles (%)	3	3			3	3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage	Left Only									2						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.96
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		16				109					299				5	
Capacity, c (veh/h)		1257				1147					554				290	
v/c Ratio		0.01				0.09					0.54				0.02	
95% Queue Length, Q_{95} (veh)		0.0				0.3					3.2				0.1	
Control Delay (s/veh)		7.9				8.5					18.8				17.6	
Level of Service (LOS)		A				A					C				C	
Approach Delay (s/veh)	0.3				2.3				18.8				17.6			
Approach LOS	A				A				C				C			

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AWD = 15.8 SEC = LOS C

#21069 - RICHARDS RANCH PROJECT REF: 03 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *12/7/2019*

TIME PERIOD: *AM PEAK HOUR*

N/S STREET: *FOXENWOOD LANE*

E/W STREET: *UVP*

CONTROL TYPE: *SIGNAL CUMULATIVE IMPROVEMENT*

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	0	44	189	0	3	1	13	296	0	78	176	32
(B)	PROJECT-ADDED:	0	0	9	0	0	0	0	29	0	10	30	0
(C)	CUMULATIVE:	0	51	189	132	7	23	58	296	0	78	176	140

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L TR	L TR	L T TR	L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	0	0	0	0	0.000	0.000	0.000	0.000
NBT	1	1600	44	44	51	51	0.146 *	0.151 *	0.150 *	0.156 *
NBR (a)		0	189	198	189	198	-	-	-	-
SBL	1	1600	0	0	132	132	0.000 *	0.000 *	0.083 *	0.083 *
SBT	1	1600	3	3	7	7	0.003	0.003	0.019	0.019
SBR (b)	0	0	1	1	23	23	-	-	-	-
EBL	1	1600	13	13	58	58	0.008	0.008	0.036	0.036
EBT	2	3200	296	325	296	325	0.093 *	0.102 *	0.093 *	0.102 *
EBR (c)		0	0	0	0	0	-	-	-	-
WBL	1	1600	78	88	78	88	0.049 *	0.055 *	0.049 *	0.055 *
WBT	2	3200	176	206	176	206	0.062	0.072	0.087	0.096
WBR (d)		0	23	23	102	102	-	-	-	-
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.388**	**0.408**	**0.475**	**0.496**
					SCENARIO LEVEL OF SERVICE:		A	A	A	A

NOTES:

RTOR: *(a)*
(b)
(c)
(d)

Printed: 05/25/22

HCS Two-Way Stop-Control Report

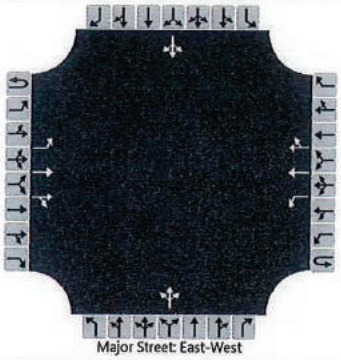
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING CONDITIONS

Site Information

Intersection	UVP/FOXENWOOD LANE
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	FOXENWOOD LANE
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	1	220	3	0	178	300	6		3	9	99		7	8	12
Percent Heavy Vehicles (%)	3	3			3	3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.96
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1				193					121				29	
Capacity, c (veh/h)		1216				1314					695				361	
v/c Ratio		0.00				0.15					0.17				0.08	
95% Queue Length, Q_{95} (veh)		0.0				0.5					0.6				0.3	
Control Delay (s/veh)		8.0				8.2					11.3				15.9	
Level of Service (LOS)		A				A					B				C	
Approach Delay (s/veh)	0.0				3.0				11.3				15.9			
Approach LOS	A				A				B				C			

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AWD= 9.9 SEC = LOS A

HCS Two-Way Stop-Control Report

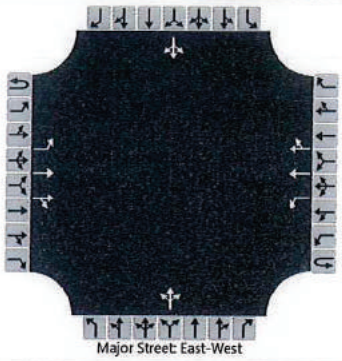
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING + PROJECT CONDITIONS

Site Information

Intersection	UVP/FOXENWOOD LANE
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	FOXENWOOD LANE
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	1	245	3	0	185	324	6		3	9	107		7	8	12
Percent Heavy Vehicles (%)	3	3			3	3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage	Left Only									2						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.96
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1				201					129				29	
Capacity, c (veh/h)		1189				1284					676				333	
v/c Ratio		0.00				0.16					0.19				0.09	
95% Queue Length, Q_{95} (veh)		0.0				0.6					0.7				0.3	
Control Delay (s/veh)		8.0				8.3					11.6				16.9	
Level of Service (LOS)		A				A					B				C	
Approach Delay (s/veh)	0.0				3.0				11.6				16.9			
Approach LOS	A				A				B				C			

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AWD = 10.2 SEC = LOS B

#21069 - RICHARDS RANCH PROJECT REF: 03 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *12/7/2019*

TIME PERIOD: *PM PEAK HOUR*

N/S STREET: *FOXENWOOD LANE*

E/W STREET: *UVP*

CONTROL TYPE: *SIGNAL CUMULATIVE IMPROVEMENT*

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	3	9	99	7	8	12	1	220	3	178	300	6
(B)	PROJECT-ADDED:	0	0	8	0	0	0	0	25	0	7	24	0
(C)	CUMULATIVE:	3	13	99	159	14	47	27	220	3	178	300	81

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L TR	L TR	L T TR	L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	3	3	3	3	0.002	0.002	0.002	0.002
NBT	1	1600	9	9	13	13	0.068 *	0.073 *	0.070 *	0.075 *
NBR (a)		0	99	107	99	107	-	-	-	-
SBL	1	1600	7	7	159	159	0.004 *	0.004 *	0.099 *	0.099 *
SBT	1	1600	8	8	14	14	0.013	0.013	0.038	0.038
SBR (b)	0	0	12	12	47	47	-	-	-	-
EBL	1	1600	1	1	27	27	0.001	0.001	0.017	0.017
EBT	2	3200	220	245	220	245	0.070 *	0.078 *	0.070 *	0.078 *
EBR (c)		0	3	3	3	3	-	-	-	-
WBL	1	1600	178	185	178	185	0.111 *	0.116 *	0.111 *	0.116 *
WBT	2	3200	300	324	300	324	0.095	0.103	0.112	0.120
WBR (d)		0	4	4	59	59	-	-	-	-
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.353**	**0.371**	**0.450**	**0.468**
					SCENARIO LEVEL OF SERVICE:		A	A	A	A

NOTES:

RTOR: *(a)*
(b)
(c)
(d)

Printed: 05/25/22

#21069 - RICHARDS RANCH PROJECT REF: 04 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *12/7/2019*

TIME PERIOD: *AM PEAK HOUR*

N/S STREET: *ORCUTT EXPRESSWAY (SR 135)*

E/W STREET: *UVP*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	15	898	254	126	717	97	198	276	15	370	174	236
(B)	PROJECT-ADDED:	0	-94	125	169	-94	0	0	38	0	122	40	186
(C)	CUMULATIVE:	102	953	254	153	741	155	219	310	92	370	260	265

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L TT R	SOUTH BOUND LL TT R	EAST BOUND LL TT R	WEST BOUND LL TT R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	15	15	102	102	0.009	0.009	0.064	0.064
NBT	2	3200	898	804	953	859	0.281 *	0.251 *	0.298 *	0.268 *
NBR (a)	1	1600	254	379	254	379	0.159	0.237	0.159	0.237
SBL	2	3200	126	295	153	322	0.039 *	0.092 *	0.048 *	0.101 *
SBT	2	3200	717	623	741	647	0.224	0.195	0.232	0.202
SBR (b)	1	1600	97	97	155	155	0.061	0.061	0.097	0.097
EBL	2	3200	198	198	219	219	0.062	0.062	0.068	0.068
EBT	2	3200	276	314	310	348	0.086 *	0.098 *	0.097 *	0.109 *
EBR (c)	1	1600	15	15	92	92	0.009	0.009	0.058	0.058
WBL	2	3200	370	492	370	492	0.116 *	0.154 *	0.116 *	0.154 *
WBT	2	3200	174	214	260	300	0.054	0.067	0.081	0.094
WBR (d)	1	1600	172	308	193	329	0.108	0.193	0.121	0.206
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.622**	**0.695**	**0.659**	**0.732**
					SCENARIO LEVEL OF SERVICE:		**B**	**B**	**B**	**C**

NOTES:

RTOR: *(a)*
(b)
(c)
(d) 27% RTOR (OVERLAP WITH SB LEFT)

Printed: 05/25/22

#21069 - RICHARDS RANCH PROJECT REF: 04 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *12/17/2019*

TIME PERIOD: *PM PEAK HOUR*

N/S STREET: *ORCUTT EXPRESSWAY (SR 135)*

E/W STREET: *UVP*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	9	952	427	311	851	259	144	174	8	273	219	108
(B)	PROJECT-ADDED:	0	-64	93	145	-64	0	0	33	0	89	31	127
(C)	CUMULATIVE:	87	1057	427	372	959	302	165	223	90	273	269	143

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L TT R	SOUTH BOUND LL TT R	EAST BOUND LL TT R	WEST BOUND LL TT R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	9	9	87	87	0.006	0.006	0.054	0.054
NBT	2	3200	952	888	1057	993	0.298 *	0.278 *	0.330 *	0.310
NBR (a)	1	1600	427	520	427	520	0.267	0.325	0.267	0.325 *
SBL	2	3200	311	456	372	517	0.097 *	0.143 *	0.116 *	0.162 *
SBT	2	3200	851	787	959	895	0.266	0.246	0.300	0.280
SBR (b)	1	1600	259	259	302	302	0.162	0.162	0.189	0.189
EBL	2	3200	144	144	165	165	0.045	0.045	0.052	0.052
EBT	2	3200	174	207	223	256	0.054 *	0.065 *	0.070 *	0.080 *
EBR (c)	1	1600	8	8	90	90	0.005	0.005	0.056	0.056
WBL	2	3200	273	362	273	362	0.085 *	0.113 *	0.085 *	0.113 *
WBT	2	3200	219	250	269	300	0.068	0.078	0.084	0.094
WBR (d)	1	1600	54	118	72	135	0.034	0.074	0.045	0.084
			LOST TIME:				0.100 *	0.100 *	0.100 *	0.100 *
			TOTAL INTERSECTION CAPACITY UTILIZATION:				**0.634**	**0.699**	**0.701**	**0.780**
			SCENARIO LEVEL OF SERVICE:				**B**	**B**	**B**	**C**

NOTES:

RTOR: *(a)*
(b)
(c)
(d) 50% RTOR (OVERLAP WITH SB LEFT)

Printed: 05/26/22

#21069 - RICHARDS RANCH PROJECT REF: 05 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *12/17/2019*

TIME PERIOD: *AM PEAK HOUR*

N/S STREET: *ORCUTT ROAD*

E/W STREET: *UVP*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A)	EXISTING:	147	77	72	24	52	8	6	561	90	36	613	13
(B)	PROJECT-ADDED:	78	12	24	15	8	125	174	104	54	81	155	23
(C)	CUMULATIVE:	147	81	72	26	56	8	6	622	90	36	728	15

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L TR	SOUTH BOUND L TR	EAST BOUND L T TR	WEST BOUND L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	147	225	147	225	0.092 *	0.141 *	0.092 *	0.141 *
NBT	1	1600	77	89	81	93	0.093	0.116	0.096	0.118
NBR (a)	0	0	72	96	72	96	-	-	-	-
SBL	1	1600	24	39	26	41	0.015	0.024	0.016	0.026
SBT	1	1600	52	60	56	64	0.038 *	0.121 *	0.040 *	0.123 *
SBR (b)	0	0	8	133	8	133	-	-	-	-
EBL	1	1600	6	180	6	180	0.004	0.113 *	0.004	0.113 *
EBT	2	3200	561	665	622	726	0.203 *	0.253	0.223 *	0.272
EBR (c)	0	0	90	144	90	144	-	-	-	-
WBL	1	1600	36	117	36	117	0.023 *	0.073	0.023 *	0.073
WBT	2	3200	613	768	728	883	0.196	0.251 *	0.232	0.288 *
WBR (d)	0	0	13	36	15	38	-	-	-	-
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.456**	**0.726**	**0.478**	**0.765**
					SCENARIO LEVEL OF SERVICE:		A	C	A	C

NOTES:

RTOR: *(a)*
(b)
(c)
(d)

Printed: 09/27/22

#21069 - RICHARDS RANCH PROJECT REF: 05 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *12/17/2019*

TIME PERIOD: ***PM PEAK HOUR***

N/S STREET: ***ORCUTT ROAD***

E/W STREET: ***UVP***

CONTROL TYPE: ***SIGNAL***

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A)	EXISTING:	**66**	**31**	**42**	**22**	**32**	**5**	**0**	**806**	**105**	**26**	**533**	**11**
(B)	PROJECT-ADDED:	**37**	**8**	**15**	**11**	**7**	**100**	**130**	**93**	**48**	**64**	**118**	**17**
(C)	CUMULATIVE:	**66**	**35**	**42**	**24**	**36**	**5**	**0**	**916**	**105**	**26**	**618**	**13**

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L TR	SOUTH BOUND L TR	EAST BOUND L T TR	WEST BOUND L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	66	103	66	103	0.041 *	0.064 *	0.041 *	0.064 *
NBT	1	1600	31	39	35	43	0.046	0.060	0.048	0.063
NBR (a)	0	0	42	57	42	57	-	-	-	-
SBL	1	1600	22	33	24	35	0.014	0.021	0.015	0.022
SBT	1	1600	32	39	36	43	0.023 *	0.090 *	0.026 *	0.093 *
SBR (b)	0	0	5	105	5	105	-	-	-	-
EBL	1	1600	0	130	0	130	0.000	0.081	0.000	0.081
EBT	2	3200	806	899	916	1009	0.285 *	0.329 *	0.319 *	0.363 *
EBR (c)	0	0	105	153	105	153	-	-	-	-
WBL	1	1600	26	90	26	90	0.016 *	0.056 *	0.016 *	0.056 *
WBT	2	3200	533	651	618	736	0.170	0.212	0.197	0.239
WBR (d)	0	0	11	28	13	30	-	-	-	-
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.465**	**0.639**	**0.502**	**0.676**
					SCENARIO LEVEL OF SERVICE:		**A**	**B**	**A**	**B**

NOTES:

RTOR: *(a)*
(b)
(c)
(d)

Printed: 09/27/22

HCS Two-Way Stop-Control Report

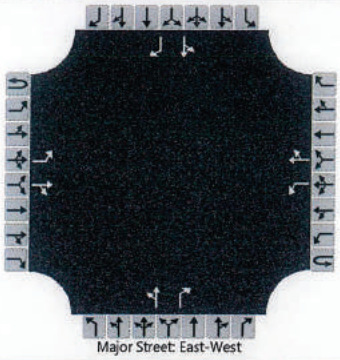
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2022
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING CONDITIONS

Site Information

Intersection	UVP/HUMMEL DRIVE
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	HUMMEL DRIVE
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	0		0	1	1		0	1	1
Configuration		L		TR		L		TR		LT		R		LT		R
Volume (veh/h)		18	633	24		41	638	10		26	36	86		25	27	18
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized										No				No		
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		20				45				67		93		57		20
Capacity, c (veh/h)		889				881				124		437		110		438
v/c Ratio		0.02				0.05				0.54		0.21		0.51		0.04
95% Queue Length, Q_{95} (veh)		0.1				0.2				2.6		0.8		2.3		0.1
Control Delay (s/veh)		9.1				9.3				64.0		15.5		67.9		13.6
Level of Service (LOS)		A				A				F		C		F		B
Approach Delay (s/veh)	0.2				0.6				35.8				54.0			
Approach LOS	A				A				E				F			

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AWD= 34.7 SEC = LOS D

HCS Two-Way Stop-Control Report

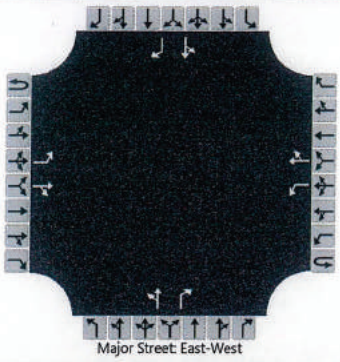
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2022
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING + PROJECT CONDITIONS

Site Information

Intersection	UVP/HUMMEL DRIVE
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	HUMMEL DRIVE
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	0		0	1	1		0	1	1
Configuration		L		TR		L		TR		LT		R		LT		R
Volume (veh/h)		32	753	38		41	742	10		40	36	86		25	27	32
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized										No				No		
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		35				45				83		93		57		35
Capacity, c (veh/h)		806				777				80		364		58		377
v/c Ratio		0.04				0.06				1.03		0.26		0.98		0.09
95% Queue Length, Q_{95} (veh)		0.1				0.2				5.7		1.0		4.5		0.3
Control Delay (s/veh)		9.7				9.9				201.0		18.3		229.5		15.5
Level of Service (LOS)		A				A				F		C		F		C
Approach Delay (s/veh)	0.4				0.5				104.0				148.0			
Approach LOS	A				A				F				F			

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AWD = > 50 SEC = LOS F

HCS Two-Way Stop-Control Report

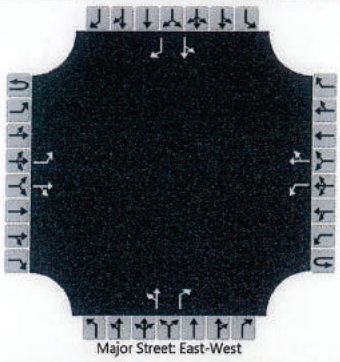
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2022
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE CONDITIONS

Site Information

Intersection	UVP/HUMMEL DRIVE
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	HUMMEL DRIVE
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	0		0	1	1		0	1	1
Configuration		L		TR		L		TR		LT		R		LT		R
Volume (veh/h)		18	696	24		41	755	10		26	36	86		25	27	18
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized										No				No		
Median Type | Storage																
	Left Only									1						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		20				45				67		93		57		20
Capacity, c (veh/h)		797				831				93		399		78		370
v/c Ratio		0.02				0.05				0.72		0.23		0.72		0.05
95% Queue Length, Q_{95} (veh)		0.1				0.2				3.7		0.9		3.4		0.2
Control Delay (s/veh)		9.6				9.6				109.6		16.8		125.9		15.3
Level of Service (LOS)		A				A				F		C		F		C
Approach Delay (s/veh)	0.2				0.5				55.7				97.4			
Approach LOS	A				A				F				F			

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AWD = > 50 SEC = LOS F

HCS Two-Way Stop-Control Report

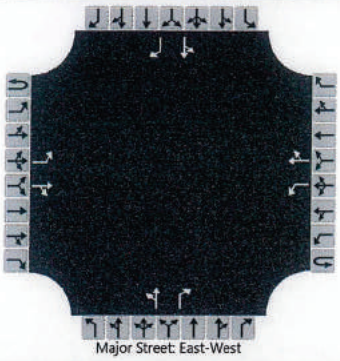
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2022
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE + PROJECT CONDITIONS

Site Information

Intersection	UVP/HUMMEL DRIVE
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	HUMMEL DRIVE
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	0		0	1	1		0	1	1
Configuration		L		TR		L		TR		LT		R		LT		R
Volume (veh/h)		32	816	38		41	859	10		40	36	86		25	27	32
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized									No				No			
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		35				45				83		93		57		35
Capacity, c (veh/h)		722				733				52		332		12		319
v/c Ratio		0.05				0.06				1.58		0.28		4.58		0.11
95% Queue Length, Q_{95} (veh)		0.2				0.2				7.8		1.1		8.1		0.4
Control Delay (s/veh)		10.2				10.2				462.6		20.0		2218.7		17.7
Level of Service (LOS)		B				B				F		C		F		C
Approach Delay (s/veh)	0.4				0.5				227.6				1380.2			
Approach LOS	A				A				F				F			

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AWD = > 50 SEC = LOS F

#21069 - RICHARDS RANCH PROJECT REF: 06 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *12/17/2019*

TIME PERIOD: *AM PEAK HOUR*

N/S STREET: *HUMMEL DRIVE*

E/W STREET: *UVP*

CONTROL TYPE: *SIGNAL - WITH RECOMMENDED IMPROVEMENTS*

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A)	EXISTING:	26	36	86	25	27	18	18	633	23	41	638	10
(B)	PROJECT-ADDED:	14	0	0	0	0	14	14	120	14	0	104	0
(C)	CUMULATIVE:	26	36	86	25	27	18	18	696	24	41	755	10

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L TR	L TR	L T TR	L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	26	40	26	40	0.016	0.025	0.016	0.025
NBT	1	1600	36	36	36	36	0.076 *	0.076 *	0.076 *	0.076 *
NBR (a)	0	0	86	86	86	86	-	-	-	-
SBL	1	1600	25	25	25	25	0.016 *	0.016 *	0.016 *	0.016 *
SBT	1	1600	27	27	27	27	0.028	0.037	0.028	0.037
SBR (b)	0	0	18	32	18	32	-	-	-	-
EBL	1	1600	18	32	18	32	0.011	0.020	0.011	0.020
EBT	2	3200	633	753	696	816	0.205 *	0.247 *	0.225 *	0.267 *
EBR (c)	0	0	23	37	24	38	-	-	-	-
WBL	1	1600	41	41	41	41	0.026 *	0.026 *	0.026 *	0.026 *
WBT	2	3200	638	742	755	859	0.203	0.235	0.239	0.272
WBR (d)	0	0	10	10	10	10	-	-	-	-
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.423**	**0.465**	**0.443**	**0.485**
					SCENARIO LEVEL OF SERVICE:		A	A	A	A

NOTES:

RTOR: *(a)*
(b)
(c)
(d)

Printed: 05/26/22

HCS Two-Way Stop-Control Report

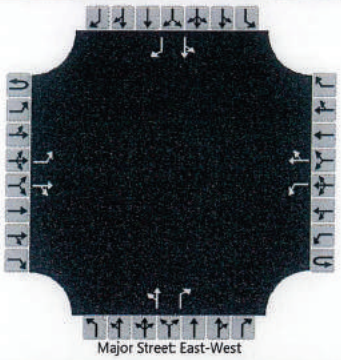
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2022
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING CONDITIONS

Site Information

Intersection	UVP/HUMMEL DRIVE
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	HUMMEL DRIVE
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	0		0	1	1		0	1	1
Configuration		L		TR		L		TR		LT		R		LT		R
Volume (veh/h)		24	828	43		66	559	23		20	19	38		12	21	8
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized										No				No		
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		26				72				42		41		36		9
Capacity, c (veh/h)		945				721				96		325		79		486
v/c Ratio		0.03				0.10				0.44		0.13		0.45		0.02
95% Queue Length, Q_{95} (veh)		0.1				0.3				1.9		0.4		1.8		0.1
Control Delay (s/veh)		8.9				10.5				69.5		17.7		83.5		12.5
Level of Service (LOS)		A				B				F		C		F		B
Approach Delay (s/veh)	0.2				1.1				43.9				69.7			
Approach LOS	A				A				E				F			

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AWD = 34.3 SEC = LOS D

HCS Two-Way Stop-Control Report

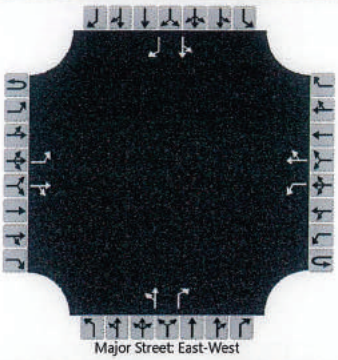
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2022
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING + PROJECT CONDITIONS

Site Information

Intersection	UVP/HUMMEL DRIVE
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	HUMMEL DRIVE
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	0		0	1	1		0	1	1
Configuration		L		TR		L		TR		LT		R		LT		R
Volume (veh/h)		35	913	54		66	658	23		32	19	38		12	21	19
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized										No				No		
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		38				72				55		41		36		21
Capacity, c (veh/h)		862				658				68		285		50		422
v/c Ratio		0.04				0.11				0.81		0.14		0.71		0.05
95% Queue Length, Q_{95} (veh)		0.1				0.4				3.8		0.5		2.9		0.2
Control Delay (s/veh)		9.4				11.1				160.8		19.7		176.8		14.0
Level of Service (LOS)		A				B				F		C		F		B
Approach Delay (s/veh)	0.3				1.0				100.6				117.3			
Approach LOS	A				A				F				F			

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AWD = > 50 SEC = LOS F

HCS Two-Way Stop-Control Report

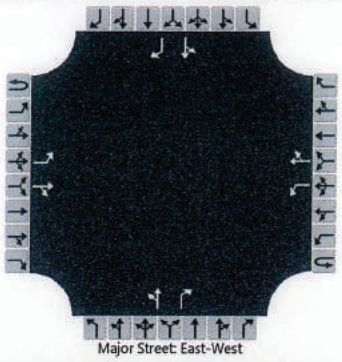
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2022
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE CONDITIONS

Site Information

Intersection	UVP/HUMMEL DRIVE
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	HUMMEL DRIVE
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	0		0	1	1		0	1	1
Configuration		L		TR		L		TR		LT		R		LT		R
Volume (veh/h)		24	940	43		66	646	23		20	19	38		12	21	8
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized										No				No		
Median Type | Storage						Left Only						1				

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		26				72				42		41		36		9
Capacity, c (veh/h)		872				648				69		277		53		429
v/c Ratio		0.03				0.11				0.61		0.15		0.68		0.02
95% Queue Length, Q_{95} (veh)		0.1				0.4				2.7		0.5		2.8		0.1
Control Delay (s/veh)		9.3				11.2				118.1		20.3		163.9		13.6
Level of Service (LOS)		A				B				F		C		F		B
Approach Delay (s/veh)	0.2				1.0				69.8				134.6			
Approach LOS	A				A				F				F			

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AWD = > 50 SEC = LOS F

HCS Two-Way Stop-Control Report

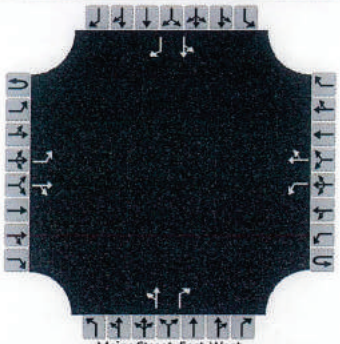
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2022
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE + PROJECT CONDITIONS

Site Information

Intersection	UVP/HUMMEL DRIVE
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	HUMMEL DRIVE
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	0		0	1	1		0	1	1
Configuration		L		TR		L		TR		LT		R		LT		R
Volume (veh/h)		35	1025	54		66	745	23		32	19	38		12	21	19
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized										No				No		
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		38				72				55		41		36		21
Capacity, c (veh/h)		794				592				41		242		14		372
v/c Ratio		0.05				0.12				1.35		0.17		2.53		0.06
95% Queue Length, Q_{95} (veh)		0.2				0.4				5.5		0.6		5.3		0.2
Control Delay (s/veh)		9.8				11.9				414.3		22.9		1241.2		15.2
Level of Service (LOS)		A				B				F		C		F		C
Approach Delay (s/veh)	0.3				0.9				247.2				793.3			
Approach LOS	A				A				F				F			

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AWD = > 50 SEC = LOS F

#21069 - RICHARDS RANCH PROJECT REF: 06 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *12/17/2019*

TIME PERIOD: *PM PEAK HOUR*

N/S STREET: *HUMMEL DRIVE*

E/W STREET: *UVP*

CONTROL TYPE: *SIGNAL - WITH RECOMMENDED IMPROVEMENTS*

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A)	EXISTING:	20	19	38	12	21	8	24	828	43	66	559	23
(B)	PROJECT-ADDED:	12	0	0	0	0	11	11	85	11	0	99	0
(C)	CUMULATIVE:	20	19	38	12	21	8	24	940	43	66	646	23

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L TR	SOUTH BOUND L TR	EAST BOUND L T TR	WEST BOUND L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	20	32	20	32	0.013	0.020 *	0.013	0.020 *
NBT	1	1600	19	19	19	19	0.036 *	0.036	0.036 *	0.036
NBR (a)	0	0	38	38	38	38	-	-	-	-
SBL	1	1600	12	12	12	12	0.008 *	0.008	0.008 *	0.008
SBT	1	1600	21	21	21	21	0.018	0.025 *	0.018	0.025 *
SBR (b)	0	0	8	19	8	19	-	-	-	-
EBL	1	1600	24	35	24	35	0.015	0.022	0.015	0.022
EBT	2	3200	828	913	940	1025	0.272 *	0.302 *	0.307 *	0.337 *
EBR (c)	0	0	43	54	43	54	-	-	-	-
WBL	1	1600	66	66	66	66	0.041 *	0.041 *	0.041 *	0.041 *
WBT	2	3200	559	658	646	745	0.182	0.213	0.209	0.240
WBR (d)	0	0	23	23	23	23	-	-	-	-
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.457**	**0.488**	**0.492**	**0.523**
					SCENARIO LEVEL OF SERVICE:		A	A	A	A

NOTES:

RTOR: *(a)*
(b)
(c)
(d)

Printed: 05/26/22

#21069 - RICHARDS RANCH PROJECT REF: 07 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *7/23/2019*

TIME PERIOD: ***AM PEAK HOUR***

N/S STREET: ***BRADLEY ROAD***

E/W STREET: ***UVP***

CONTROL TYPE: ***SIGNAL***

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A)	EXISTING:	83	273	132	51	148	30	28	464	42	75	399	14
(B)	PROJECT-ADDED:	27	0	0	0	0	20	19	79	22	0	57	0
(C)	CUMULATIVE:	112	324	144	51	184	30	29	510	57	80	485	15

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L TT R	SOUTH BOUND L T TR	EAST BOUND LL TT R	WEST BOUND LL TT R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	83	110	112	139	0.052	0.069 *	0.070 *	0.087 *
NBT	2	3200	273	273	324	324	0.085 *	0.085	0.101	0.101
NBR (a)	1	1600	132	132	144	144	0.083	0.083	0.090	0.090
SBL	1	1600	51	51	51	51	0.032 *	0.032	0.032	0.032
SBT	2	3200	148	148	184	184	0.056	0.062 *	0.067 *	0.073 *
SBR (b)	0	0	30	50	30	50	-	-	-	-
EBL	2	3200	28	47	29	48	0.009	0.015	0.009	0.015
EBT	2	3200	464	543	510	589	0.145 *	0.170 *	0.159 *	0.184 *
EBR (c)	1	1600	42	64	57	79	0.026	0.040	0.036	0.049
WBL	2	3200	75	75	80	80	0.023 *	0.023 *	0.025 *	0.025 *
WBT	2	3200	399	456	485	542	0.125	0.143	0.152	0.169
WBR (d)	1	1600	14	14	15	15	0.009	0.009	0.009	0.009
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.385**	**0.424**	**0.421**	**0.469**
					SCENARIO LEVEL OF SERVICE:		A	A	A	A

NOTES:

RTOR: (a)
(b)
(c)
(d)

Printed: 05/26/22

#21069 - RICHARDS RANCH PROJECT REF: 07 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *7/23/2019*

TIME PERIOD: ***PM PEAK HOUR***

N/S STREET: ***BRADLEY ROAD***

E/W STREET: ***UVP***

CONTROL TYPE: ***SIGNAL***

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	65	342	101	40	405	65	60	524	136	172	587	54
(B)	PROJECT-ADDED:	22	0	0	0	0	17	16	51	18	0	60	0
(C)	CUMULATIVE:	100	398	108	40	474	65	61	590	180	184	638	54

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L TT R	L T TR	LL TT R	LL TT R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	65	87	100	122	0.041 *	0.054 *	0.063 *	0.076 *
NBT	2	3200	342	342	398	398	0.107	0.107	0.124	0.124
NBR (a)	1	1600	101	101	108	108	0.063	0.063	0.068	0.068
SBL	1	1600	40	40	40	40	0.025	0.025	0.025	0.025
SBT	2	3200	405	405	474	474	0.147 *	0.152 *	0.168 *	0.174 *
SBR (b)	0	0	65	82	65	82	-	-	-	-
EBL	2	3200	60	76	61	77	0.019	0.024	0.019	0.024
EBT	2	3200	524	575	590	641	0.164 *	0.180 *	0.184 *	0.200 *
EBR (c)	1	1600	136	154	180	198	0.085	0.096	0.113	0.124
WBL	2	3200	172	172	184	184	0.054 *	0.054 *	0.058 *	0.058 *
WBT	2	3200	587	647	638	698	0.183	0.202	0.199	0.218
WBR (d)	1	1600	54	54	54	54	0.034	0.034	0.034	0.034
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.506**	**0.540**	**0.573**	**0.608**
					SCENARIO LEVEL OF SERVICE:		A	A	A	B

NOTES:

RTOR: *(a)*
(b)
(c)
(d)

Printed: 05/26/22

HCS Two-Way Stop-Control Report

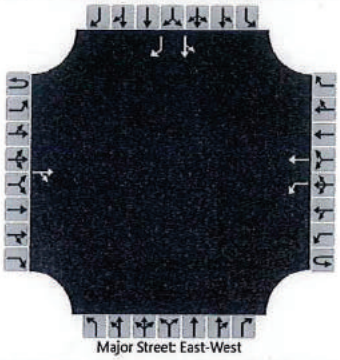
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING CONDITIONS

Site Information

Intersection	UVP/US 101 SB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 SB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Only used 65% of SB right-turn volume

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	0	0		0	1	1
Configuration				TR		L	T							LT		R
Volume (veh/h)			932	107		2	90							1	4	428
Percent Heavy Vehicles (%)						3								3	3	3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type | Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1								7.1	6.5	6.2
Critical Headway (sec)						4.13								7.13	6.53	6.23
Base Follow-Up Headway (sec)						2.2								3.5	4.0	3.3
Follow-Up Headway (sec)						2.23								3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2								5		465
Capacity, c (veh/h)						615								189		955
v/c Ratio						0.00								0.03		0.49
95% Queue Length, Q_{95} (veh)						0.0								0.1		2.7
Control Delay (s/veh)						10.9								24.6		12.3
Level of Service (LOS)						B								C		B
Approach Delay (s/veh)					0.2								12.4			
Approach LOS					A								B			

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AWD = 12.4 SEC = LOS B

HCS Two-Way Stop-Control Report

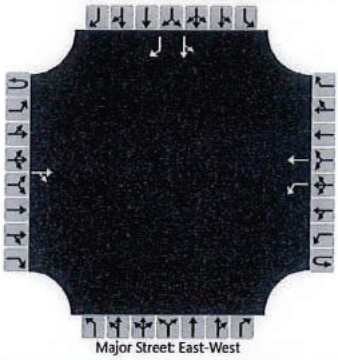
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING + PROJECT CONDITIONS

Site Information

Intersection	UVP/US 101 SB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 SB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Only used 65% of SB right-turn volume

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	0	0		0	1	1
Configuration				TR		L	T							LT		R
Volume (veh/h)			980	131		2	108							1	4	451
Percent Heavy Vehicles (%)						3								3	3	3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized														No		
Median Type | Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1								7.1	6.5	6.2
Critical Headway (sec)						4.13								7.13	6.53	6.23
Base Follow-Up Headway (sec)						2.2								3.5	4.0	3.3
Follow-Up Headway (sec)						2.23								3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2								5		490
Capacity, c (veh/h)						574								166		932
v/c Ratio						0.00								0.03		0.53
95% Queue Length, Q_{95} (veh)						0.0								0.1		3.1
Control Delay (s/veh)						11.3								27.4		13.1
Level of Service (LOS)						B								D		B
Approach Delay (s/veh)					0.2								13.2			
Approach LOS					A								B			

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AWD = 13.2 SEC = LOS B

HCS Two-Way Stop-Control Report

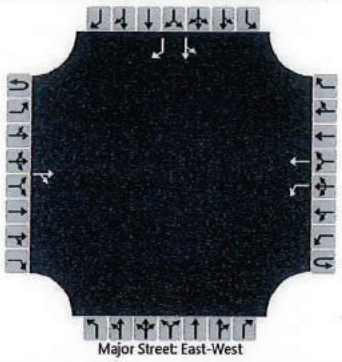
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE CONDITIONS

Site Information

Intersection	UVP/US 101 SB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 SB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Only used 65% of SB right-turn volume

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	0	0		0	1	1
Configuration				TR		L	T							LT		R
Volume (veh/h)			976	121		2	116							1	4	471
Percent Heavy Vehicles (%)						3								3	3	3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized														No		
Median Type | Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1								7.1	6.5	6.2
Critical Headway (sec)						4.13								7.13	6.53	6.23
Base Follow-Up Headway (sec)						2.2								3.5	4.0	3.3
Follow-Up Headway (sec)						2.23								3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2								5		512
Capacity, c (veh/h)						582								168		922
v/c Ratio						0.00								0.03		0.56
95% Queue Length, Q_{95} (veh)						0.0								0.1		3.5
Control Delay (s/veh)						11.2								27.2		13.7
Level of Service (LOS)						B								D		B
Approach Delay (s/veh)					0.2								13.8			
Approach LOS					A								B			

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AWD = 13.8 SEC = LOS B

HCS Two-Way Stop-Control Report

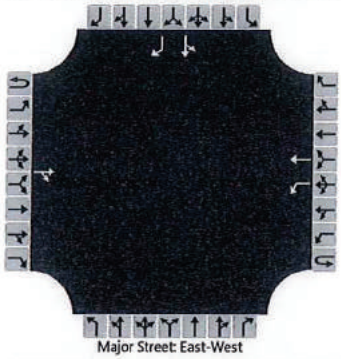
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE + PROJECT CONDITIONS

Site Information

Intersection	UVP/US 101 SB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 SB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Only used 65% of SB right-turn volume

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	0	0		0	1	1
Configuration				TR		L	T							LT		R
Volume (veh/h)			1024	145		2	134							1	4	493
Percent Heavy Vehicles (%)						3								3	3	3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized														No		
Median Type | Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1								7.1	6.5	6.2
Critical Headway (sec)						4.13								7.13	6.53	6.23
Base Follow-Up Headway (sec)						2.2								3.5	4.0	3.3
Follow-Up Headway (sec)						2.23								3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2								5		536
Capacity, c (veh/h)						543								148		899
v/c Ratio						0.00								0.04		0.60
95% Queue Length, Q_{95} (veh)						0.0								0.1		4.1
Control Delay (s/veh)						11.7								30.3		14.7
Level of Service (LOS)						B								D		B
Approach Delay (s/veh)					0.2								14.9			
Approach LOS					A								B			

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AWD = 14.8 SEC = LOS B

HCS Two-Way Stop-Control Report

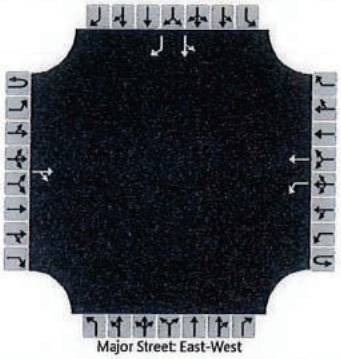
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING CONDITIONS

Site Information

Intersection	UVP/US 101 SB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 SB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Only used 65%
of SB right-turn volume

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	0	0		0	1	1
Configuration				TR		L	T							LT		R
Volume (veh/h)			729	55		3	109							2	2	532
Percent Heavy Vehicles (%)						3								3	3	3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized														No		
Median Type | Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1								7.1	6.5	6.2
Critical Headway (sec)						4.13								7.13	6.53	6.23
Base Follow-Up Headway (sec)						2.2								3.5	4.0	3.3
Follow-Up Headway (sec)						2.23								3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						3								4		578
Capacity, c (veh/h)						782								292		931
v/c Ratio						0.00								0.01		0.62
95% Queue Length, Q_{95} (veh)						0.0								0.0		4.5
Control Delay (s/veh)						9.6								17.5		15.0
Level of Service (LOS)						A								C		B
Approach Delay (s/veh)					0.3								15.0			
Approach LOS					A								C			

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AWD = 15.0 SEC = LOS B

HCS Two-Way Stop-Control Report

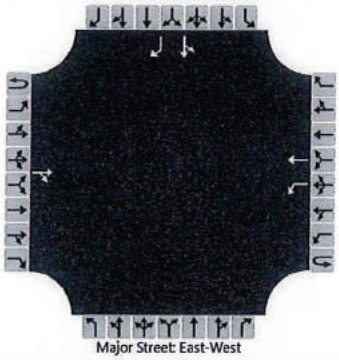
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING + PROJECT CONDITIONS

Site Information

Intersection	UVP/US 101 SB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 SB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Only used 65% of SB right-turn volume

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	0	0		0	1	1
Configuration				TR		L	T							LT		R
Volume (veh/h)			759	70		3	128							2	2	557
Percent Heavy Vehicles (%)						3								3	3	3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type | Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1								7.1	6.5	6.2
Critical Headway (sec)						4.13								7.13	6.53	6.23
Base Follow-Up Headway (sec)						2.2								3.5	4.0	3.3
Follow-Up Headway (sec)						2.23								3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						3								4		605
Capacity, c (veh/h)						750								271		906
v/c Ratio						0.00								0.02		0.67
95% Queue Length, Q_{95} (veh)						0.0								0.0		5.3
Control Delay (s/veh)						9.8								18.5		16.6
Level of Service (LOS)						A								C		C
Approach Delay (s/veh)					0.2								16.6			
Approach LOS					A								C			

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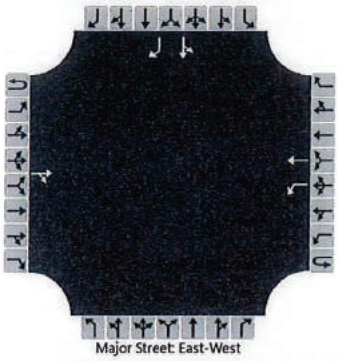
AWD= 16.6 SEC = LOS C

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SAS	Intersection	UVP/US 101 SB RAMPS
Agency/Co.	ATE	Jurisdiction	SANTA MARIA
Date Performed	1/5/2022	East/West Street	UVP
Analysis Year	2019	North/South Street	US 101 SB RAMPS
Time Analyzed	PM PEAK HOUR	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	CUMULATIVE CONDITIONS		

Lanes



Only used 65% of SB right-turn volume

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	0	0		0	1	1
Configuration				TR		L	T							LT		R
Volume (veh/h)			782	75		3	124							2	2	563
Percent Heavy Vehicles (%)						3								3	3	3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type | Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1								7.1	6.5	6.2
Critical Headway (sec)						4.13								7.13	6.53	6.23
Base Follow-Up Headway (sec)						2.2								3.5	4.0	3.3
Follow-Up Headway (sec)						2.23								3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						3								4		612
Capacity, c (veh/h)						730								262		911
v/c Ratio						0.00								0.02		0.67
95% Queue Length, Q_{95} (veh)						0.0								0.1		5.4
Control Delay (s/veh)						10.0								19.0		16.6
Level of Service (LOS)						A								C		C
Approach Delay (s/veh)					0.2								16.6			
Approach LOS					A								C			

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AWD = 16.6 SEC = LOS C

HCS Two-Way Stop-Control Report

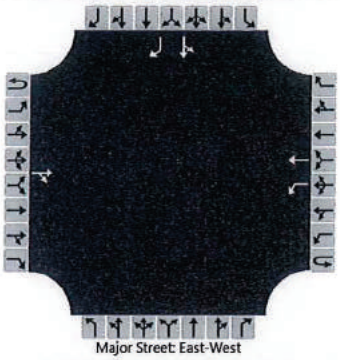
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE + PROJECT CONDITIONS

Site Information

Intersection	UVP/US 101 SB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 SB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Only used 65% of SB right-turn volume

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	0	0		0	1	1
Configuration				TR		L	T							LT		R
Volume (veh/h)			812	90		3	143							2	2	588
Percent Heavy Vehicles (%)						3								3	3	3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type | Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1								7.1	6.5	6.2
Critical Headway (sec)						4.13								7.13	6.53	6.23
Base Follow-Up Headway (sec)						2.2								3.5	4.0	3.3
Follow-Up Headway (sec)						2.23								3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						3								4		639
Capacity, c (veh/h)						700								243		888
v/c Ratio						0.00								0.02		0.72
95% Queue Length, Q_{95} (veh)						0.0								0.1		6.4
Control Delay (s/veh)						10.2								20.1		18.7
Level of Service (LOS)						B								C		C
Approach Delay (s/veh)					0.2								18.7			
Approach LOS					A								C			

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AWD = 18.7 SEC = LOS C

HCS Two-Way Stop-Control Report

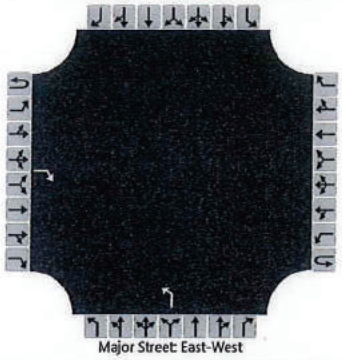
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING CONDITIONS

Site Information

Intersection	UVP/US 101 NB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 NB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	0	1	0	0	0	0		1	0	0		0	0	0
Configuration				R						L						
Volume (veh/h)				933						92						
Percent Heavy Vehicles (%)										3						
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)										6.4						
Critical Headway (sec)										5.76						
Base Follow-Up Headway (sec)										3.8						
Follow-Up Headway (sec)										3.83						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										100						
Capacity, c (veh/h)										940						
v/c Ratio										0.11						
95% Queue Length, Q_{95} (veh)										0.4						
Control Delay (s/veh)										9.3						
Level of Service (LOS)										A						
Approach Delay (s/veh)										9.3						
Approach LOS										A						

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HCS Two-Way Stop-Control Report

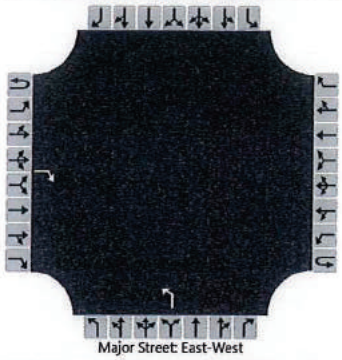
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING + PROJECT CONDITIONS

Site Information

Intersection	UVP/US 101 NB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 NB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	0	1	0	0	0	0		1	0	0		0	0	0
Configuration				R						L						
Volume (veh/h)				981						110						
Percent Heavy Vehicles (%)										3						
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)										6.4						
Critical Headway (sec)										5.76						
Base Follow-Up Headway (sec)										3.8						
Follow-Up Headway (sec)										3.83						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										120						
Capacity, c (veh/h)										940						
v/c Ratio										0.13						
95% Queue Length, Q_{95} (veh)										0.4						
Control Delay (s/veh)										9.4						
Level of Service (LOS)										A						
Approach Delay (s/veh)										9.4						
Approach LOS										A						

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HCS Two-Way Stop-Control Report

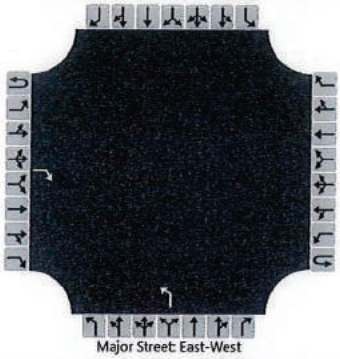
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE CONDITIONS

Site Information

Intersection	UVP/US 101 NB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 NB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	0	1	0	0	0	0		1	0	0		0	0	0
Configuration				R						L						
Volume (veh/h)				977						118						
Percent Heavy Vehicles (%)										3						
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)										6.4						
Critical Headway (sec)										5.76						
Base Follow-Up Headway (sec)										3.8						
Follow-Up Headway (sec)										3.83						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										128						
Capacity, c (veh/h)										940						
v/c Ratio										0.14						
95% Queue Length, Q_{95} (veh)										0.5						
Control Delay (s/veh)										9.4						
Level of Service (LOS)										A						
Approach Delay (s/veh)										9.4						
Approach LOS										A						

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HCS Two-Way Stop-Control Report

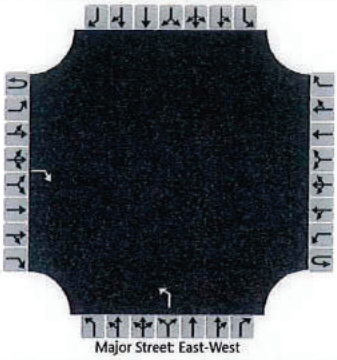
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE + PROJECT CONDITIONS

Site Information

Intersection	UVP/US 101 NB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 NB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	0	1	0	0	0	0		1	0	0		0	0	0
Configuration				R						L						
Volume (veh/h)				1025						136						
Percent Heavy Vehicles (%)										3						
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)										6.4						
Critical Headway (sec)										5.76						
Base Follow-Up Headway (sec)										3.8						
Follow-Up Headway (sec)										3.83						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										148						
Capacity, c (veh/h)										940						
v/c Ratio										0.16						
95% Queue Length, Q_{95} (veh)										0.6						
Control Delay (s/veh)										9.5						
Level of Service (LOS)										A						
Approach Delay (s/veh)										9.5						
Approach LOS										A						

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HCS Two-Way Stop-Control Report

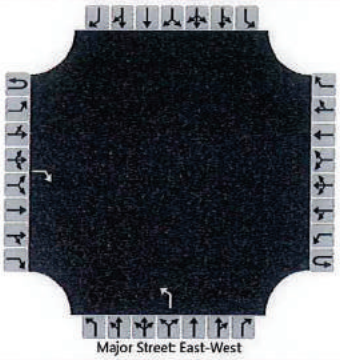
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING CONDITIONS

Site Information

Intersection	UVP/US 101 NB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 NB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	0	1	0	0	0	0		1	0	0		0	0	0
Configuration				R						L						
Volume (veh/h)				731						112						
Percent Heavy Vehicles (%)										3						
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)										6.4						
Critical Headway (sec)										5.76						
Base Follow-Up Headway (sec)										3.8						
Follow-Up Headway (sec)										3.83						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										122						
Capacity, c (veh/h)										940						
v/c Ratio										0.13						
95% Queue Length, Q_{95} (veh)										0.4						
Control Delay (s/veh)										9.4						
Level of Service (LOS)										A						
Approach Delay (s/veh)										9.4						
Approach LOS										A						

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HCS Two-Way Stop-Control Report

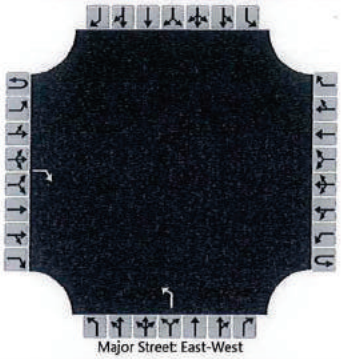
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING + PROJECT CONDITIONS

Site Information

Intersection	UVP/US 101 NB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 NB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	0	1	0	0	0	0		1	0	0		0	0	0
Configuration				R						L						
Volume (veh/h)				761						131						
Percent Heavy Vehicles (%)										3						
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)										6.4						
Critical Headway (sec)										5.76						
Base Follow-Up Headway (sec)										3.8						
Follow-Up Headway (sec)										3.83						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										142						
Capacity, c (veh/h)										940						
v/c Ratio										0.15						
95% Queue Length, Q_{95} (veh)										0.5						
Control Delay (s/veh)										9.5						
Level of Service (LOS)										A						
Approach Delay (s/veh)										9.5						
Approach LOS										A						

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HCS Two-Way Stop-Control Report

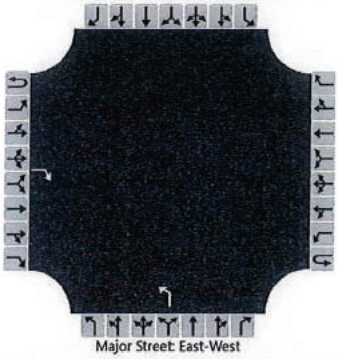
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE CONDITIONS

Site Information

Intersection	UVP/US 101 NB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 NB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	0	1	0	0	0	0		1	0	0		0	0	0
Configuration				R						L						
Volume (veh/h)				784						127						
Percent Heavy Vehicles (%)										3						
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)										6.4						
Critical Headway (sec)										5.76						
Base Follow-Up Headway (sec)										3.8						
Follow-Up Headway (sec)										3.83						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										138						
Capacity, c (veh/h)										940						
v/c Ratio										0.15						
95% Queue Length, Q_{95} (veh)										0.5						
Control Delay (s/veh)										9.5						
Level of Service (LOS)										A						
Approach Delay (s/veh)										9.5						
Approach LOS										A						

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HCS Two-Way Stop-Control Report

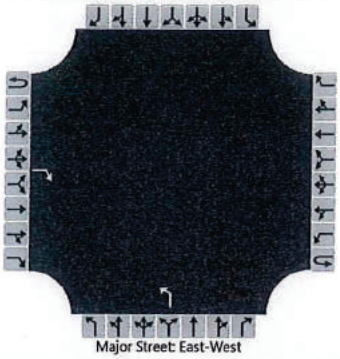
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE + PROJECT CONDITIONS

Site Information

Intersection	UVP/US 101 NB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 NB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	0	1	0	0	0	0		1	0	0		0	0	0
Configuration				R						L						
Volume (veh/h)				814						146						
Percent Heavy Vehicles (%)										3						
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized			No													
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)										6.4						
Critical Headway (sec)										5.76						
Base Follow-Up Headway (sec)										3.8						
Follow-Up Headway (sec)										3.83						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										159						
Capacity, c (veh/h)										940						
v/c Ratio										0.17						
95% Queue Length, Q_{95} (veh)										0.6						
Control Delay (s/veh)										9.6						
Level of Service (LOS)										A						
Approach Delay (s/veh)										9.6						
Approach LOS										A						

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PROJECT DRIVEWAYS - LEVEL OF SERVICE CALCULATION WORKSHEETS

HCS Two-Way Stop-Control Report

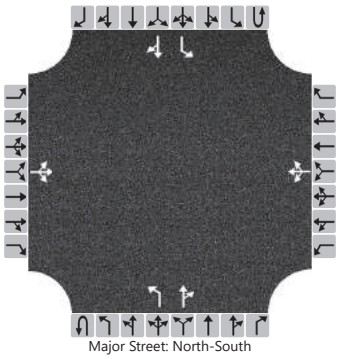
General Information

Analyst	JH
Agency/Co.	ATE
Date Performed	9/27/22
Analysis Year	2022
Time Analyzed	AM PEAK HOUR
Intersection Orientation	North-South
Project Description	CUMULATIVE + PROJECT CONDTIONS

Site Information

Intersection	ORCUTT/PARCEL 1&2 DRIVEWAYS
Jurisdiction	SANTA MARIA
East/West Street	PARCEL 1&2 DRIVEWAYS
North/South Street	ORCUTT ROAD
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		4	0	72		82	0	21		75	41	142		26	78	5
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			76				103			75				26		
Capacity, c (veh/h)			947				598			1508				1386		
v/c Ratio			0.08				0.17			0.05				0.02		
95% Queue Length, Q_{95} (veh)			0.3				0.6			0.2				0.1		
Control Delay (s/veh)			9.1				12.3			7.5				7.6		
Level of Service (LOS)			A				B			A				A		
Approach Delay (s/veh)		9.1				12.3				2.2				1.8		
Approach LOS		A				B				A				A		

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AWD = 9.7 sec. (LOS A)

HCS Two-Way Stop-Control Report

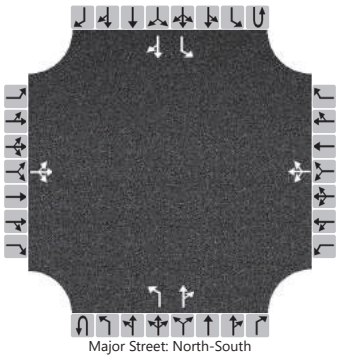
General Information

Analyst	JH
Agency/Co.	ATE
Date Performed	9/27/22
Analysis Year	2022
Time Analyzed	PM PEAK HOUR
Intersection Orientation	North-South
Project Description	CUMULATIVE + PROJECT CONDTIONS

Site Information

Intersection	ORCUTT/PARCEL 1&2 DRIVEWAYS
Jurisdiction	SANTA MARIA
East/West Street	PARCEL 1&2 DRIVEWAYS
North/South Street	ORCUTT ROAD
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		3	0	55		67	0	17		56	43	105		20	57	3
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			58				84			56				20		
Capacity, c (veh/h)			979				666			1537				1427		
v/c Ratio			0.06				0.13			0.04				0.01		
95% Queue Length, Q_{95} (veh)			0.2				0.4			0.1				0.0		
Control Delay (s/veh)			8.9				11.2			7.4				7.6		
Level of Service (LOS)			A				B			A				A		
Approach Delay (s/veh)		8.9				11.2				2.0				1.9		
Approach LOS		A				B				A				A		

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AWD = 9.3 sec. (LOS A)

HCS Two-Way Stop-Control Report

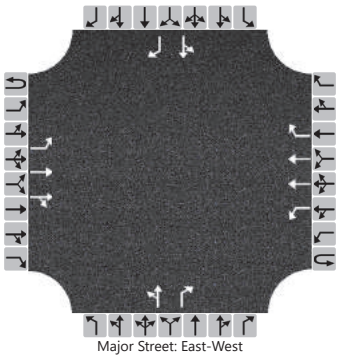
General Information

Analyst	GOM
Agency/Co.	ATE
Date Performed	8/31/22
Analysis Year	2022
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE + PROJECT CONDTIONS

Site Information

Intersection	UVP/PARCEL 2 EASTERLY & PARCEL 4 DWYS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	PARCEL 2 EASTERLY & PARCEL 4 DRIVEWAYS
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	1		0	1	1		0	1	1
Configuration		L	T	TR		L	T	R		LT		R		LT		R
Volume (veh/h)	0	129	791	11	0	14	903	13		34	0	44		50	0	24
Percent Heavy Vehicles (%)	3	3			3	3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized						No				No				No		
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.96
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		129				14				34		44		50		24
Capacity, c (veh/h)		734				811				142		596		158		552
v/c Ratio		0.18				0.02				0.24		0.07		0.32		0.04
95% Queue Length, Q_{95} (veh)		0.6				0.1				0.9		0.2		1.3		0.1
Control Delay (s/veh)		10.9				9.5				38.1		11.5		37.9		11.8
Level of Service (LOS)		B				A				E		B		E		B
Approach Delay (s/veh)	1.5				0.1				23.1				29.5			
Approach LOS	A				A				C				D			

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AWD = 18.7 sec. (LOS C)

HCS Two-Way Stop-Control Report

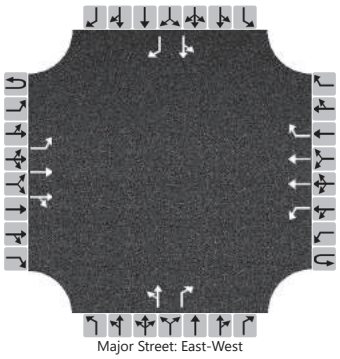
General Information

Analyst	GOM
Agency/Co.	ATE
Date Performed	8/31/22
Analysis Year	2022
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE + PROJECT CONDTIONS

Site Information

Intersection	UVP/PARCEL 2 EASTERLY & PARCEL 4 DWYS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	PARCEL 2 EASTERLY & PARCEL 4 DRIVEWAYS
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	1		0	1	1		0	1	1
Configuration		L	T	TR		L	T	R		LT		R		LT		R
Volume (veh/h)	0	95	1052	23	0	31	756	10		13	0	17		45	0	20
Percent Heavy Vehicles (%)	3	3			3	3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized						No				No				No		
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.96
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		95				31				13		17		45		20
Capacity, c (veh/h)		837				638				123		485		170		617
v/c Ratio		0.11				0.05				0.11		0.04		0.27		0.03
95% Queue Length, Q_{95} (veh)		0.4				0.2				0.3		0.1		1.0		0.1
Control Delay (s/veh)		9.9				10.9				37.8		12.7		33.7		11.0
Level of Service (LOS)		A				B				E		B		D		B
Approach Delay (s/veh)	0.8				0.4				23.6				26.7			
Approach LOS	A				A				C				D			

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AWD = 16.8 sec. (LOS C)

HCS Two-Way Stop-Control Report

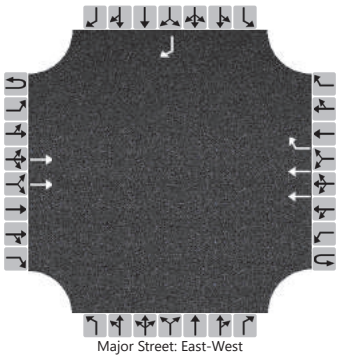
General Information

Analyst	JH
Agency/Co.	ATE
Date Performed	9/27/22
Analysis Year	2022
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE + PROJECT CONDTIONS

Site Information

Intersection	UVP/PARCEL 2 WESTERLY DRIVEWAY
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	PARCEL 2 WESTERLY DRIVEWAY
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	1		0	0	0		0	0	1
Configuration			T				T	R								R
Volume (veh/h)			931				837	124								204
Percent Heavy Vehicles (%)																3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized							Yes						No			
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																6.9
Critical Headway (sec)																6.96
Base Follow-Up Headway (sec)																3.3
Follow-Up Headway (sec)																3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																204
Capacity, c (veh/h)																581
v/c Ratio																0.35
95% Queue Length, Q_{95} (veh)																1.6
Control Delay (s/veh)																14.5
Level of Service (LOS)																B
Approach Delay (s/veh)													14.5			
Approach LOS													B			

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HCS Two-Way Stop-Control Report

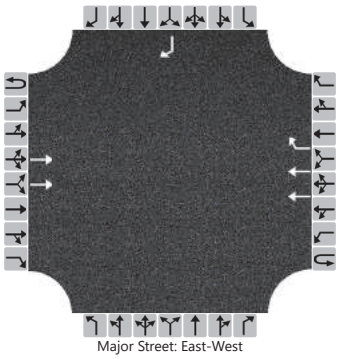
General Information

Analyst	JH
Agency/Co.	ATE
Date Performed	9/27/22
Analysis Year	2022
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE + PROJECT CONDTIONS

Site Information

Intersection	UVP/PARCEL 2 WESTERLY DRIVEWAY
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	PARCEL 2 WESTERLY DRIVEWAY
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	1		0	0	0		0	0	1
Configuration			T				T	R								R
Volume (veh/h)			1170				694	95								170
Percent Heavy Vehicles (%)																3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized							Yes							No		
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)																6.9
Critical Headway (sec)																6.96
Base Follow-Up Headway (sec)																3.3
Follow-Up Headway (sec)																3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																170
Capacity, c (veh/h)																646
v/c Ratio																0.26
95% Queue Length, Q_{95} (veh)																1.1
Control Delay (s/veh)																12.5
Level of Service (LOS)																B
Approach Delay (s/veh)														12.5		
Approach LOS														B		

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HCS Two-Way Stop-Control Report

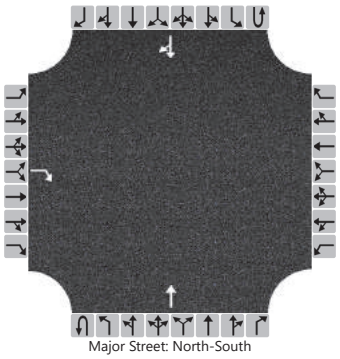
General Information

Analyst	JH
Agency/Co.	ATE
Date Performed	9/27/22
Analysis Year	2022
Time Analyzed	AM PEAK HOUR
Intersection Orientation	North-South
Project Description	CUMULATIVE + PROJECT CONDTIONS

Site Information

Intersection	ORCUTT/PARCEL 3 NORTH DRIVEWAY
Jurisdiction	SANTA MARIA
East/West Street	PARCEL 3 NORTH DRIVEWAY
North/South Street	ORCUTT ROAD
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	1	0	0	0	1	0
Configuration				R							T					TR
Volume (veh/h)				2							414				203	68
Percent Heavy Vehicles (%)				3												
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)				6.2												
Critical Headway (sec)				6.23												
Base Follow-Up Headway (sec)				3.3												
Follow-Up Headway (sec)				3.33												

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				2												
Capacity, c (veh/h)				800												
v/c Ratio				0.00												
95% Queue Length, Q_{95} (veh)				0.0												
Control Delay (s/veh)				9.5												
Level of Service (LOS)				A												
Approach Delay (s/veh)	9.5															
Approach LOS	A															

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HCS Two-Way Stop-Control Report

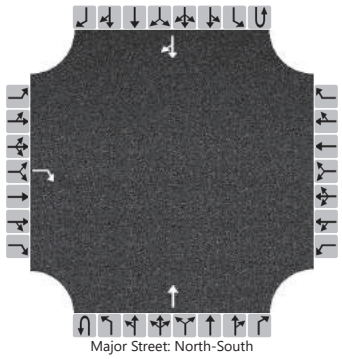
General Information

Analyst	JH
Agency/Co.	ATE
Date Performed	9/27/22
Analysis Year	2022
Time Analyzed	PM PEAK HOUR
Intersection Orientation	North-South
Project Description	CUMULATIVE + PROJECT CONDTIONS

Site Information

Intersection	ORCUTT/PARCEL 3 NORTH DRIVEWAY
Jurisdiction	SANTA MARIA
East/West Street	PARCEL 3 NORTH DRIVEWAY
North/South Street	ORCUTT ROAD
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	1	0	0	0	1	0
Configuration				R							T					TR
Volume (veh/h)				0							203				202	38
Percent Heavy Vehicles (%)				3												
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)				6.2												
Critical Headway (sec)				6.23												
Base Follow-Up Headway (sec)				3.3												
Follow-Up Headway (sec)				3.33												

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				0												
Capacity, c (veh/h)				816												
v/c Ratio				0.00												
95% Queue Length, Q_{95} (veh)				0.0												
Control Delay (s/veh)				9.4												
Level of Service (LOS)				A												
Approach Delay (s/veh)																
Approach LOS																

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HCS Two-Way Stop-Control Report

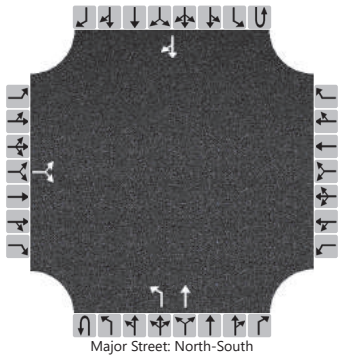
General Information

Analyst	JH
Agency/Co.	ATE
Date Performed	9/27/22
Analysis Year	2022
Time Analyzed	AM PEAK HOUR
Intersection Orientation	North-South
Project Description	CUMULATIVE + PROJECT CONDTIONS

Site Information

Intersection	ORCUTT/PARCEL 3 SOUTH DRIVEWAY
Jurisdiction	SANTA MARIA
East/West Street	PARCEL 3 SOUTH DRIVEWAY
North/South Street	ORCUTT ROAD
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	1	0	0	0	1	0
Configuration			LR							L	T					TR
Volume (veh/h)		65		2						4	349				205	0
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.43		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			67							4						
Capacity, c (veh/h)			570							1360						
v/c Ratio			0.12							0.00						
95% Queue Length, Q_{95} (veh)			0.4							0.0						
Control Delay (s/veh)			12.2							7.7						
Level of Service (LOS)			B							A						
Approach Delay (s/veh)		12.2								0.1						
Approach LOS		B								A						

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AWD = 11.2 sec. (LOS B)

HCS Two-Way Stop-Control Report

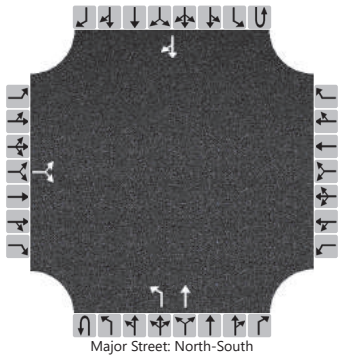
General Information

Analyst	JH
Agency/Co.	ATE
Date Performed	9/27/22
Analysis Year	2022
Time Analyzed	PM PEAK HOUR
Intersection Orientation	North-South
Project Description	CUMULATIVE + PROJECT CONDTIONS

Site Information

Intersection	ORCUTT/PARCEL 3 SOUTH DRIVEWAY
Jurisdiction	SANTA MARIA
East/West Street	PARCEL 3 SOUTH DRIVEWAY
North/South Street	ORCUTT ROAD
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	1	0	0	0	1	0
Configuration			LR							L	T					TR
Volume (veh/h)		35		2						2	168				202	0
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.43		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			37							2						
Capacity, c (veh/h)			676							1364						
v/c Ratio			0.05							0.00						
95% Queue Length, Q_{95} (veh)			0.2							0.0						
Control Delay (s/veh)			10.6							7.6						
Level of Service (LOS)			B							A						
Approach Delay (s/veh)	10.6								0.1							
Approach LOS	B								A							

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AWD = 10.4 sec. (LOS B)

HCS Two-Way Stop-Control Report

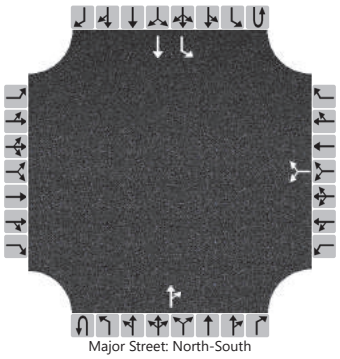
General Information

Analyst	JH
Agency/Co.	ATE
Date Performed	9/27/22
Analysis Year	2022
Time Analyzed	AM PEAK HOUR
Intersection Orientation	North-South
Project Description	CUMULATIVE + PROJECT CONDTIONS

Site Information

Intersection	ORCUTT/PARCEL 5 DRIVEWAY
Jurisdiction	SANTA MARIA
East/West Street	PARCEL 5 DRIVEWAY
North/South Street	ORCUTT ROAD
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	1	1	0
Configuration							LR					TR		L	T	
Volume (veh/h)						3		39			314	1		12	194	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.13		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							42							12		
Capacity, c (veh/h)							711							1240		
v/c Ratio							0.06							0.01		
95% Queue Length, Q_{95} (veh)							0.2							0.0		
Control Delay (s/veh)							10.4							7.9		
Level of Service (LOS)							B							A		
Approach Delay (s/veh)					10.4								0.5			
Approach LOS					B								A			

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AWD = 9.8 sec. (LOS A)

HCS Two-Way Stop-Control Report

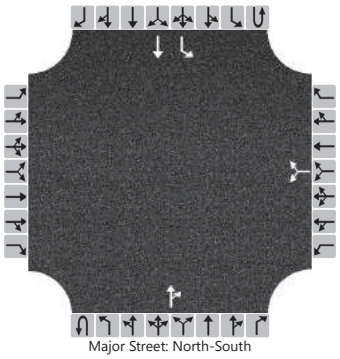
General Information

Analyst	JH
Agency/Co.	ATE
Date Performed	9/27/22
Analysis Year	2022
Time Analyzed	PM PEAK HOUR
Intersection Orientation	North-South
Project Description	CUMULATIVE + PROJECT CONDTIONS

Site Information

Intersection	ORCUTT/PARCEL 5 DRIVEWAY
Jurisdiction	SANTA MARIA
East/West Street	PARCEL 5 DRIVEWAY
North/South Street	ORCUTT ROAD
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	1	1	0
Configuration							LR					TR		L	T	
Volume (veh/h)						2		16			154	2		27	177	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.13		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							18							27		
Capacity, c (veh/h)							854							1418		
v/c Ratio							0.02							0.02		
95% Queue Length, Q_{95} (veh)							0.1							0.1		
Control Delay (s/veh)							9.3							7.6		
Level of Service (LOS)							A							A		
Approach Delay (s/veh)					9.3								1.0			
Approach LOS					A								A			

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AWD = 8.3 sec. (LOS A)

ASSOCIATED TRANSPORTATION ENGINEERS

100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110 • (805)687-4418 • main@atesb.com

Since 1978

Richard L. Pool, P.E.
Scott A. Schell

December 1, 2022 21069L02

Richards Ranch, LLC
Re: Michael Stoltey, Managing Member
San Luis Obispo, CA

SUPPLEMENTAL TRAFFIC MITIGATION ANALYSIS FOR THE RICHARDS RANCH PROJECT, CITY OF SANTA MARIA

Associated Transportation Engineers (ATE) has prepared the following supplemental traffic mitigation analysis for the Richards Ranch Project (the "Project"). The supplemental analysis provides additional information on the improvements identified for the UVP/Hummel Drive intersection.

INTRODUCTION

The traffic study completed by ATE for the Richards Ranch Project[1] contained an analysis of the future long-term improvements at the UVP/Hummel Drive intersection that included widening of the UVP to its ultimate 4-lane configuration and installation of traffic signals. City staff requested that this analysis be expanded to include an evaluation of the interim improvement plan which includes installation of traffic signals and no widening of the UVP.

UVP/HUMMEL DRIVE INTERSECTION

Interim Improvements

The interim improvement plan for the UVP/Hummel Drive intersection would include installation of traffic signals at the existing intersection with no widening of the UVP at the intersection. Figure 1 (attached) provides a schematic illustration of the interim intersection design without the UVP widening. Table 1 presents the Existing + Project and Cumulative + Project levels of service forecasts for the intersection assuming implementation of the interim improvements (LOS calculations attached).

[1] Updated Traffic and Circulation Study for the Richards Ranch Project, ATE, October 7, 2022.

Table 1
Intersection Levels of Service With Interim Improvements

Intersection	Existing + Project		Cumulative + Project	
	Existing Geometry	With Improvements	Existing Geometry	With Improvements
UVP/Hummel Drive AM(a)	> 50.0 sec. / LOS F	0.71 / LOS C	> 50.0 sec / LOS F	0.75 / LOS C
UVP/Hummel Drive PM(a)	> 50.0 sec. / LOS F	0.79 / LOS C	> 50.0 sec / LOS F	0.86 / LOS D

(a) Assumes traffic signal installation and no UVP widening.

The data presented in Table 1 show that with the interim improvements, the UVP/Hummel Drive intersection will operate in the LOS C range with Existing + Project volumes. Under Cumulative conditions, the intersection operations would degrade to LOS D during the PM peak hour indicating that the long-term improvements would be required as cumulative buildout occurs in the area.

Long-Term Plan

County staff have indicated that the ultimate plan for the UVP adjacent to the Hummel Drive intersection is to widen UVP from two lanes to four lanes with left-turn channelization. This widening will occur west of Hummel Drive to match the four lanes in front of the Project site. In addition, County staff indicated that traffic signals would be installed at the UVP/Hummel Drive intersection in the future. Figure 2 provides a schematic illustration of the future intersection design with the widening. Table 2 presents the Existing + Project and Cumulative + Project levels of service forecasts for the intersection assuming implementation of the long-term improvements (LOS calculations attached).

Table 2
Intersection Levels of Service With Long-Term Improvements

Intersection	Existing + Project		Cumulative + Project	
	Existing Geometry	With Improvements	Existing Geometry	With Improvements
UVP/Hummel Drive AM(a)	> 50.0 sec. / LOS F	0.47 / LOS A	> 50.0 sec / LOS F	0.49 / LOS A
UVP/Hummel Drive PM(a)	> 50.0 sec. / LOS F	0.49 / LOS A	> 50.0 sec / LOS F	0.52 / LOS A

(b) Assumes UVP widening and traffic signal installation.

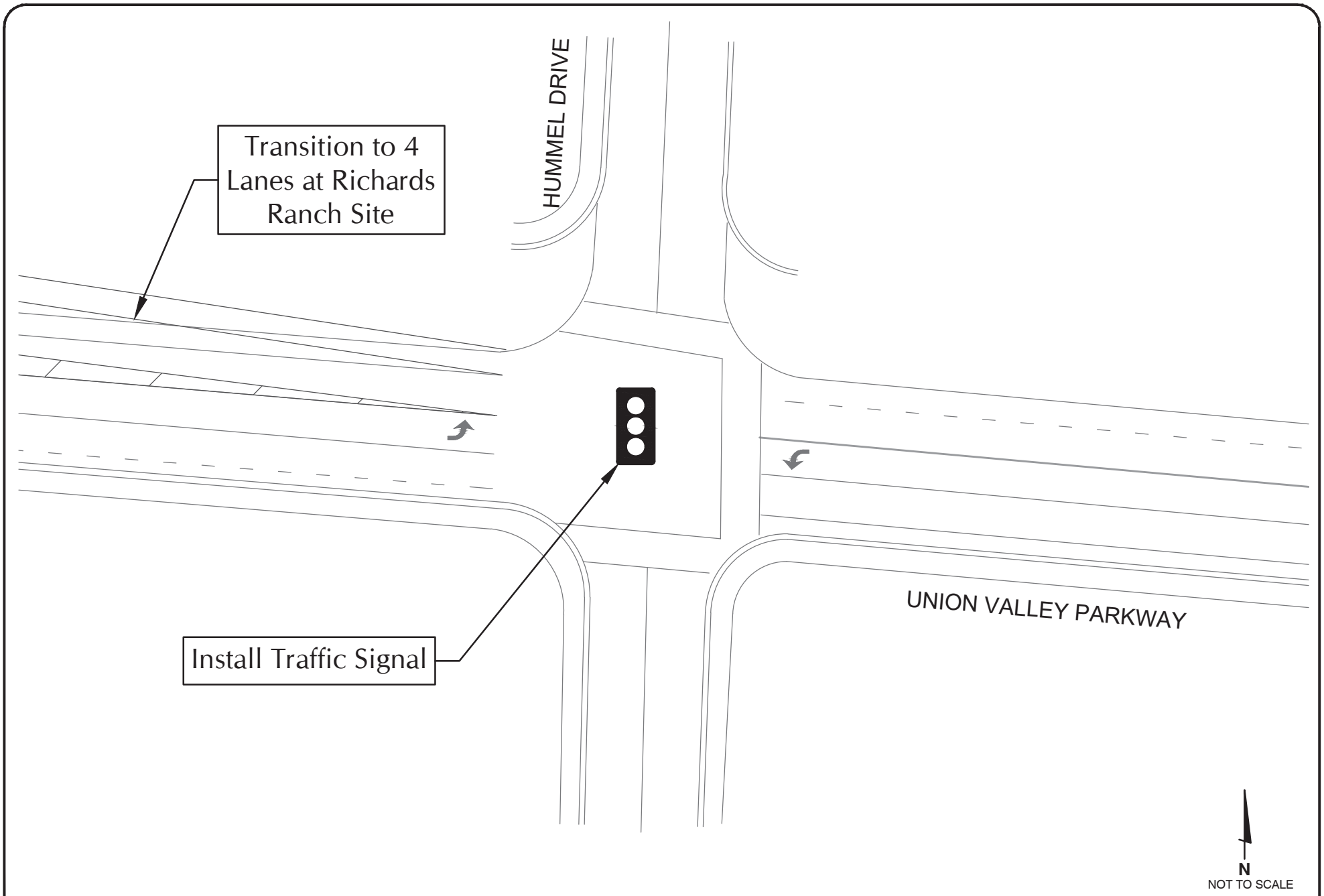
The data presented in Table 2 show that with the long-term improvements, the UVP/Hummel Drive intersection will operate in the LOS A range.

This concludes ATE's supplemental Traffic Mitigation analysis for the Richards Ranch Project.

Associated Transportation Engineers

By: Scott A. Schell
Principal Transportation Planner

Attachments

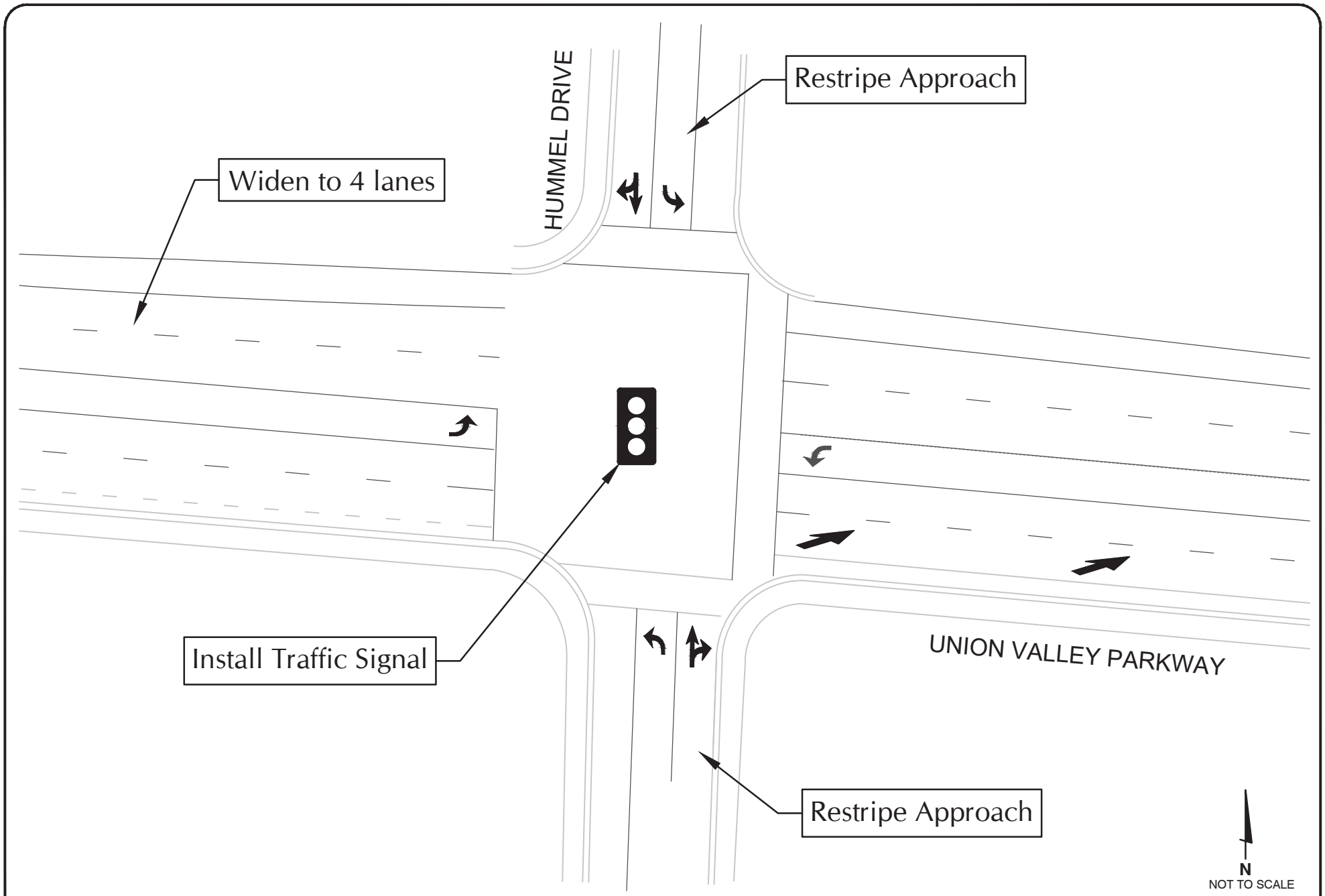


ASSOCIATED TRANSPORTATION ENGINEERS

UNION VALLEY PARKWAY/HUMMEL DRIVE - INTERIM INTERSECTION DESIGN

FIGURE 1

GM- ATE#21069



ASSOCIATED TRANSPORTATION ENGINEERS

UNION VALLEY PARKWAY/HUMMEL DRIVE - FUTURE INTERSECTION DESIGN

FIGURE 2

GM- ATE#21069

#21069 - RICHARDS RANCH PROJECT **REF:** 06 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***04/27/2022***

TIME PERIOD: ***AM PEAK HOUR***

N/S STREET: ***HUMMEL DRIVE***

E/W STREET: ***UVP***

CONTROL TYPE: ***SIGNAL - WITH INTERIM IMPROVEMENTS***

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	**26**	**36**	**86**	**25**	**27**	**18**	**18**	**633**	**23**	**41**	**638**	**10**
(B)	PROJECT-ADDED:	**14**	**0**	**0**	**0**	**0**	**14**	**14**	**120**	**14**	**0**	**104**	**0**
(C)	CUMULATIVE:	**26**	**36**	**86**	**25**	**27**	**18**	**18**	**696**	**24**	**41**	**755**	**10**

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L TR	SOUTH BOUND L TR	EAST BOUND L TR	WEST BOUND L TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS		# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL		1	1600	26	40	26	40	0.016	0.025	0.016	0.025
NBT		1	1600	36	36	36	36	0.076 *	0.076 *	0.076 *	0.076 *
NBR	*(a)*	0	0	86	86	86	86	-	-	-	-
SBL		1	1600	25	25	25	25	0.016 *	0.016 *	0.016 *	0.016 *
SBT		1	1600	27	27	27	27	0.028	0.037	0.028	0.037
SBR	*(b)*	0	0	18	32	18	32	-	-	-	-
EBL		1	1600	18	32	18	32	0.011	0.020	0.011	0.020
EBT		1	1600	633	753	696	816	0.410 *	0.494 *	0.450 *	0.534 *
EBR	*(c)*	0	0	23	37	24	38	-	-	-	-
WBL		1	1600	41	41	41	41	0.026 *	0.026 *	0.026 *	0.026 *
WBT		1	1600	638	742	755	859	0.405	0.470	0.478	0.543
WBR	*(d)*	0	0	10	10	10	10	-	-	-	-
						LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
						TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.628**	**0.712**	**0.668**	**0.752**
						SCENARIO LEVEL OF SERVICE:		**B**	**C**	**B**	**C**

NOTES:

RTOR: *(a)*
(b)
(c)
(d)

Printed: 12/01/22

#21069 - RICHARDS RANCH PROJECT **REF:** 06 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***04/27/202***

TIME PERIOD: ***AM PEAK HOUR***

N/S STREET: ***HUMMEL DRIVE***

E/W STREET: ***UVP***

CONTROL TYPE: ***SIGNAL - WITH LONG-TERM IMPROVEMENTS***

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	**26**	**36**	**86**	**25**	**27**	**18**	**18**	**633**	**23**	**41**	**638**	**10**
(B)	PROJECT-ADDED:	**14**	**0**	**0**	**0**	**0**	**14**	**14**	**120**	**14**	**0**	**104**	**0**
(C)	CUMULATIVE:	**26**	**36**	**86**	**25**	**27**	**18**	**18**	**696**	**24**	**41**	**755**	**10**

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L TR	L TR	L T TR	L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS		# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL		1	1600	26	40	26	40	0.016	0.025	0.016	0.025
NBT		1	1600	36	36	36	36	0.076 *	0.076 *	0.076 *	0.076 *
NBR	*(a)*	0	0	86	86	86	86	-	-	-	-
SBL		1	1600	25	25	25	25	0.016 *	0.016 *	0.016 *	0.016 *
SBT		1	1600	27	27	27	27	0.028	0.037	0.028	0.037
SBR	*(b)*	0	0	18	32	18	32	-	-	-	-
EBL		1	1600	18	32	18	32	0.011	0.020	0.011	0.020
EBT		2	3200	633	753	696	816	0.205 *	0.247 *	0.225 *	0.267 *
EBR	*(c)*	0	0	23	37	24	38	-	-	-	-
WBL		1	1600	41	41	41	41	0.026 *	0.026 *	0.026 *	0.026 *
WBT		2	3200	638	742	755	859	0.203	0.235	0.239	0.272
WBR	*(d)*	0	0	10	10	10	10	-	-	-	-
						LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
						TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.423**	**0.465**	**0.443**	**0.485**
						SCENARIO LEVEL OF SERVICE:		**A**	**A**	**A**	**A**

NOTES:

RTOR: *(a)*
(b)
(c)
(d)

Printed: 12/01/22

#21069 - RICHARDS RANCH PROJECT **REF:** 06 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***04/28/2022***

TIME PERIOD: ***PM PEAK HOUR***

N/S STREET: ***HUMMEL DRIVE***

E/W STREET: ***UVP***

CONTROL TYPE: ***SIGNAL - WITH INTERIM IMPROVEMENTS***

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	**20**	**19**	**38**	**12**	**21**	**8**	**24**	**828**	**43**	**66**	**559**	**23**
(B)	PROJECT-ADDED:	**12**	**0**	**0**	**0**	**0**	**11**	**11**	**85**	**11**	**0**	**99**	**0**
(C)	CUMULATIVE:	**20**	**19**	**38**	**12**	**21**	**8**	**24**	**940**	**43**	**66**	**646**	**23**

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L TR	SOUTH BOUND L TR	EAST BOUND L TR	WEST BOUND L TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS		# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL		1	1600	20	32	20	32	0.013	0.020 *	0.013	0.020 *
NBT		1	1600	19	19	19	19	0.036 *	0.036	0.036 *	0.036
NBR	*(a)*	0	0	38	38	38	38	-	-	-	-
SBL		1	1600	12	12	12	12	0.008 *	0.008	0.008 *	0.008
SBT		1	1600	21	21	21	21	0.018	0.025 *	0.018	0.025 *
SBR	*(b)*	0	0	8	19	8	19	-	-	-	-
EBL		1	1600	24	35	24	35	0.015	0.022	0.015	0.022
EBT		1	1600	828	913	940	1025	0.544 *	0.604 *	0.614 *	0.674 *
EBR	*(c)*	0	0	43	54	43	54	-	-	-	-
WBL		1	1600	66	66	66	66	0.041 *	0.041 *	0.041 *	0.041 *
WBT		1	1600	559	658	646	745	0.364	0.426	0.418	0.480
WBR	*(d)*	0	0	23	23	23	23	-	-	-	-
						LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
						TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.729**	**0.790**	**0.799**	**0.860**
						SCENARIO LEVEL OF SERVICE:		**C**	**C**	**C**	**D**

NOTES:

RTOR: *(a)*
(b)
(c)
(d)

Printed: 12/01/22

#21069 - RICHARDS RANCH PROJECT **REF:** 06 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***04/28/2022***

TIME PERIOD: ***PM PEAK HOUR***

N/S STREET: ***HUMMEL DRIVE***

E/W STREET: ***UVP***

CONTROL TYPE: ***SIGNAL - WITH LONG-TERM IMPROVEMENTS***

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	**20**	**19**	**38**	**12**	**21**	**8**	**24**	**828**	**43**	**66**	**559**	**23**
(B)	PROJECT-ADDED:	**12**	**0**	**0**	**0**	**0**	**11**	**11**	**85**	**11**	**0**	**99**	**0**
(C)	CUMULATIVE:	**20**	**19**	**38**	**12**	**21**	**8**	**24**	**940**	**43**	**66**	**646**	**23**

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L TR	L TR	L T TR	L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

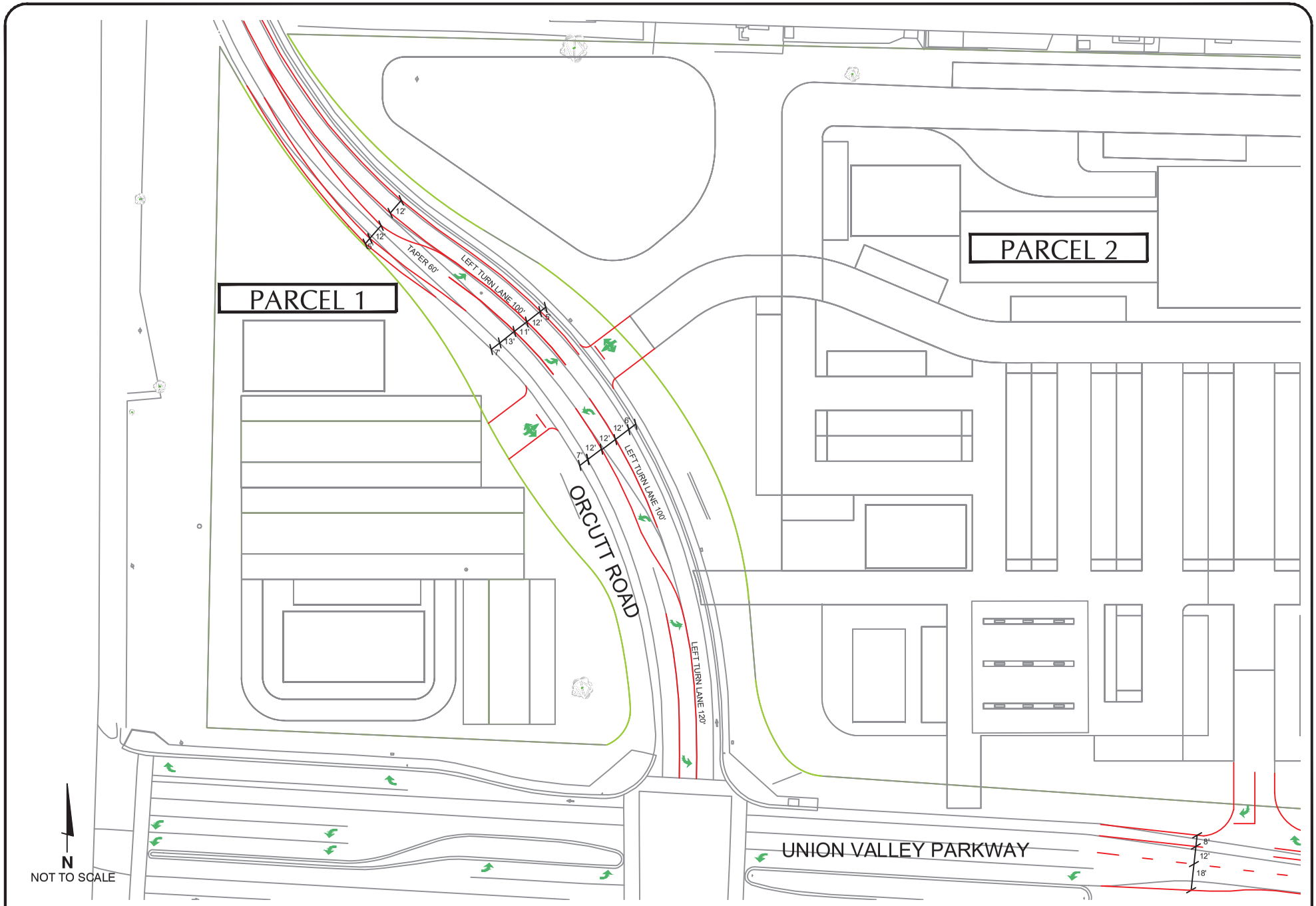
LEVEL OF SERVICE CALCULATIONS

MOVEMENTS		# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL		1	1600	20	32	20	32	0.013	0.020 *	0.013	0.020 *
NBT		1	1600	19	19	19	19	0.036 *	0.036	0.036 *	0.036
NBR	*(a)*	0	0	38	38	38	38	-	-	-	-
SBL		1	1600	12	12	12	12	0.008 *	0.008	0.008 *	0.008
SBT		1	1600	21	21	21	21	0.018	0.025 *	0.018	0.025 *
SBR	*(b)*	0	0	8	19	8	19	-	-	-	-
EBL		1	1600	24	35	24	35	0.015	0.022	0.015	0.022
EBT		2	3200	828	913	940	1025	0.272 *	0.302 *	0.307 *	0.337 *
EBR	*(c)*	0	0	43	54	43	54	-	-	-	-
WBL		1	1600	66	66	66	66	0.041 *	0.041 *	0.041 *	0.041 *
WBT		2	3200	559	658	646	745	0.182	0.213	0.209	0.240
WBR	*(d)*	0	0	23	23	23	23	-	-	-	-
						LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
						TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.457**	**0.488**	**0.492**	**0.523**
						SCENARIO LEVEL OF SERVICE:		**A**	**A**	**A**	**A**

NOTES:

RTOR: *(a)*
(b)
(c)
(d)

Printed: 12/01/22

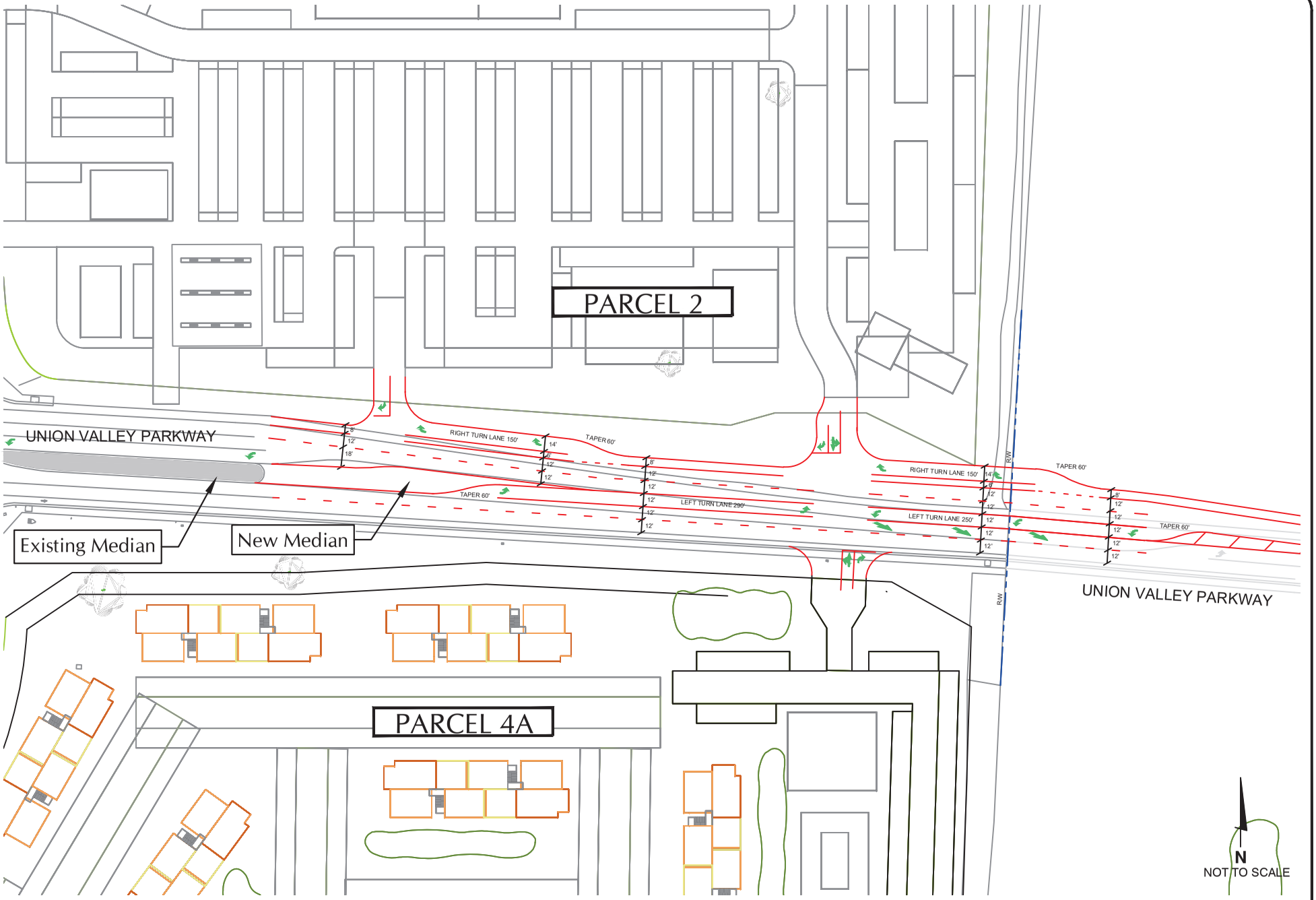


ASSOCIATED TRANSPORTATION ENGINEERS

PARCEL 1 AND PARCEL 2 - ORCUTT ROAD DRIVEWAYS

FIGURE 10

GM- ATE#21069

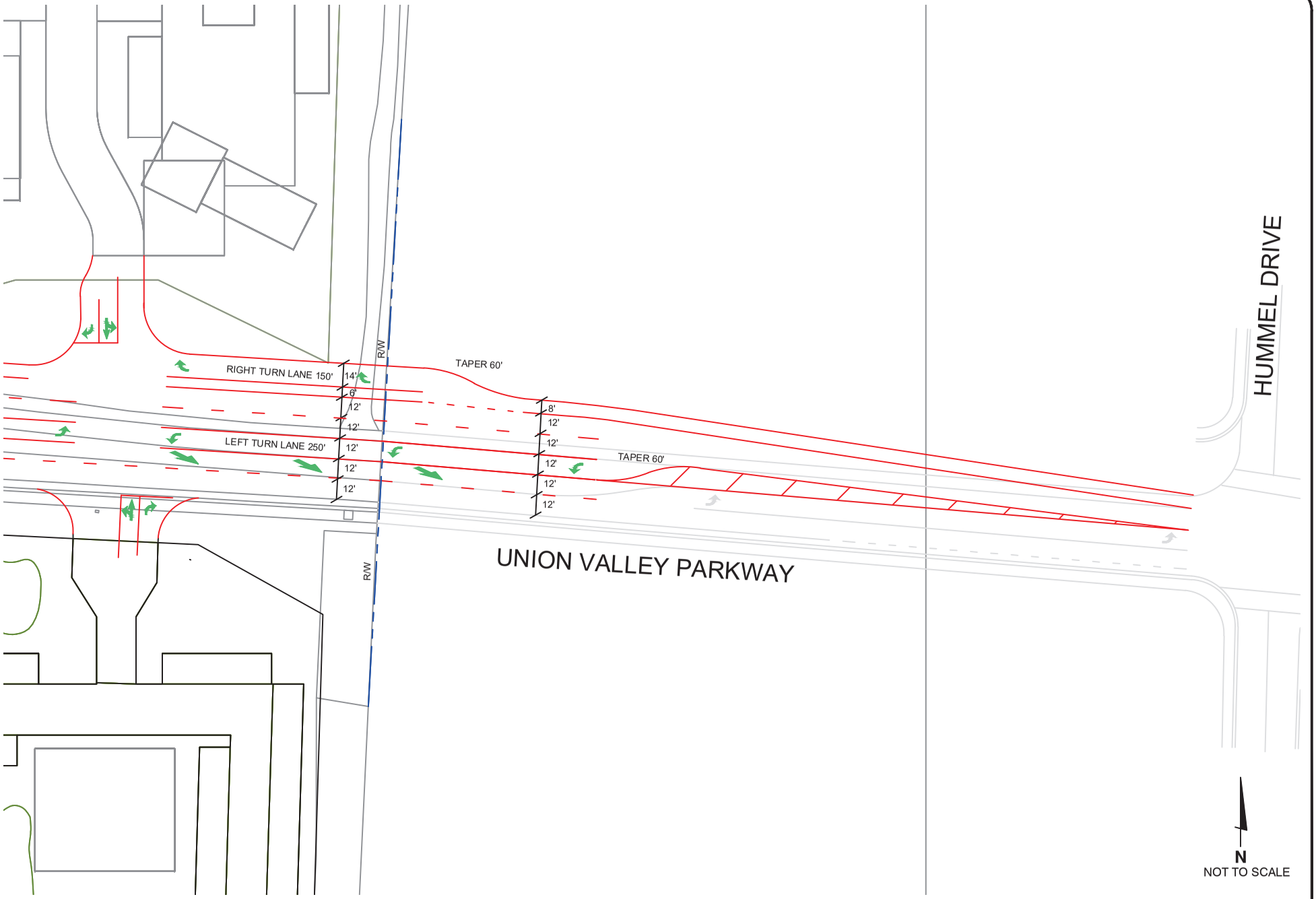


ASSOCIATED TRANSPORTATION ENGINEERS

PARCEL 2 AND PARCEL 4A - UNION VALLEY PARKWAY DRIVEWAYS

FIGURE 11

GM- ATE#21069

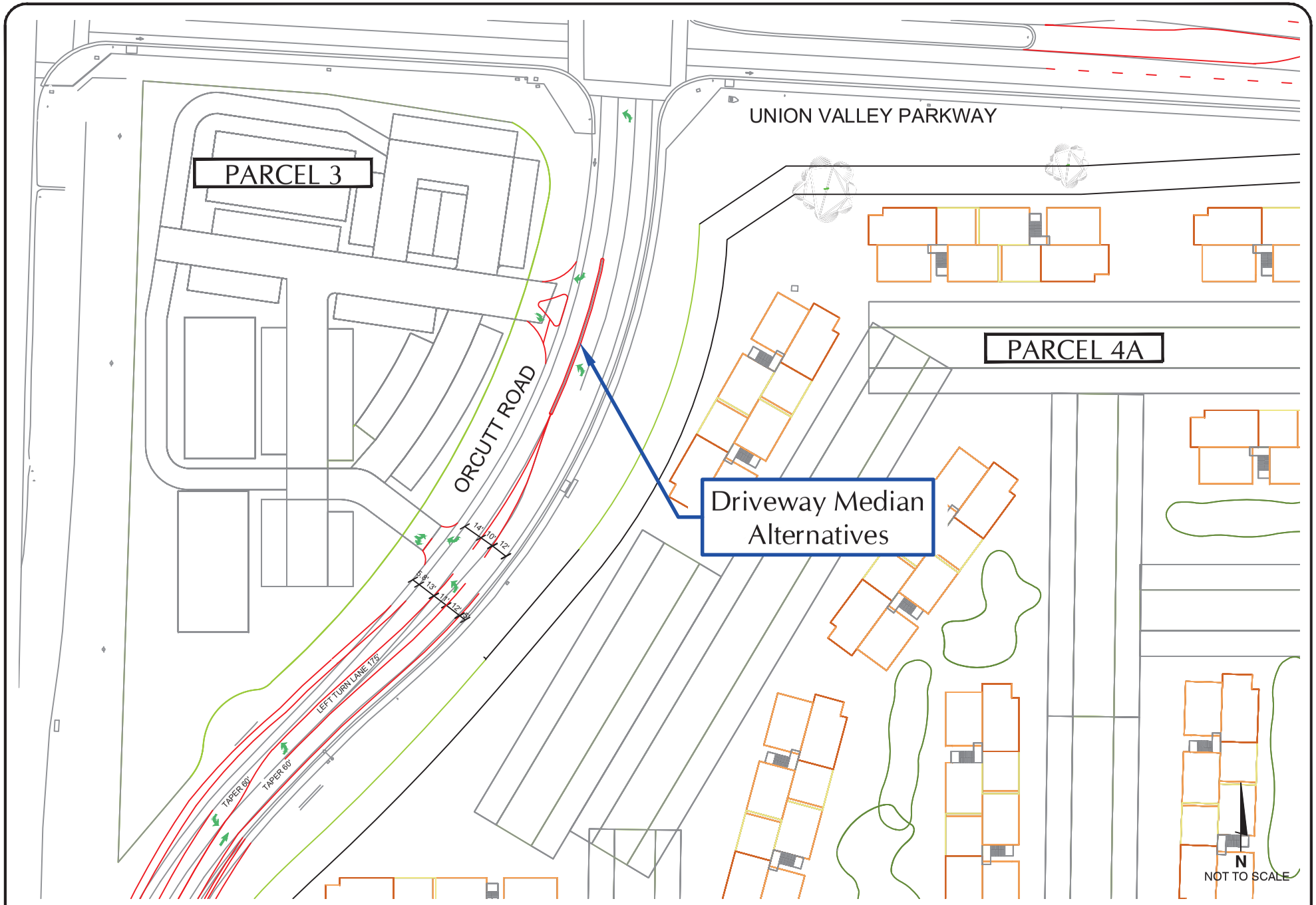


ASSOCIATED
TRANSPORTATION
ENGINEERS

UVP INTERIM TRANSITION PLAN

FIGURE 12a

GM- ATE#21069

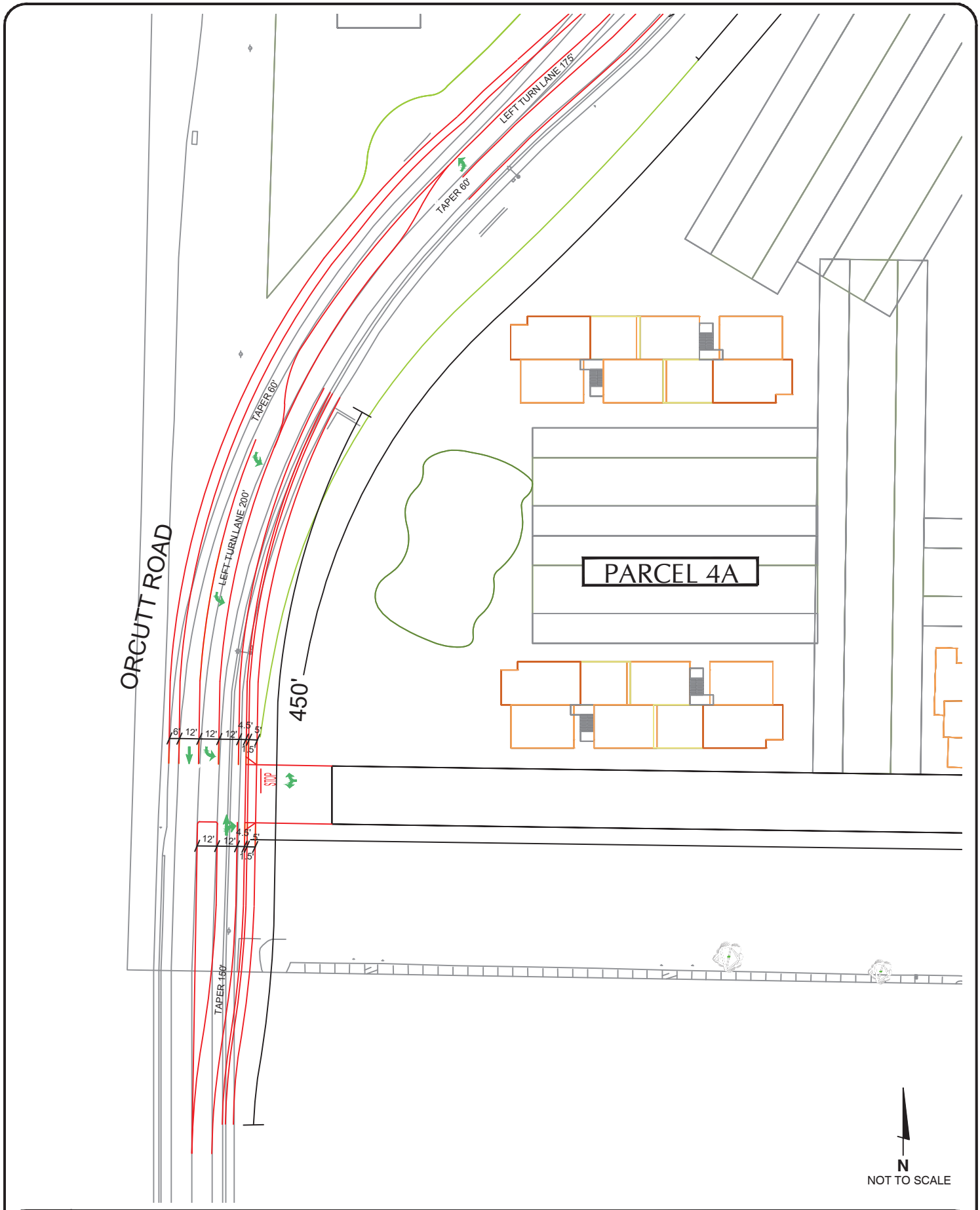


ASSOCIATED TRANSPORTATION ENGINEERS

PARCEL 3 - ORCUTT ROAD DRIVEWAYS

FIGURE 13

GM- ATE#21069

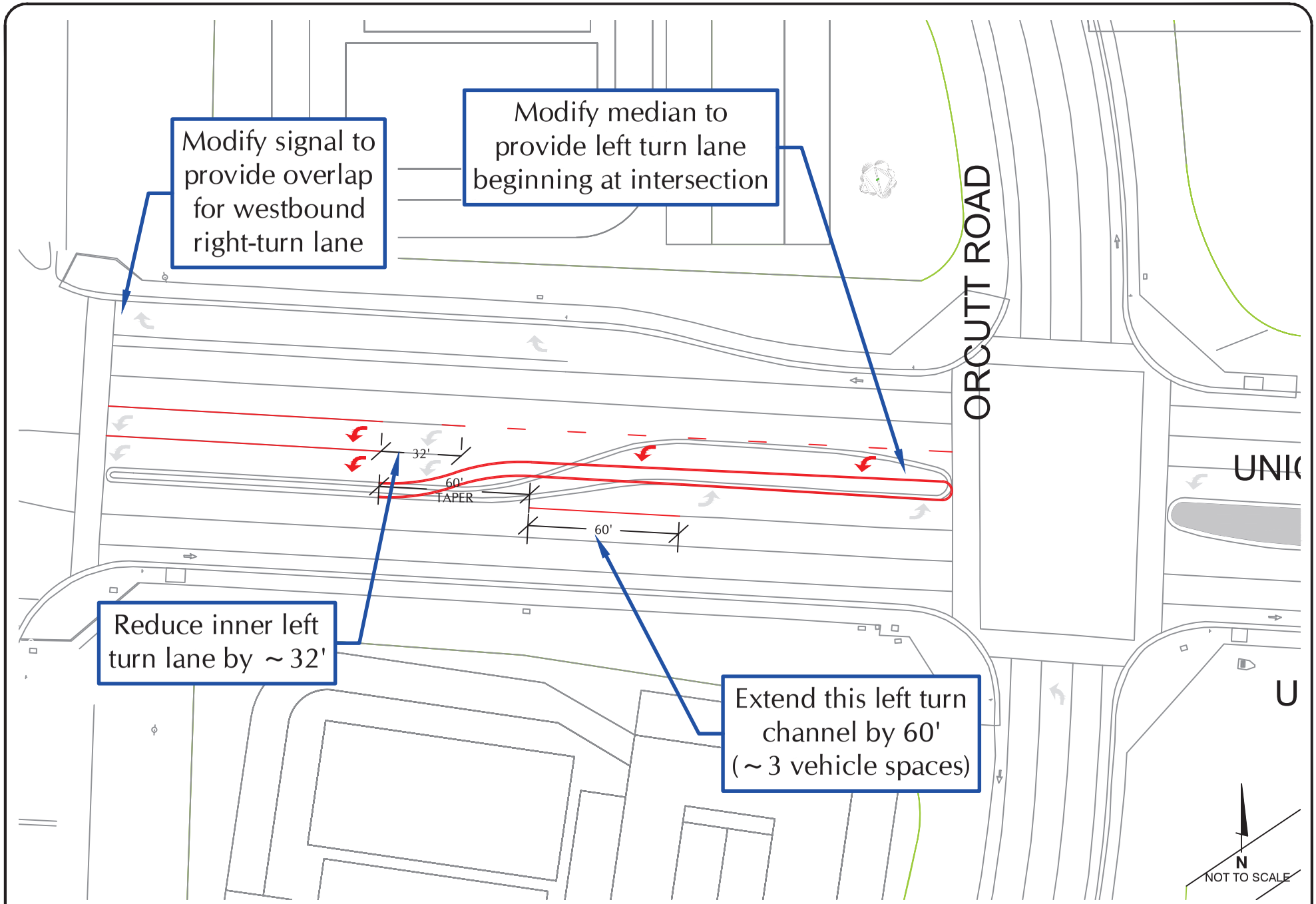


ASSOCIATED TRANSPORTATION ENGINEERS

PARCEL 4A AND PARCEL 4B - ORCUTT ROAD DRIVEWAY

FIGURE 14

GM- ATE#21069

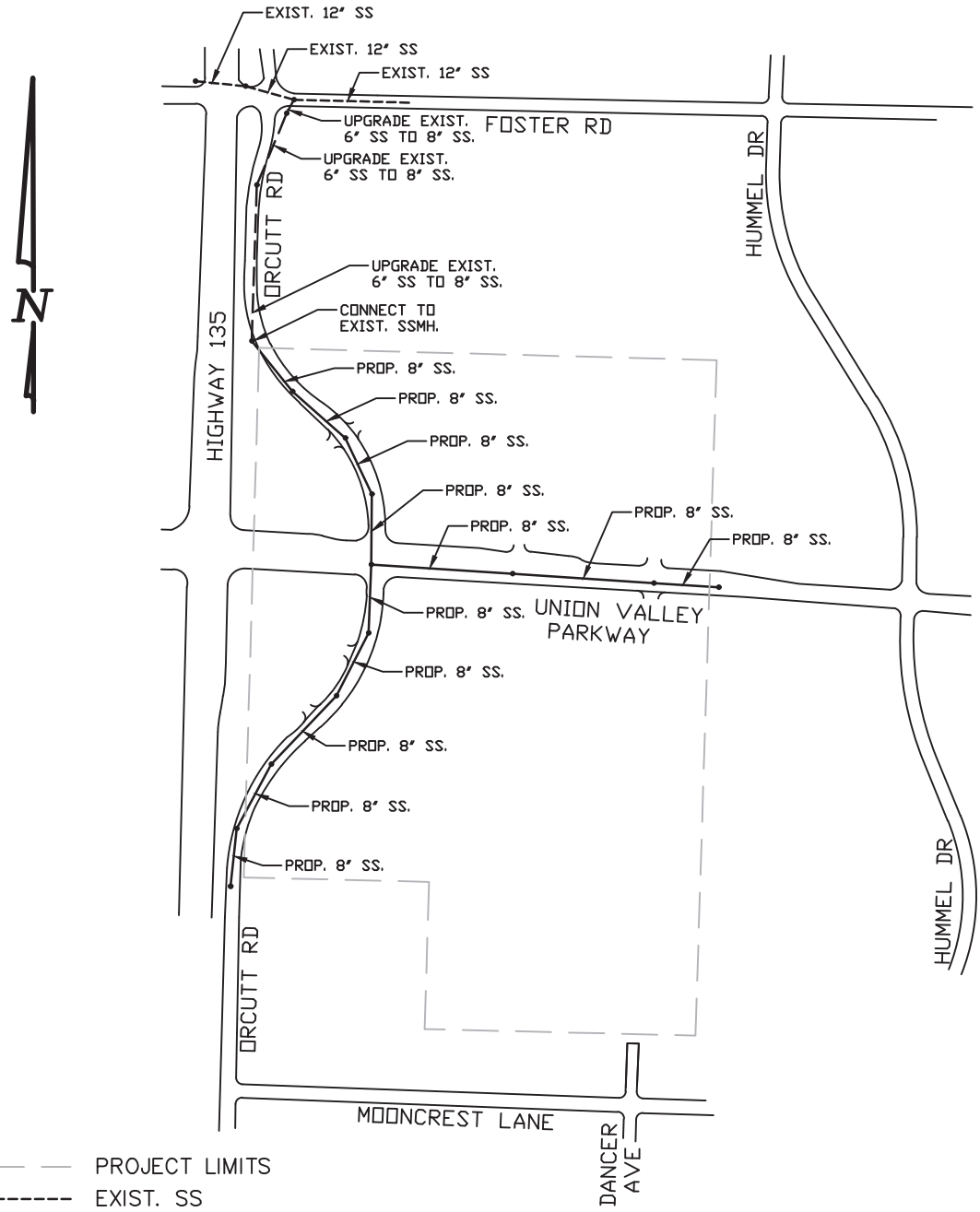


ASSOCIATED TRANSPORTATION ENGINEERS

LEFT TURN CHANNELS AT UVP/ORCUTT ROAD AND ORCUTT EXPY

FIGURE 17

GM- ATE#21069

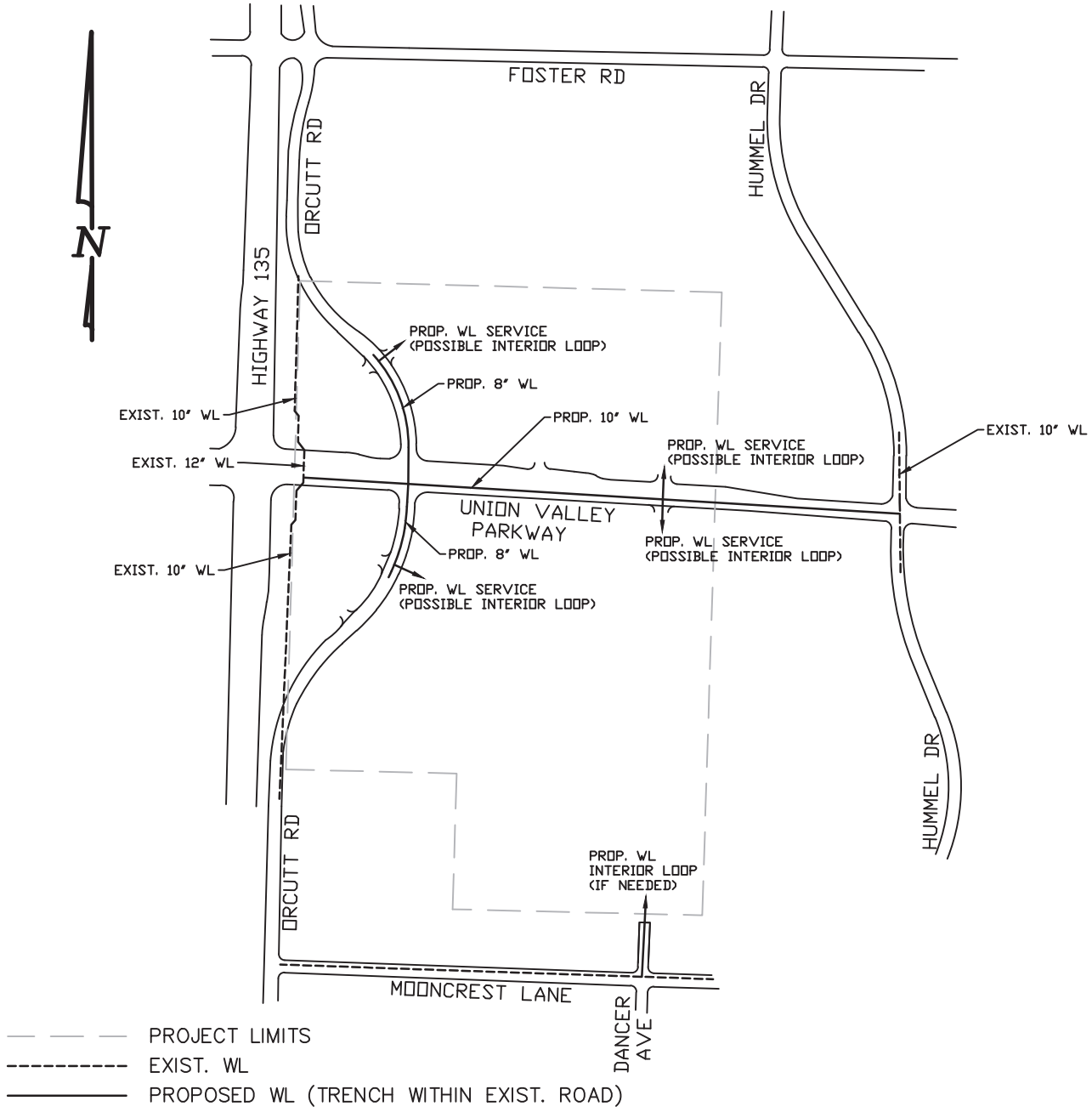


SEWER FACILITIES EXHIBIT

NTS

URBAN PLANNING CONCEPTS, INC.
URBAN DESIGN • LAND PLANNING • ENVIRONMENTAL ANALYSIS
2450 Professional Parkway, Suite 120
Santa Maria, California 93455 805/934-5760

BETHEL engineering
2624 Airpark Dr., Santa Maria,
California 93455 (805) 934-5767



WATER FACILITIES EXHIBIT

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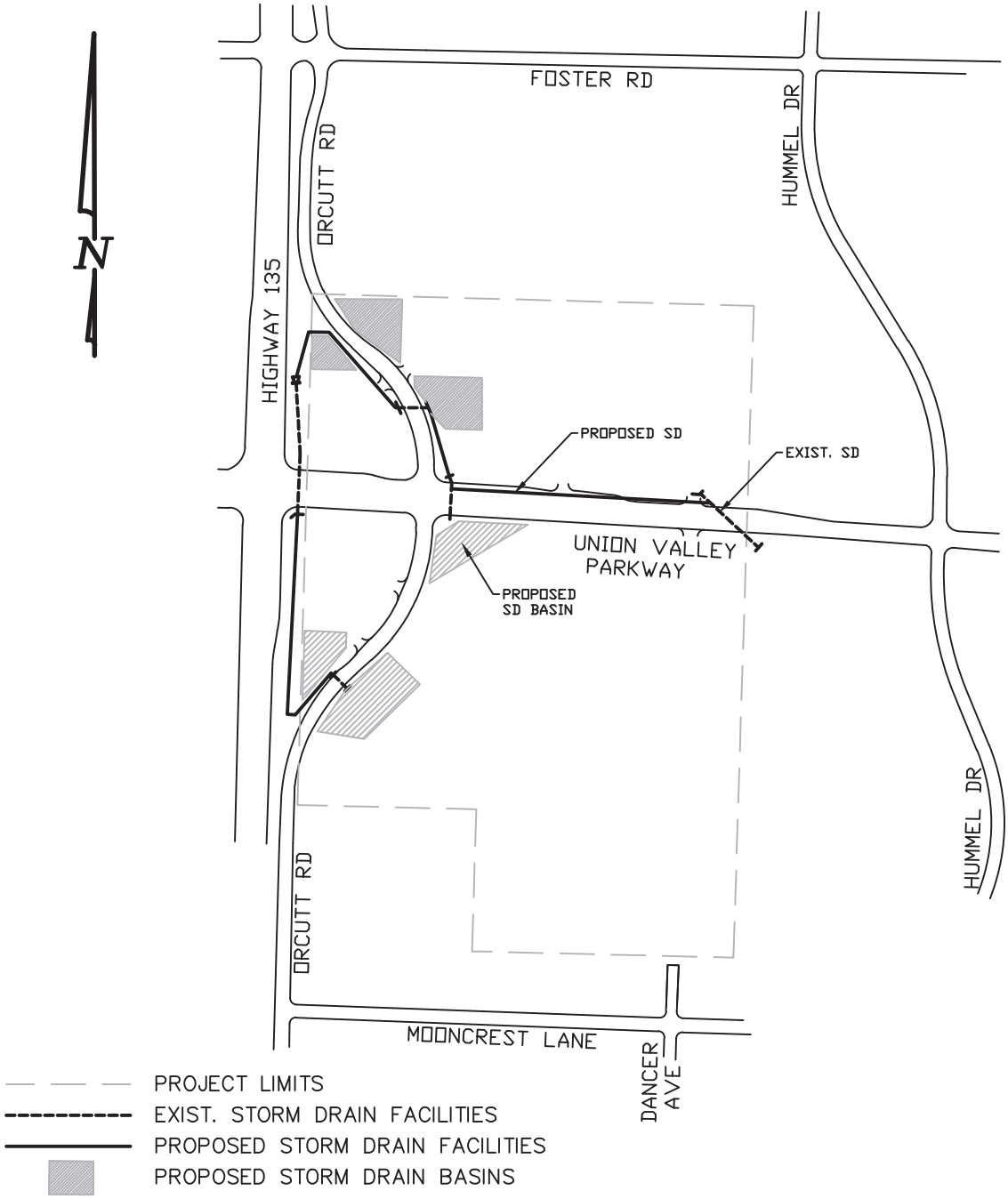
California 93455 (805) 934-5767



STORM WATER FACILITIES EXHIBIT

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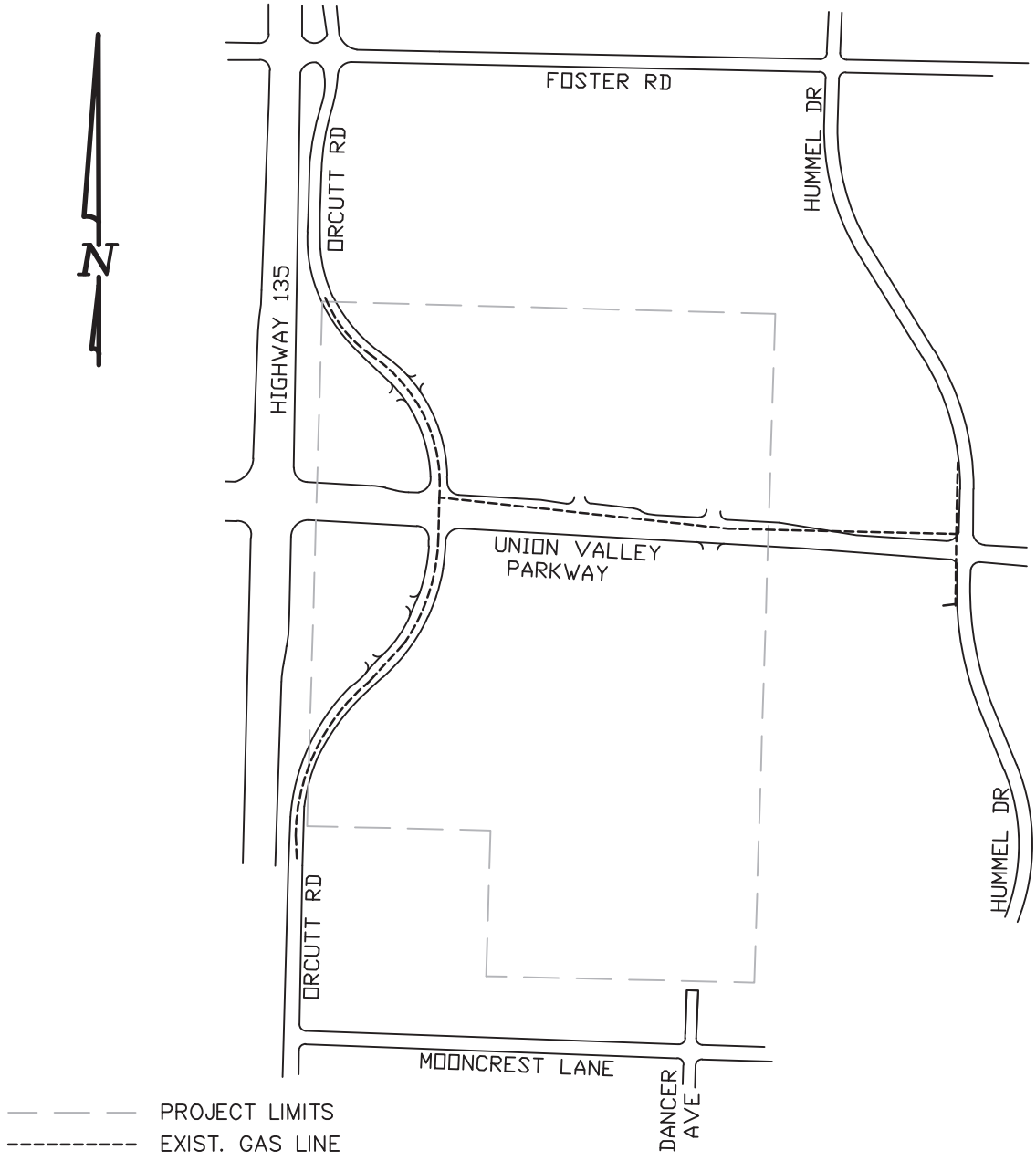

GAS FACILITIES EXHIBIT

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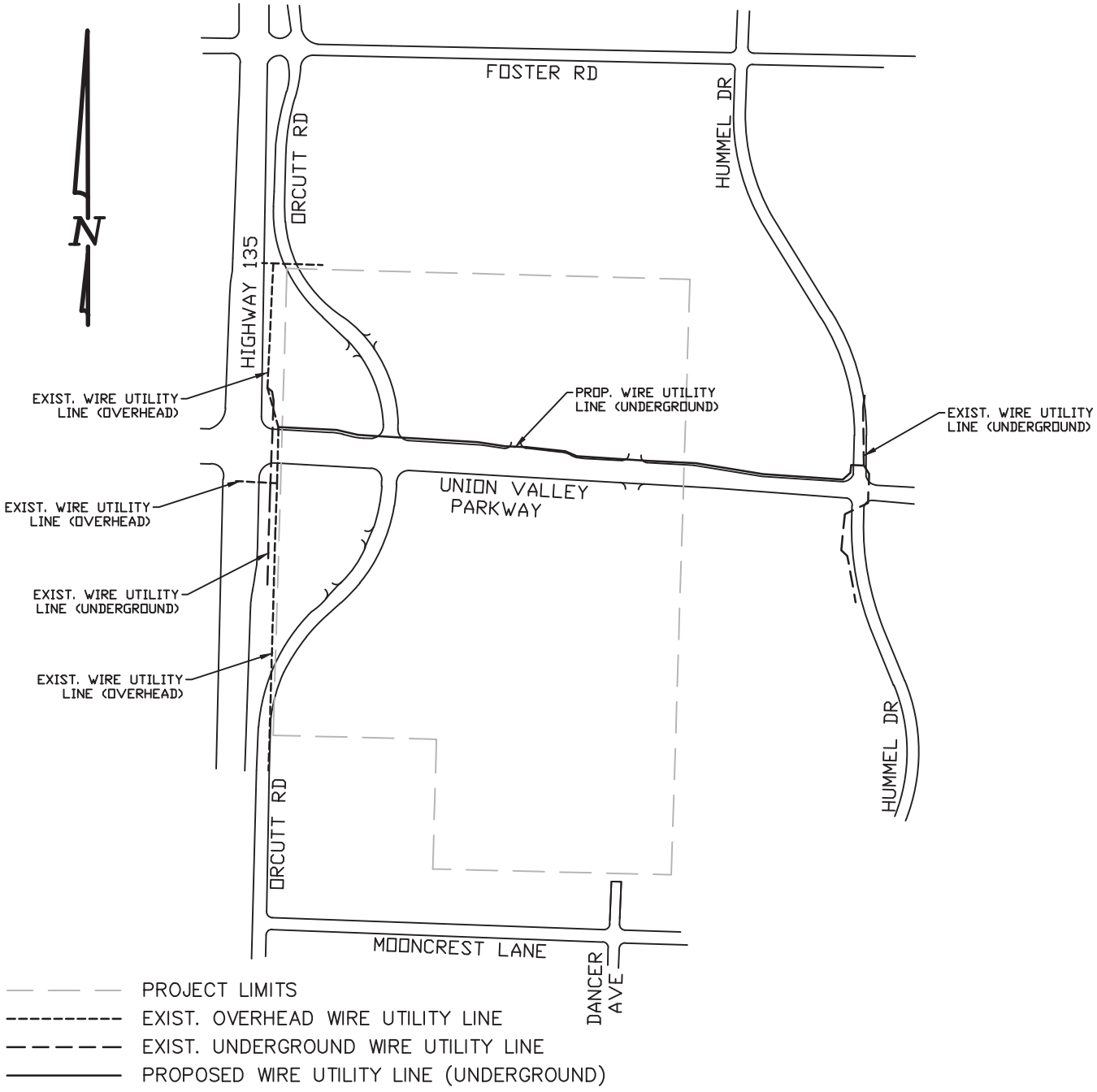
BETHEL
engineering

2624 Airpark Dr., Santa Maria,
California 93455 (805) 934-5767



WIRE UTILITIES EXHIBIT

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BETHEL engineering

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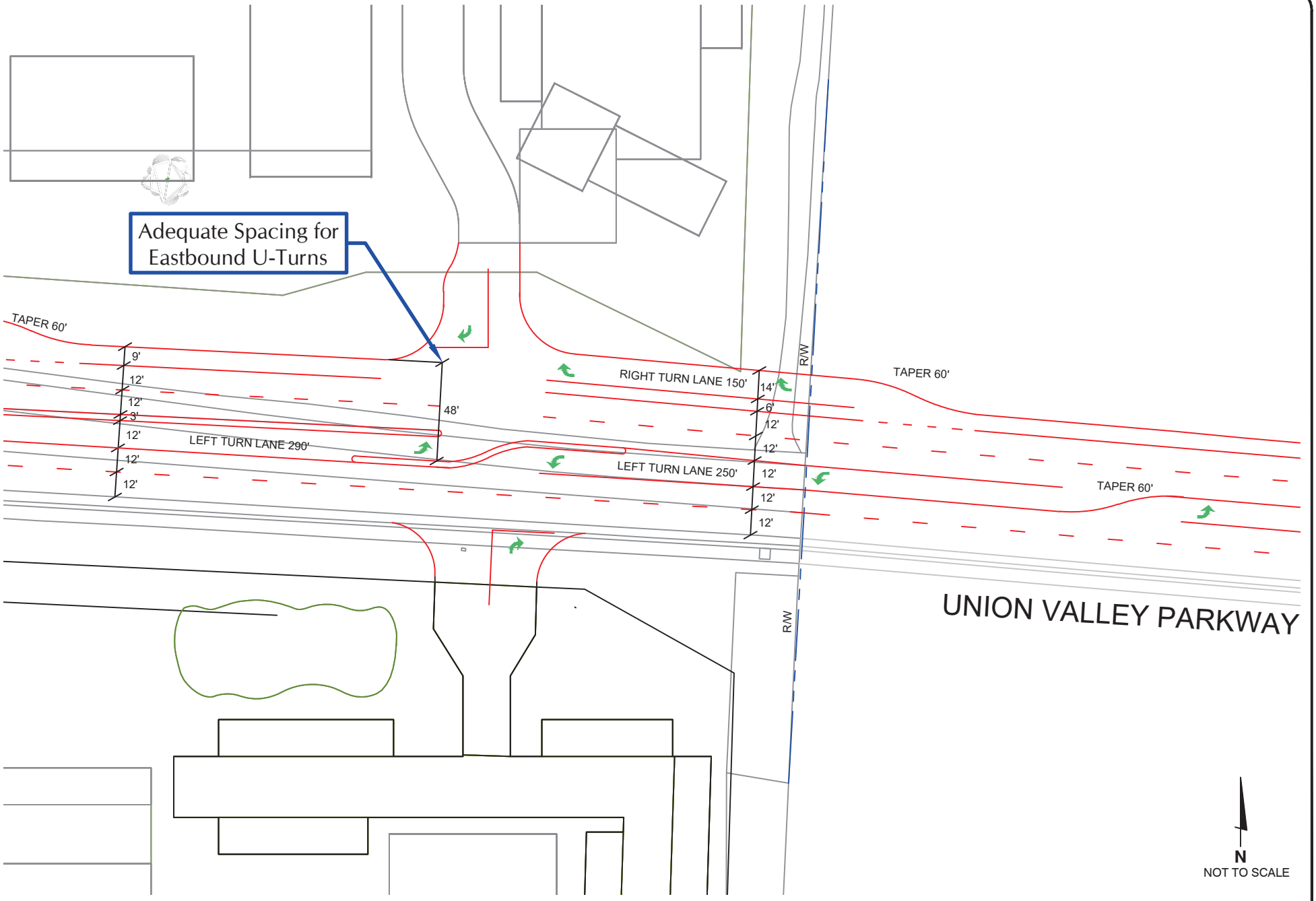
California 93455 (805) 934-5767



ASSOCIATED TRANSPORTATION ENGINEERS

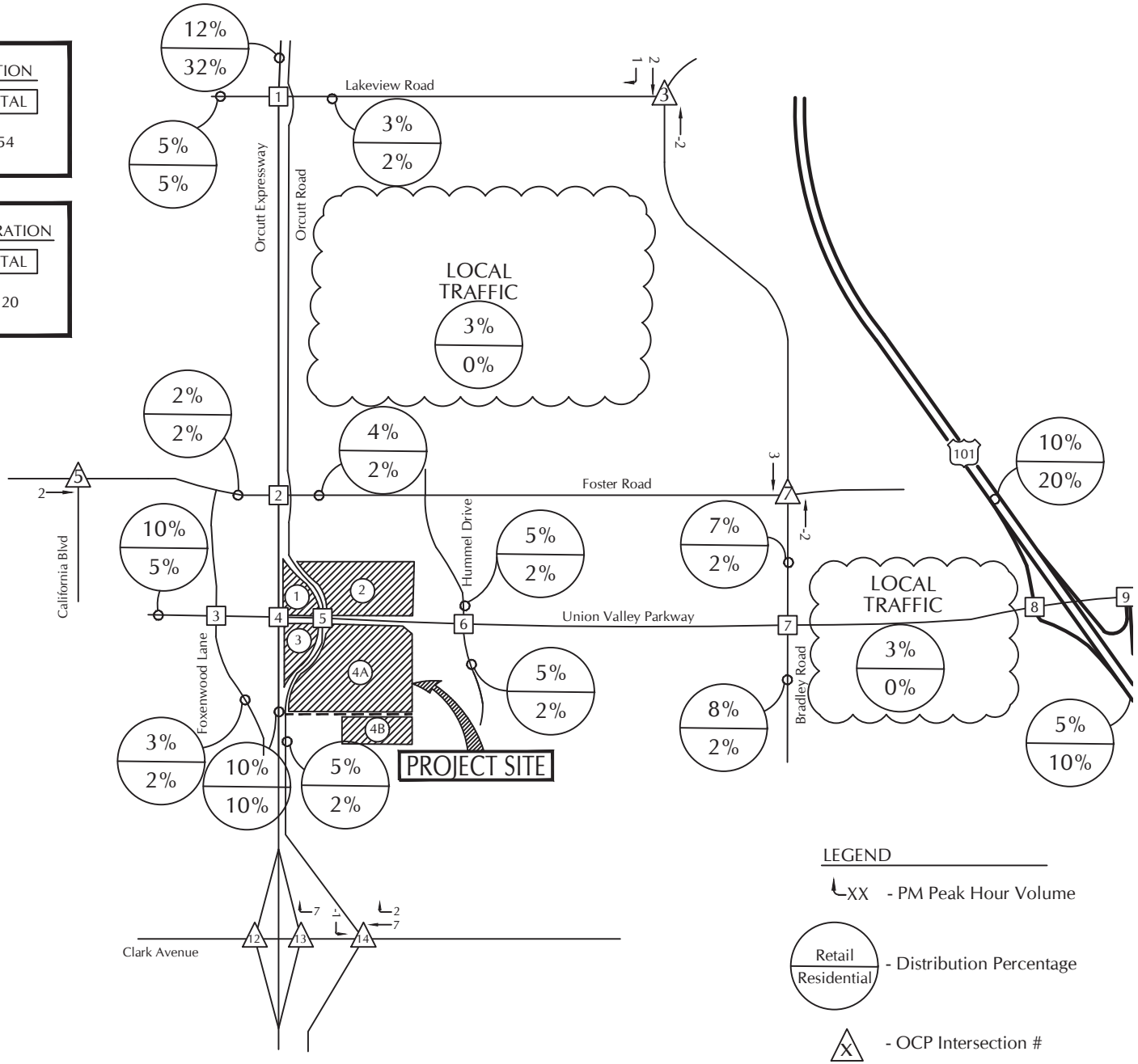
CONCEPTUAL REVISED UVP MEDIAN STRIPING PLAN (LEFT-TURNS IN ONLY)

FIGURE A

GM- ATE#21069

RETAIL NET PROJECT TRIP GENERATION			
	IN	OUT	TOTAL
PM PEAK HOUR	-9	-44	-54

RESIDENTIAL NET PROJECT TRIP GENERATION			
	IN	OUT	TOTAL
PM PEAK HOUR	76	44	120

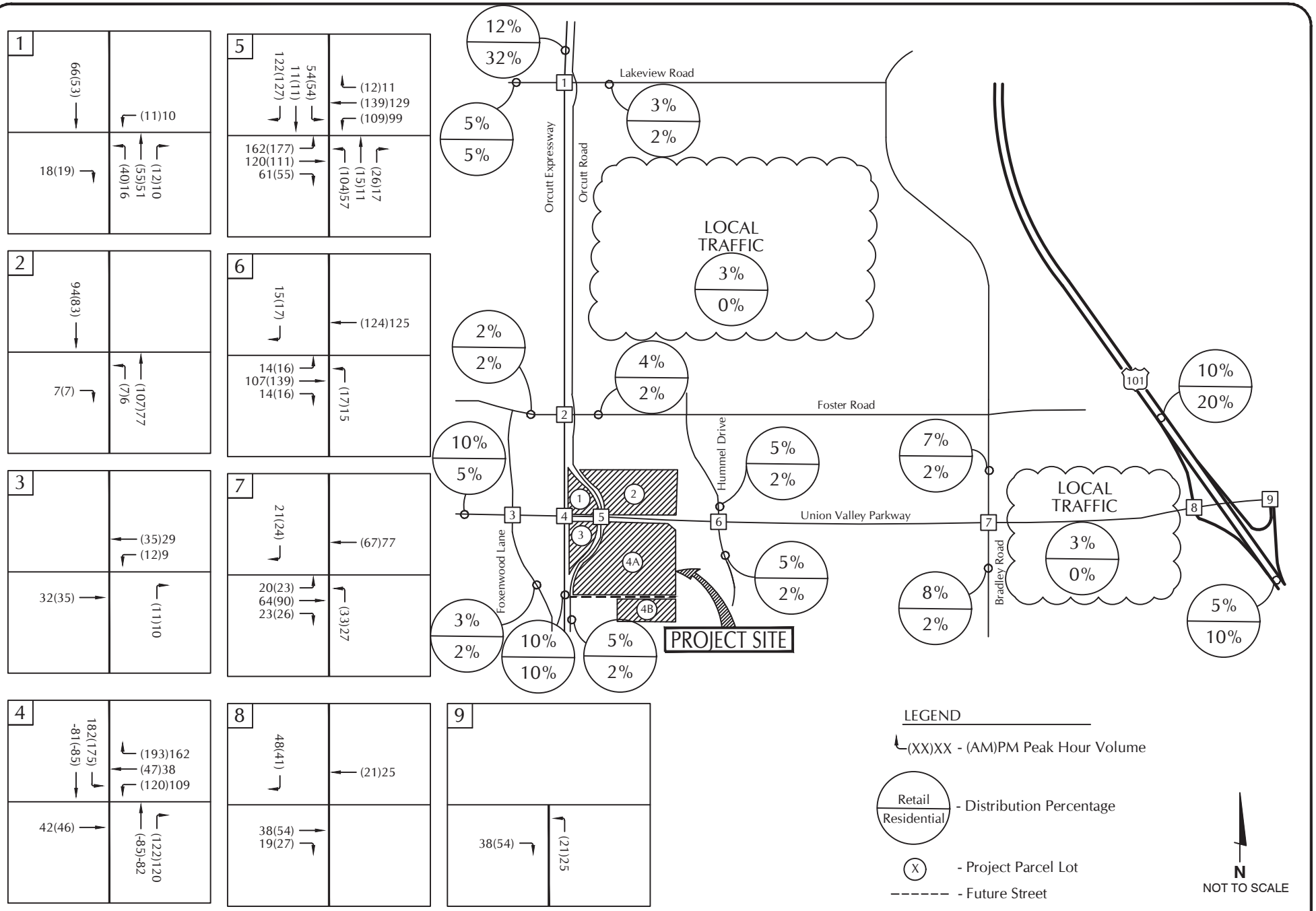


ASSOCIATED TRANSPORTATION ENGINEERS

NET PROJECT TRIP DISTRIBUTION AND ASSIGNMENT - ADDITIONAL INTERSECTIONS

FIGURE B

GM- ATE#21069

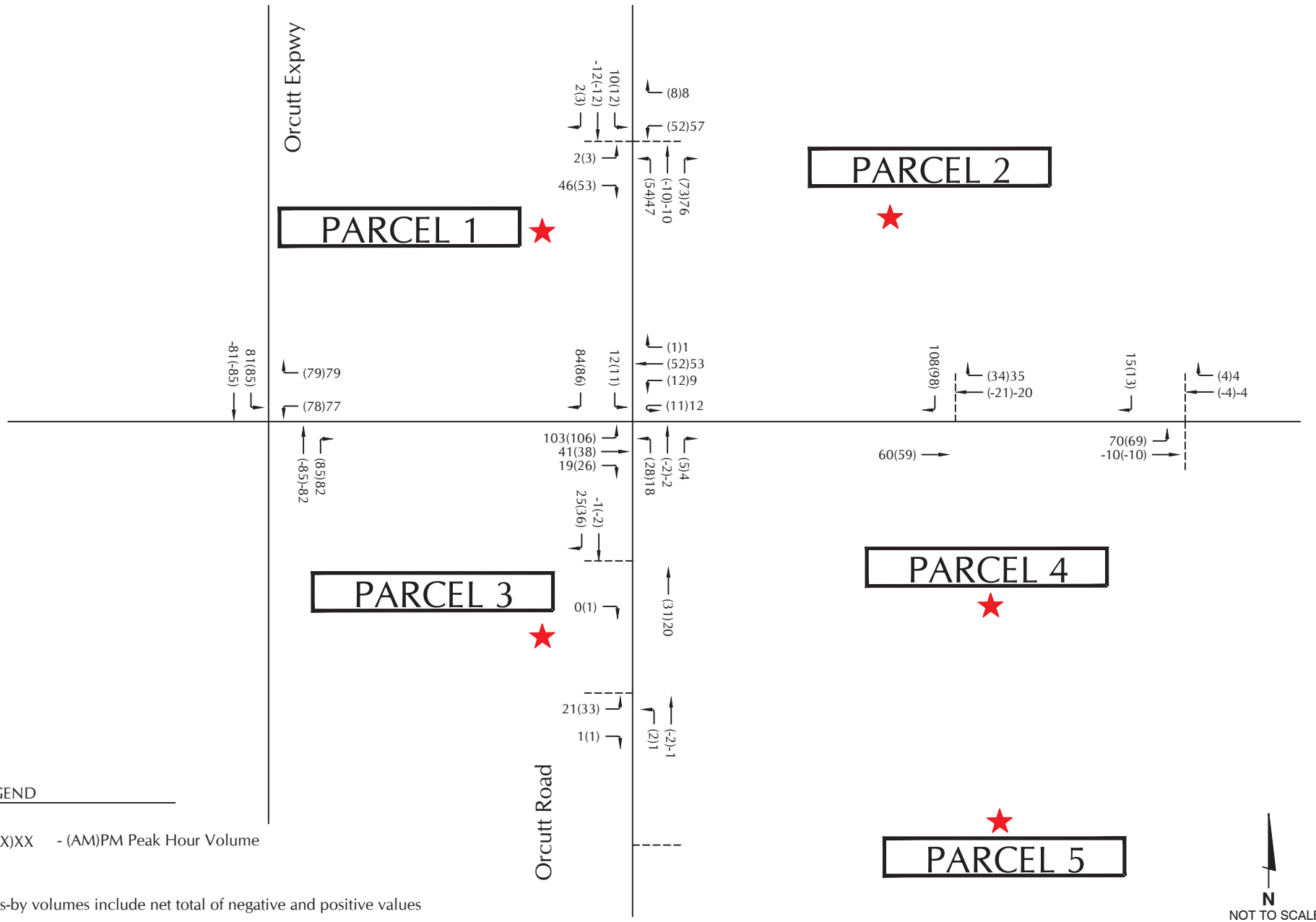


ASSOCIATED
TRANSPORTATION
ENGINEERS

PROJECT TRIP DISTRIBUTION AND ASSIGNMENT TOTAL (PRIMARY AND PASS-BY)

FIGURE C

GM- ATE#21069



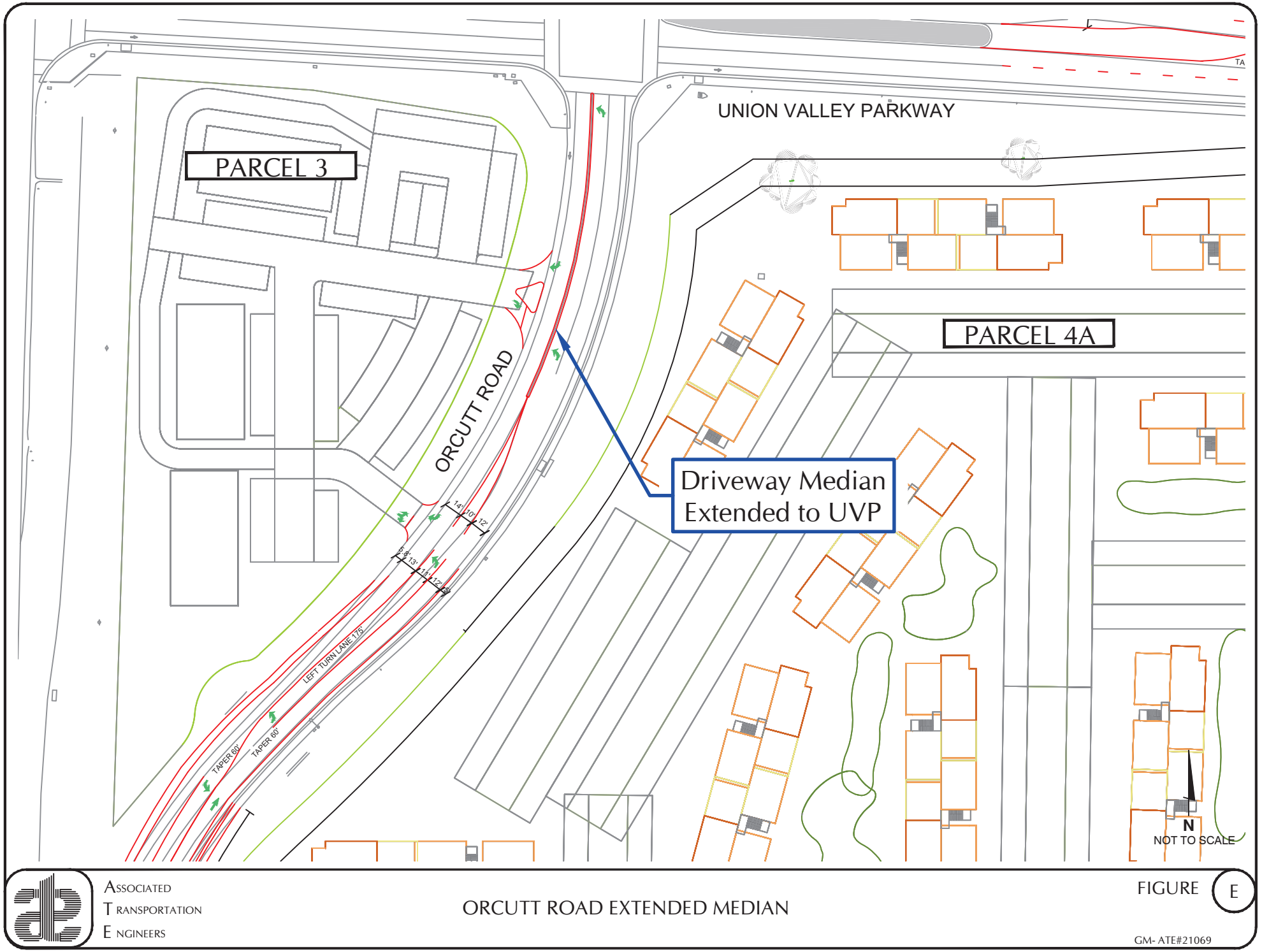
*Pass-by volumes include net total of negative and positive values

ASSOCIATED TRANSPORTATION ENGINEERS

PASS-BY TRAFFIC VOLUMES

FIGURE D

GM- ATE#21069

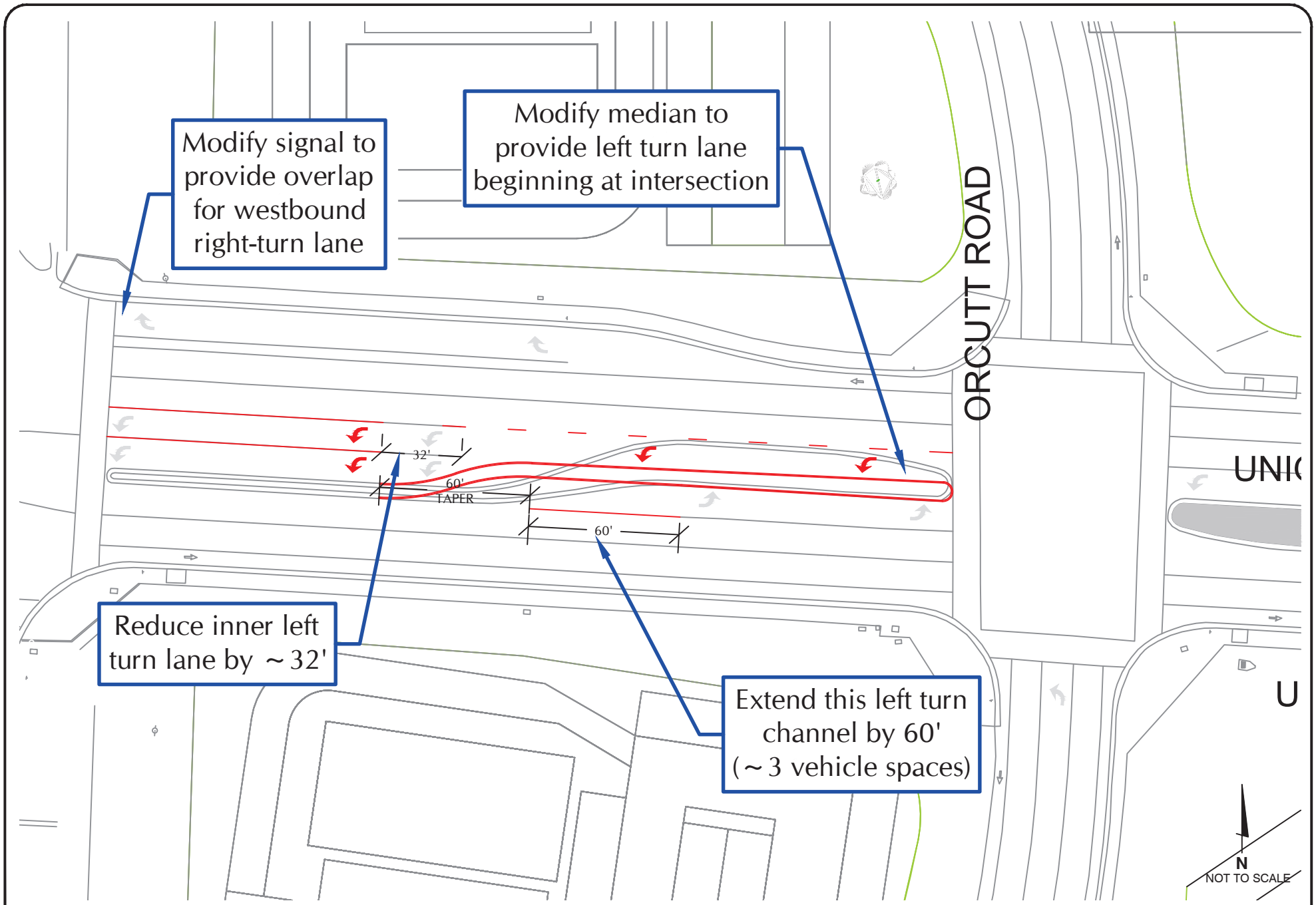


ASSOCIATED
TRANSPORTATION
ENGINEERS

ORCUTT ROAD EXTENDED MEDIAN

FIGURE E

GM- ATE#21069



ASSOCIATED TRANSPORTATION ENGINEERS

LEFT-TURN CHANNELS AT UVP/ORCUTT ROAD AND ORCUTT EXPRESSWAY

FIGURE F

GM- ATE#21069

ASSOCIATED TRANSPORTATION ENGINEERS

Memo

To: Michael Stoltey & Laurie Tamura

From: Scott Schell, ATE

cc:

Date: June 6, 2023

Re: Richards Ranch Project

ATE 21069M02

ATE conducted video traffic counts in May 2023 at the Orcutt Expressway/Union Valley Parkway intersection in order to validate the 2019 (pre-Covid) traffic volumes that were used in the traffic study completed for the Richards Ranch Project. Tables A and B compare the 2023 and 2019 traffic volumes at the intersection.

Table A
Traffic Volume Comparison
Orcutt Expressway (SR 135) North of Union Valley Parkway

	2023 Count Data			2019 Count Data	
Peak Hour	May 23	May 24	Average	December 17	% Difference
PM Peak Hour	2,434 VPH	2,488 VPH	2,461 VPH	2,625 VPH	-6.2%

Table B
Traffic Volume Comparison
Union Valley Parkway East of Orcutt Expressway (SR 135)

	2023 Count Data			2019 Count Data	
Peak Hour	May 23	May 24	Average	December 17	% Difference
PM Peak Hour	1,370 VPH	1,432 VPH	1,401 VPH	1,512 VPH	-7.3%

The data presented in Tables A and B show that the traffic counts collected adjacent to the Orcutt Expressway/Union Valley Parkway intersection in 2023 are approximately 6% to 7% *lower* than the 2019 traffic counts that were used for the Richards Ranch traffic study. The volumes used in the traffic study are therefore more conservative than the current count data.

ASSOCIATED TRANSPORTATION ENGINEERS

Memo

To: Michael Stoltey & Laurie Tamura

From: Scott Schell, ATE

cc:

Date: June 14, 2023

Re: Richards Ranch Project

ATE 21069M03

Additional traffic counts were conducted in May 2023 adjacent to the Orcutt Expressway/Union Valley Parkway intersection in order to validate the 2019 (pre-Covid) traffic volumes that were used in the traffic study completed for the Richards Ranch Project. Tables A and B compare the 2023 and 2019 traffic volumes at the intersection.

Table A
Traffic Volume Comparison
Orcutt Expressway (SR 135) South of Union Valley Parkway

	2023 Count Data				2019 Count Data	% Difference
Peak Hour	May 30	May 31	June 1	Average	December 17	
AM Peak Hour	2,039 VPH	1,997 VPH	2,014 VPH	2,017 VPH	2,269 VPH	-11.1%
PM Peak Hour	2,520 VPH	2,575 VPH	2,544 VPH	2,546 VPH	2,520 VPH	+1.0%

Table B
Traffic Volume Comparison
Union Valley Parkway East of Orcutt Expressway (SR 135)

	2023 Count Data				2019 Count Data	% Difference
Peak Hour	May 30	May 31	June 1	Average	December 17	
AM Peak Hour	1,224 VPH	1,156 VPH	1,194 VPH	1,191 VPH	1,436 VPH	-17.1%
PM Peak Hour	1,404 VPH	1,437 VPH	1,428 VPH	1,423 VPH	1,512 VPH	-5.9%

The data presented in Tables A and B show that the AM and PM peak hour traffic counts collected adjacent to the Orcutt Expressway/Union Valley Parkway intersection in 2023 are approximately 6% to 17% *lower* than the 2019 traffic counts that were used for the Richards Ranch traffic study. It is noted that the PM peak hour traffic counts collected on Orcutt Expressway (SR 135) south of Union Valley Parkway are similar (1% higher) to the 2019 traffic counts that were used for the Richards Ranch traffic study. The volumes used in the traffic study are therefore more conservative than the current count data.

Associated Transportation Engineers
Trip Generation Worksheet - October 2023 Update

RICHARDS RANCH - SANTA MARIA (#21069) - WITH INTERNAL TRIP FACTORS

Use	Size		ADT Internal Factor	AM Internal Factor	PM Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
						Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																			
High Turnover Sit Down Restaurant (a)	5,000	SF	0.81	0.92	0.70	107.20	434	9.57	44	55%	24	45%	20	9.05	32	61%	20	39%	12
2 Restaurants without Drive Thru (b)	6,000	SF	0.81	0.92	0.70	97.14	472	1.43	8	50%	4	50%	4	12.55	53	55%	29	45%	24
6 Drive Thru Restaurants (c)	18,750	SF	0.81	0.92	0.70	467.48	7,100	44.61	770	51%	393	49%	377	33.03	434	52%	226	48%	208
Shopping Center (d)	55,000	SF	0.81	0.92	0.70	94.49	4,210	3.53	179	62%	111	38%	68	9.84	379	48%	182	52%	197
Gas Station with Mart (e)	10	Fueling Positions	0.81	0.92	0.70	200.80	1,626	16.06	148	50%	74	50%	74	18.42	129	50%	65	50%	64
Car Wash-Automated (f)	1	Tunnel	0.55	0.55	0.55	249.00	137	8.50	5	50%	3	50%	2	23.70	13	50%	7	50%	6
Lube Station (g)	3	Bays	0.81	0.92	0.70	40.00	97	3.00	8	67%	5	33%	3	4.85	10	56%	6	44%	4
Mini Storage (h)	39,500	SF	0.81	0.92	0.70	1.45	46	0.09	3	59%	2	41%	1	0.15	4	47%	2	53%	2
Subtotals:	**124,250**	**SF**					**14,122**		**1,165**		**616**		**549**		**1,054**		**537**		**517**
RESIDENTIAL																			
Three Story Apartments (i)	400	DU	0.81	0.92	0.70	6.60	2,138	0.37	135	24%	32	76%	103	0.48	135	63%	85	37%	50
Two Story Townhomes (i)	95	DU	0.81	0.92	0.70	6.60	508	0.37	32	24%	8	76%	24	0.48	32	63%	20	37%	12
Subtotals:	**495**	**DU**					**2,646**		**167**		**40**		**127**		**167**		**105**		**62**
Totals:							**16,768**		**1,332**		**656**		**676**		**1,221**		**642**		**579**

(a) Trip generation based on ITE rates for High-Turnover (Sit-Down) Restaurant (ITE #932) Average Rate.
(b) Trip generation based on ITE rates for Fast Casual Restaurant (ITE #930) Average Rate.
(c) Trip generation based on ITE rates for Fast-Food Restaurant with Drive-Through Window (ITE #934) Average Rate.
(d) Trip generation based on ITE rates for Shopping Plaza (ITE #821). Average Rate for ADT and AM Peak Hour. Fitted Curve Equation for PM Peak Hour.
(e) Trip generation based on ITE rates for Convenience Store/Gas Station (ITE #945). Fitted Curve Equation for ADT. Average Rate for AM/PM Peak Hours.
(f) Trip generation for Car Wash-Automated derived from local studies.
(g) Trip generation based on ITE rates for Quick Lubrication Vehicle Shop (ITE #941) Average Rate.
(h) Trip generation based on ITE rates for Mini-Warehouse (ITE #151).
(i) Trip generation based on ITE rates for Multifamily Housing (Low-Rise) (ITE #220) Fitted Curve Equation.

SHOPPING CENTER PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Retail	4,210	179	111	68	379	182	197
30% ADT, 20% AM, 40% PM Pass-By Trips - Applied to Retail	1,263	36	22	14	152	73	79
70% ADT, 80% AM, 60% PM Primary Trips - Remainder Retail	2,947	143	89	54	227	109	118

SIT DOWN RESTAURANT PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Restaurant - Shopping Center and No Drive Thru	906	52	28	24	85	49	36
32% ADT, 20% AM, 43% PM Pass-By Trips - Applied to Restaurant - Shopping Center and No Drive Thru	290	10	6	4	37	21	16
68% ADT, 80% AM, 57% PM Primary Trips - Remainder Restaurant - Shopping Center and No Drive Thru	616	42	22	20	48	28	20

FAST FOOD RESTAURANT PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Restaurant Pads	7,100	770	393	377	434	226	208
53% ADT, 50% AM, 55% PM Pass-By Trips - Applied to Restaurant Pads	3,763	385	197	188	239	125	114
47% ADT, 50% AM, 45% PM Primary Trips - Remainder Restaurant Pads	3,337	385	196	189	195	101	94

GAS STATION PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Gas Station	1,626	148	74	74	129	65	64
76% ADT, 76% AM, 75% PM Pass-By Trips - Applied to Gas Station	1,236	113	57	56	97	49	48
24% ADT, 24% AM, 25% PM Primary Trips - Remainder Gas Station	390	35	17	18	32	16	16

CAR WASH PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Car Wash	137	5	3	2	13	7	6
20% Pass-By Trips - Applied to Car Wash	27	1	1	0	3	2	1
80% Primary Trips - Remainder Car Wash	110	4	2	2	10	5	5

TOTAL PASS-BY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Shopping Center	1,263	36	22	14	152	73	79
Sit Down Restaurant and Fast Casual Restaurant	290	10	6	4	37	21	16
Fast Food Restaurant	3,763	385	197	188	239	125	114
Gas Station	1,236	113	57	56	97	49	48
Car Wash	27	1	1	0	3	2	1
Total Pass-By Trips	**6,579**	**545**	**283**	**262**	**528**	**270**	**258**

TOTAL EXTERNAL PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial - External	7,400	609	326	283	512	259	253
Lube Station - External	97	8	5	3	10	6	4
Mini Storage - External	46	3	2	1	4	2	2
Residential - External	2,646	167	40	127	167	105	62
Total External Trips	**10,189**	**787**	**373**	**414**	**693**	**372**	**321**

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 1 WITH INTERNAL TRIP FACTORS

Use	Size	ADT Internal Factor	AM Internal Factor	PM Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
					Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																		
Gas Station with Mart	10 Fueling Positions	0.81	0.92	0.70	200.80	1,626	16.06	148	50%	74	50%	74	18.42	129	50%	65	50%	64
Lube Station	3 Bays	0.81	0.92	0.70	40.00	97	3.00	8	67%	5	33%	3	4.85	10	56%	6	44%	4
Totals:						**1,723**		**156**		**79**		**77**		**139**		**71**		**68**

(a) Trip generation based on ITE rates for Convenience Store/Gas Station (ITE #945). Fitted Curve Equation for ADT. Average Rate for AM/PM Peak Hours.
(b) Trip generation based on ITE rates for Quick Lubrication Vehicle Shop (ITE #941) Average Rate.

GAS STATION PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Gas Station	1,626	148	74	74	129	65	64
76% ADT, 76% AM, 75% PM Pass-By Trips - Applied to Gas Station	1,236	113	57	56	97	49	48
24% ADT, 24% AM, 25% PM Primary Trips - Remainder Gas Station	390	35	17	18	32	16	16

TOTAL EXTERNAL PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External	390	35	17	18	32	16	16
Lube Station - External	97	8	5	3	10	6	4
Total External Trips	**487**	**43**	**22**	**21**	**42**	**22**	**20**

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 2A WITH INTERNAL TRIP FACTORS

Use	Size	ADT Internal Factor	AM Internal Factor	PM Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
					Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																		
Shopping Center(a)	55,000 SF	0.81	0.92	0.70	94.49	4,210	3.53	179	62%	111	38%	68	9.84	379	48%	182	52%	197
Restaurant - Shopping Center (b)	5,000 SF	0.81	0.92	0.70	107.20	434	9.57	44	55%	24	45%	20	9.05	32	61%	20	39%	12
Restaurant Pad 1 - Drive Thru (c)	3,750 SF	0.81	0.92	0.70	467.48	1,420	44.61	154	51%	79	49%	75	33.03	87	52%	46	48%	41
Restaurant Pad 2 - Drive Thru (c)	3,500 SF	0.81	0.92	0.70	467.48	1,325	44.61	144	51%	73	49%	71	33.03	81	52%	42	48%	39
Restaurant Pad 3 - No Drive Thru (d)	3,000 SF	0.81	0.92	0.70	97.14	236	1.43	4	50%	2	50%	2	12.55	26	55%	14	45%	12
Restaurant Pad 4 - No Drive Thru (d)	3,000 SF	0.81	0.92	0.70	97.14	236	1.43	4	50%	2	50%	2	12.55	26	55%	14	45%	12
Restaurant Pad 5 - Drive Thru (c)	2,500 SF	0.81	0.92	0.70	467.48	947	44.61	103	51%	53	49%	50	33.03	58	52%	30	48%	28
Restaurant Pad 6 - Drive Thru (c)	3,000 SF	0.81	0.92	0.70	467.48	1,136	44.61	123	51%	63	49%	60	33.03	70	52%	37	48%	33
Restaurant Pad 7 - Drive Thru (c)	2,500 SF	0.81	0.92	0.70	467.48	947	44.61	102	51%	52	49%	50	33.03	58	52%	30	48%	28
Totals:	**81,250 SF**					**10,891**		**857**		**459**		**398**		**817**		**415**		**402**

(a) Trip generation based on ITE rates for Shopping Plaza (ITE #821). Average Rate for ADT and AM Peak Hour. Fitted Curve Equation for PM Peak Hour.
(b) Trip generation based on ITE rates for High-Turnover (Sit-Down) Restaurant (ITE #932) Average Rate.
(c) Trip generation based on ITE rates for Fast-Food Restaurant with Drive-Through Window (ITE #934) Average Rate.
(d) Trip generation based on ITE rates for Fast Casual Restaurant (ITE #930) Average Rate.

SHOPPING CENTER PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Retail	4,210	179	111	68	379	182	197
30% ADT, 20% AM, 40% PM Pass-By Trips - Applied to Retail	1,263	36	22	14	152	73	79
70% ADT, 80% AM, 60% PM Primary Trips - Remainder Retail	2,947	143	89	54	227	109	118

SIT DOWN RESTAURANT PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Restaurant - Shopping Center and No Drive Thru	906	52	28	24	84	48	36
32% ADT, 20% AM, 43% PM Pass-By Trips - Applied to Restaurant - Shopping Center and No Drive Thru	290	10	6	4	36	21	15
68% ADT, 80% AM, 57% PM Primary Trips - Remainder Restaurant - Shopping Center and No Drive Thru	616	42	22	20	48	27	21

FAST FOOD RESTAURANT PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Restaurant Drive Thru	5,775	626	320	306	354	185	169
53% ADT, 50% AM, 55% PM Pass-By Trips - Applied to Restaurant Pads	3,061	313	160	153	195	102	93
47% ADT, 50% AM, 45% PM Primary Trips - Remainder Restaurant Pads	2,714	313	160	153	159	83	76

TOTAL EXTERNAL PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External	6,277	498	271	227	434	219	215
Total External Trips	**6,277**	**498**	**271**	**227**	**434**	**219**	**215**

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 2B WITH INTERNAL TRIP FACTORS

Use	Size	ADT Internal Factor	AM Internal Factor	PM Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
					Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																		
Mini Storage(c)	39,500 SF	0.81	0.92	0.70	1.45	46	0.09	3	59%	2	41%	1	0.15	4	47%	2	53%	2
Totals:	**39,500 SF**					**46**		**3**		**2**		**1**		**4**		**2**		**2**

(a) Trip generation based on ITE rates for Mini-Warehouse (ITE #151).

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 3 WITH INTERNAL TRIP FACTORS

Use	Size	ADT Internal Factor	AM Internal Factor	PM Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
					Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																		
Car Wash-Automated (a)	1 Tunnel	0.55	0.55	0.55	249.00	137	8.50	5	50%	3	50%	2	23.70	13	50%	7	50%	6
Restaurant Pad 8 - Drive Thru (c)	3,500 SF	0.81	0.92	0.70	467.48	1,325	44.61	144	51%	73	49%	71	33.03	81	52%	42	48%	39
Totals:						**1,462**		**149**		**76**		**73**		**94**		**49**		**45**

(a) Trip generation for Car Wash-Automated derived from local studies.
(b) Trip generation based on ITE rates for Fast-Food Restaurant with Drive-Through Window (ITE #934) Average Rate.

CAR WASH PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Car Wash	137	5	3	2	13	7	6
20% Pass-By Trips - Applied to Car Wash	27	1	1	0	3	2	1
80% Primary Trips - Remainder Car Wash	110	4	2	2	10	5	5

FAST FOOD RESTAURANT PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Restaurant Pads	1,325	144	73	71	81	42	39
53% ADT, 50% AM, 55% PM Pass-By Trips - Applied to Restaurant Pads	702	72	37	35	45	23	22
47% ADT, 50% AM, 45% PM Primary Trips - Remainder Restaurant Pads	623	72	36	36	36	19	17

TOTAL EXTERNAL PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External	733	76	38	38	46	24	22
Total External Trips	**733**	**76**	**38**	**38**	**46**	**24**	**22**

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 4 WITH INTERNAL TRIP FACTORS

Use	Size	ADT Internal Factor	AM Internal Factor	PM Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
					Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
RESIDENTIAL																		
Three Story Apartments(a)	400 DU	0.81	0.92	0.70	6.60	2,138	0.37	135	24%	32	76%	103	0.48	135	63%	85	37%	50
Totals:	**400 DU**					**2,138**		**135**		**32**		**103**		**135**		**85**		**50**

(a) Trip generation based on ITE rates for Multifamily Housing (Low-Rise) (ITE #220) Fitted Curve Equation.

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 5 WITH INTERNAL TRIP FACTORS

Use	Size	ADT Internal Factor	AM Internal Factor	PM Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
					Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
RESIDENTIAL																		
Two Story Townhomes(a)	95 DU	0.81	0.91	0.70	6.60	508	0.37	32	24%	8	76%	24	0.48	32	63%	20	37%	12
Totals:	**95 DU**					**508**		**32**		**8**		**24**		**32**		**20**		**12**

(a) Trip generation based on ITE rates for Multifamily Housing (Low-Rise) (ITE #220) Fitted Curve Equation.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	RICHARDS RANCH	**Organization:**	ATE
Project Location:	SANTA MARIA	**Performed By:**	GOM
Scenario Description:	UPDATED WITH FACTORS	**Date:**	17-Oct-23
Analysis Year:		**Checked By:**	SAS
Analysis Period:	**AM Street Peak Hour**	**Date:**	17-Oct-23

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	821/945/941	55,000	SF	194	120	74
Restaurant	930/932/934	29,750	SF	893	457	436
Cinema/Entertainment				0		
Residential	220	495	DU	182	43	139
Hotel				0		
All Other Land Uses[2]	151	39,500	SF	4	2	2
				1,273	622	651

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail	1.72	2%	4%	1.72	2%	4%
Restaurant	1.72	2%	4%	1.72	2%	4%
Cinema/Entertainment						
Residential	1.75	2%	4%	1.75	2%	4%
Hotel						
All Other Land Uses[2]	1.72	2%	4%	1.72	2%	4%

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		17	0	2	0
Restaurant	0	16		0	4	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	2	49	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	2,191	1,069	1,122
Internal Capture Percentage	8%	8%	8%
External Vehicle-Trips[5]	1,099	536	563
External Transit-Trips[6]	40	19	21
External Non-Motorized Trips[6]	81	40	41

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	9%	15%
Restaurant	8%	3%
Cinema/Entertainment	N/A	N/A
Residential	8%	21%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	RICHARDS RANCH	**Organization:**	ATE
Project Location:	SANTA MARIA	**Performed By:**	GOM
Scenario Description:	UPDATED WITH FACTORS	**Date:**	17-Oct-23
Analysis Year:		**Checked By:**	SAS
Analysis Period:	**PM Street Peak Hour**	**Date:**	17-Oct-23

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	821/945/941	55,000	SF	541	260	281
Restaurant	930/932/934	29,750	SF	739	390	349
Cinema/Entertainment				0		
Residential	220	495	DU	239	151	88
Hotel				0		
All Other Land Uses[2]	151	39,500	SF	6	3	3
				1,525	804	721

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail	1.72	2%	4%	1.72	2%	4%
Restaurant	1.72	2%	4%	1.72	2%	4%
Cinema/Entertainment						
Residential	1.75	2%	4%	1.75	2%	4%
Hotel						
All Other Land Uses[2]	1.72	2%	4%	1.72	2%	4%

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail					1200	
Restaurant					1300	
Cinema/Entertainment						
Residential		1200	1300			
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		140	0	109	0
Restaurant	0	223		0	42	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	31	22	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	2,625	1,385	1,240
Internal Capture Percentage	43%	41%	46%
External Vehicle-Trips[5]	815	447	368
External Transit-Trips[6]	30	16	14
External Non-Motorized Trips[6]	59	33	26

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	57%	52%
Restaurant	24%	44%
Cinema/Entertainment	N/A	N/A
Residential	57%	34%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

ASSOCIATED TRANSPORTATION ENGINEERS

100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110 ● (805) 687-4418 ● (805) 682-8509-F

ACCIDENT RATE CALCULATION SHEET - FOR INTERSECTIONS

Project: Richards Ranch
Project #: 021069
Analyst: GOM
Date: 11/7/2023

File Name: Accident Rate Worksheet 3 Year

N/S Street: Orcutt Expressway
E/W Street: Union Valley Parkway
Weekday:
PM Peak Hour Entering Volume: 3735
Peak Hour Factor: 10.8
----------OR----------
Total Approach ADT: N/A
Weekend:
PM Peak Hour Entering Volume OR ADT: 75% (as a percentage of Weekday PM Peak Hour Entering Volume OR ADT)

Period Analyzed (years): 3

Number of Accidents: 29

Million Entering Vehicle Miles: 41.02 million entering vehicle miles (mevm)

Accident Rate: **.71 accidents per million entering vehicle miles (mevm)**

Intersection Rate Group: I09
California State Average Collision Rate: 0.55

DEFINITIONS

$$\text{Number Expected} = \frac{\text{ADT} \times \text{Time} \times \text{Rate Expected} \times \text{Length}}{1000000}$$

$$\text{Number Significant} = \text{Number Expected} + (2.576 \times (\text{Number Expected})^{1/2}) + 1.329$$

NOTES: Number Significant using 99.5% confidence level.

For intersections, use annual number of entering vehicles in place of ADT and delete length. The NR is the same as for roadway segments.

CALCULATIONS - ORCUTT EXPRESSWAY/UVP INTERSECTION (Three Year Period)

$$\text{Number Expected} = \frac{13{,}674{,}634 \times 3 \times 0.55 \times 1}{1000000} = 22.5631$$

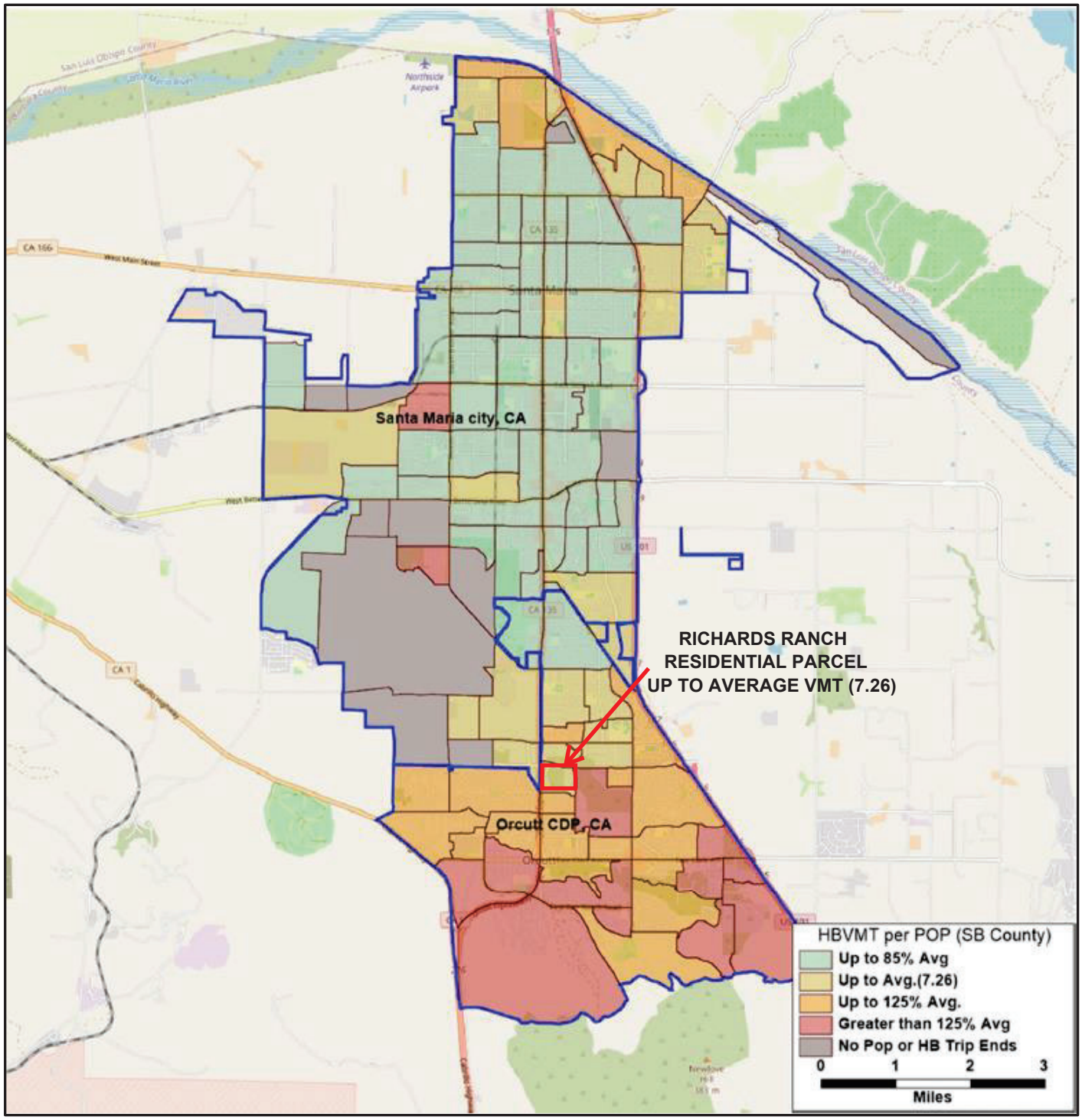
Number Significant = 36.1283213

Number of Accidents Recorded = 29

Santa Maria Environmental Procedures and Guidelines

Appendix B

Countywide Average: Home-Based VMT per Population (Residential Land Uses)



Adopted by the City Council on November 3, 2020 (City Council Resolution 2020-111)