APPENDIX I – TRAFFIC REPORT

BELTRAMO RANCH RESIDENTIAL PROJECT
CITY OF MOORPARK, CALIFORNIA

TRAFFIC AND CIRCULATION STUDY

May 19, 2021 **ATE #19087**

Warmington Residential
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Since 1978

Richard L. Pool, P.E.
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May 19, 2021

19087R01

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TRAFFIC AND CIRCULATION STUDY
FOR THE BELTRAMO RANCH RESIDENTIAL PROJECT, CITY OF MOORPARK

Associated Transportation Engineers (ATE) has prepared the following traffic and circulation study for the Beltramo Ranch Residential Project, proposed in the City of Moorpark. It is understood that the study will be submitted to the City for environmental review.

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 report contains an analysis of the traffic and circulation issues associated with the Beltramo Ranch Residential Project (the "Project") proposed in the City of Moorpark. The report evaluates existing and future traffic operations within the Project study area to determine the Project's consistency with the City's transportation policies. The roadways and intersections analyzed in the study were determined based on input provided by City of Moorpark staff. An evaluation of the Project's potential CEQA impacts is also provided based on the State's new CEQA requirements adopted under Senate Bill 743.

PROJECT DESCRIPTION

The Project site is located on the south side of Los Angeles Avenue (State Route 118) between Tierra Rejada Road and Maureen Avenue, as illustrated on Figure 1. The Project is located on a 7.2-acre site that is occupied by the Four Square Church and two single family residential homes. The Project is proposing to redevelop the site and construct 47 single family housing units. Figure 2 illustrated the Project site plan. Site access would be provided via Beltramo Ranch Road, which would be realigned. The access connection would allow left-turns and right-turns inbound but restrict outbound movements to right-turns. The realigned Beltramo Ranch Road access connection to Los Angeles Avenue would be designed to Caltrans standards.

EXISTING CONDITIONS

Street Network

The Project site is served by a network of highways, arterial, collector, and local streets. Figure 3 illustrates the study-area street network, including the traffic controls and lane geometries at the key study-area intersections identified for analysis. The following text provides a brief discussion of the existing street network.

Los Angeles Avenue (State Route 118), located adjacent to the Project site, is a 2- to 6-lane arterial highway that extends from the State Route 126 (Santa Paula Freeway) in the City of Ventura to State Route 210 (Foothill Freeway) east of the City of San Fernando. Access to the Project site would be provided via the Beltramo Ranch Road connection to Los Angeles Avenue.

Tierra Rejada Road, located west of the Project site, is a 4-lane arterial roadway that extends south from Los Angeles Avenue and then easterly to the City of Simi Valley. Tierra Rejada Road is signalized at Los Angeles Avenue.

Maureen Lane, located east of the Project site, is a 2-lane roadway that extends north and south from Los Angeles. Maureen Lane serves industrial uses north of Los Angeles Avenue and residential uses south of Los Angeles Avenue. Maureen Lane is signalized at Los Angeles Avenue.

N
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PROJECT SITE LOCATION

FIGURE 1

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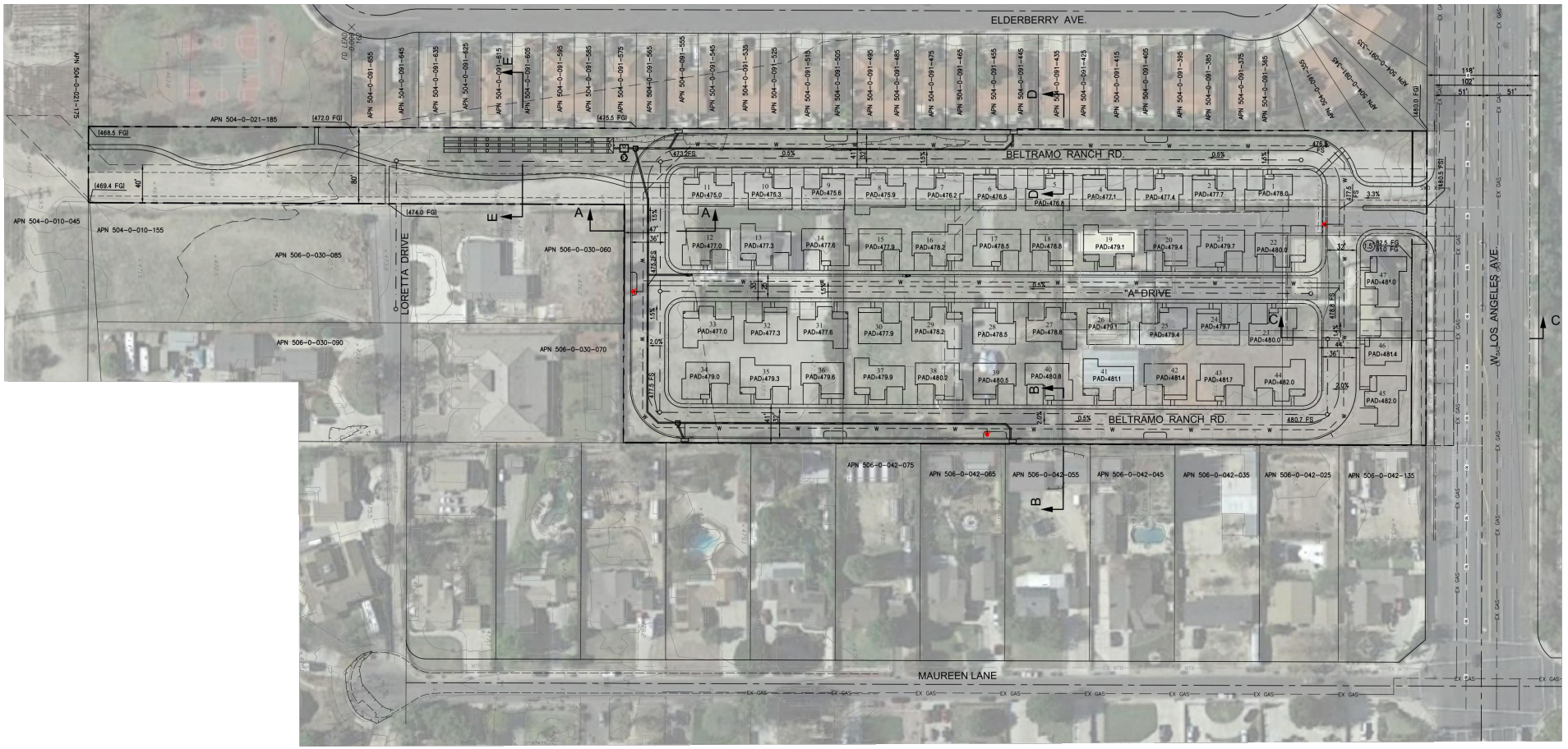

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PROJECT SITE PLAN

FIGURE 2

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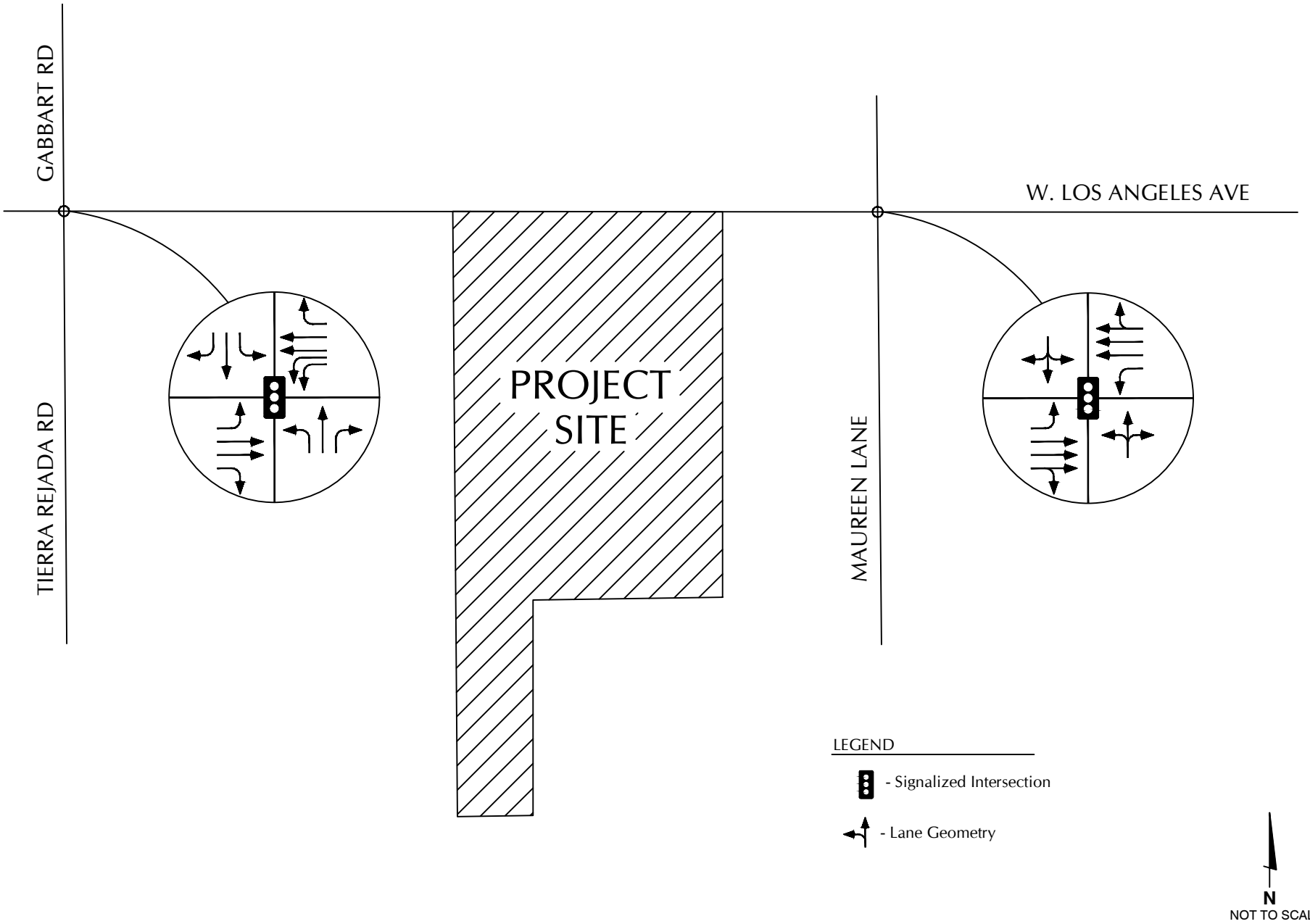

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EXISTING LANE GEOMETRY AND TRAFFIC CONTROL

FIGURE 3

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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 Moorpark considers LOS C as the performance standard for intersections (maintain LOS C or better).

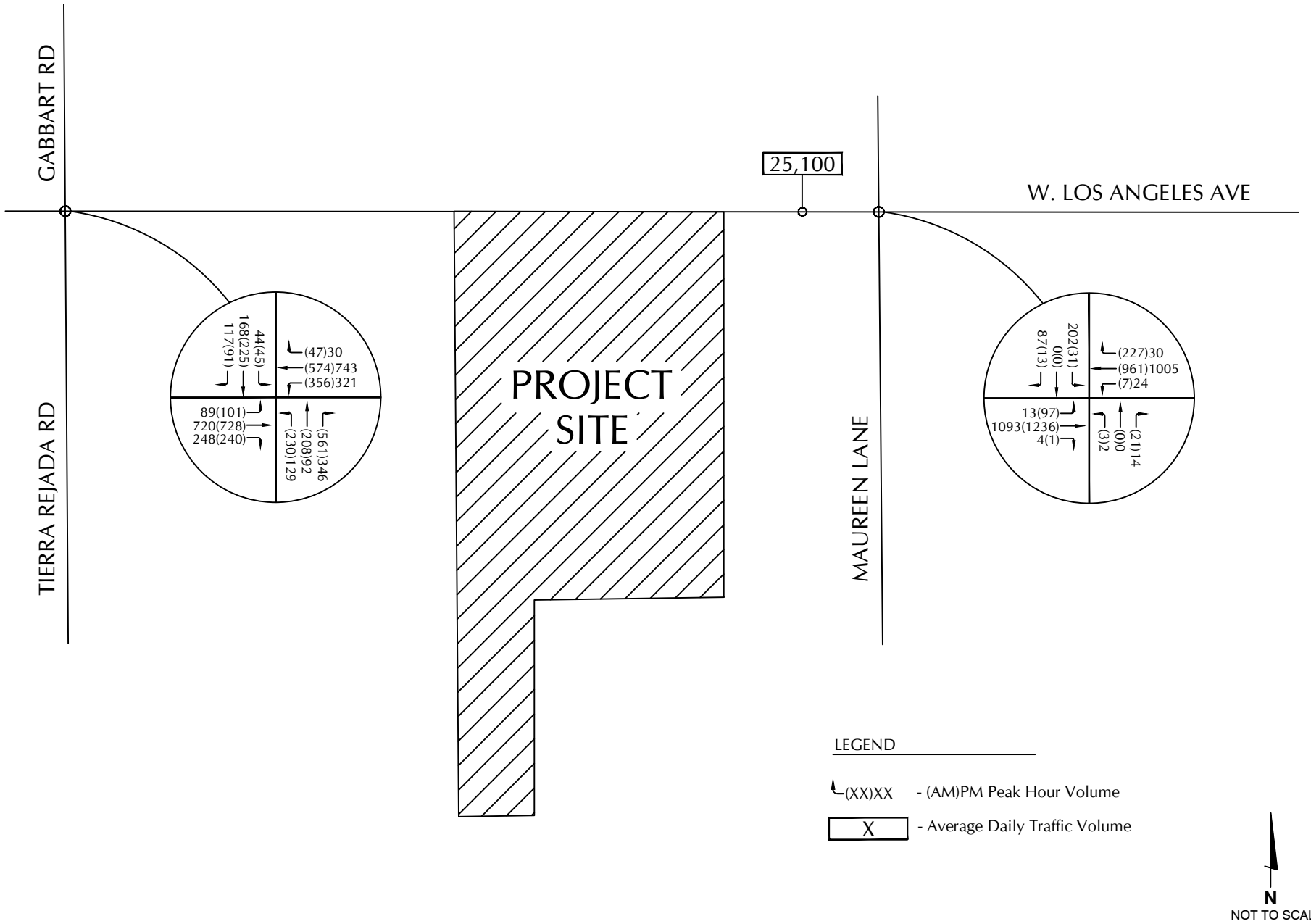
Existing peak hour traffic volumes for the Los Angeles Avenue/Tierra Rejada intersection were obtained from traffic counts collected in 2019 by the City (see Technical Appendix for count data). Current counts are not available for the Los Angeles Avenue/Maureen Lane intersection. Given that new counts cannot collected in the near term due to the economic slowdown related to the Covid 19 pandemic, traffic count data was obtained from the StreetLight InSight Origin and Destination Analysis program. The StreetLight program provides roadway and intersection volumes for a specified period of time (week, month, year, etc.), day of the week, and hour of the day. Traffic flows are captured using location-based data (LBS) from smartphone apps and navigation-GPS data created by connected cars and trucks as well as turn-by-turn navigation tools. The traffic volumes used in this study are based on traffic flows for average weekdays (Tuesday-Thursday) during the 2019 February-May and September-October months.

Figure 4 presents the existing AM and PM peak hour traffic volumes for the study-area intersections. Levels of service were calculated for the signalized intersections using the "Intersection Capacity Utilization" (ICU) methodology, which is the level of service method adopted by the City for signalized intersections. Existing levels of service are listed in Table 1.

Table 1
Existing Levels of Service

Intersection	Control	AM Peak Hour		PM Peak Hour	
		ICU	LOS	ICU	LOS
Los Angeles Avenue/Tierra Rejada Road	Signal	0.741	LOS C	0.623	LOS B
Los Angeles Avenue/Maureen Lane	Signal	0.456	LOS A	0.536	LOS A

The data presented in Table 1 show that the study-area intersections currently operate in the LOS A-C during the AM and PM peak hours, which meet the City's LOS C operating standard.



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EXISTING TRAFFIC VOLUMES

FIGURE 4

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CITY OF MOORPARK TRANSPORTATION POLICIES

Pursuant to Policy 2.1 of the City's Circulation Element, Level of Service (LOS) C shall be the system performance objective. For facilities already operating at less than LOS C, the system performance objective shall be to maintain or improve the current level of service. The City of Moorpark, "Guidelines for Preparing Traffic and Circulation Studies" states that if a level of service degradation of one level of service or greater is attributable to a project it will be considered significant enough to require mitigation measures. The City's criteria also states that a level of service degradation of less than one level of service may also be considered significant, depending on circumstances.

PROJECT-SPECIFIC ANALYSIS

Project Trip Generation

Trip generation estimates were calculated for the existing and proposed land uses based on rates presented in the Institute of Transportation Engineers (ITE) Trip Generation manual.[1] The ITE rates for Single Family Detached Housing (Land Use #210) and Church (land Use #560) were applied in the trip generation calculations. Table 2 shows the trip generation estimates for the Project (a detailed calculation worksheet is contained in the Technical Appendix for reference).

Table 2
Project Trip Generation

Land Use	Size	Average Daily Trips		AM Peak Hour Trips		PM Peak Hour Trips	
		Rate	Trips	Rate	Trips	Rate	Trips
Proposed							
Single Family Residential	47 Units	9.44	444	0.74	35	0.99	47
Existing							
Church	6,820 SF	6.95	47	0.33	2	0.49	3
Single Family Residential	2 Units	9.44	19	0.74	2	0.99	1
Total			66		4		4
Net Trip Generation			**378**		**31**		**43**

As shown in Table 2, the Project is forecast to generate 378 average daily trips (ADT), with 31 trips occurring during the AM peak hour and 43 trips occurring during the PM peak hour.

[1] Trip Generation Manual, Institute of Transportation Engineers, 10th Edition, 2017.

Project Trip Distribution

Trip distribution percentages were developed for the Project based on data derived from existing traffic patterns in the study area and consideration of the land uses in the surrounding area. Table 3 presents the trip distribution percentages developed for the Project. Figure 5 illustrates the trip distribution pattern and the assignment of Project traffic at the study-area intersections.

Table 3
Project Trip Distribution

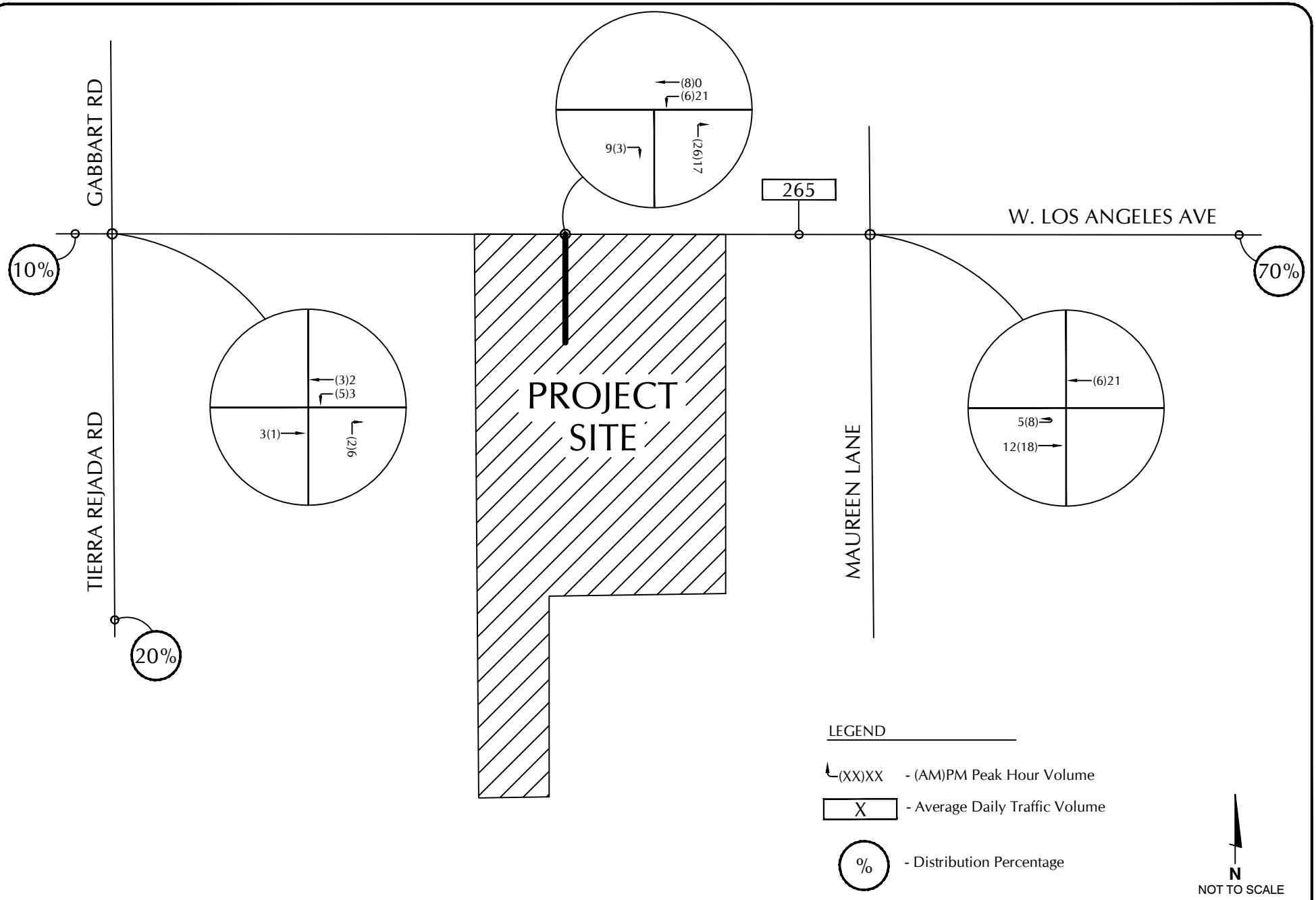
Origin/Destination	Direction	Distribution %
Los Angeles Avenue	East	70%
Los Angeles Avenue	West	10%
Tierra Rejada Road	South	20%
Total		**100%**

Existing + Project Intersection Operations

Levels of service were calculated for the study-area intersections assuming the Existing + Project traffic volumes shown on Figure 6. Tables 4 and 5 compare the Existing and Existing + Project levels of service and identify locations that are forecast to exceed the City's LOS C standard.

Table 4
Existing + Project Levels of Service – AM Peak Hour

Intersection	ICU / LOS		Project Added	
	Existing	Existing + Project	Trips	Exceed LOS C Standard?
Los Angeles Avenue/Tierra Rejada Road	0.741/LOS C	0.742/LOS C	11	NO
Los Angeles Avenue/Maureen Lane	0.456/LOS A	0.462/LOS A	32	NO



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PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

FIGURE 5

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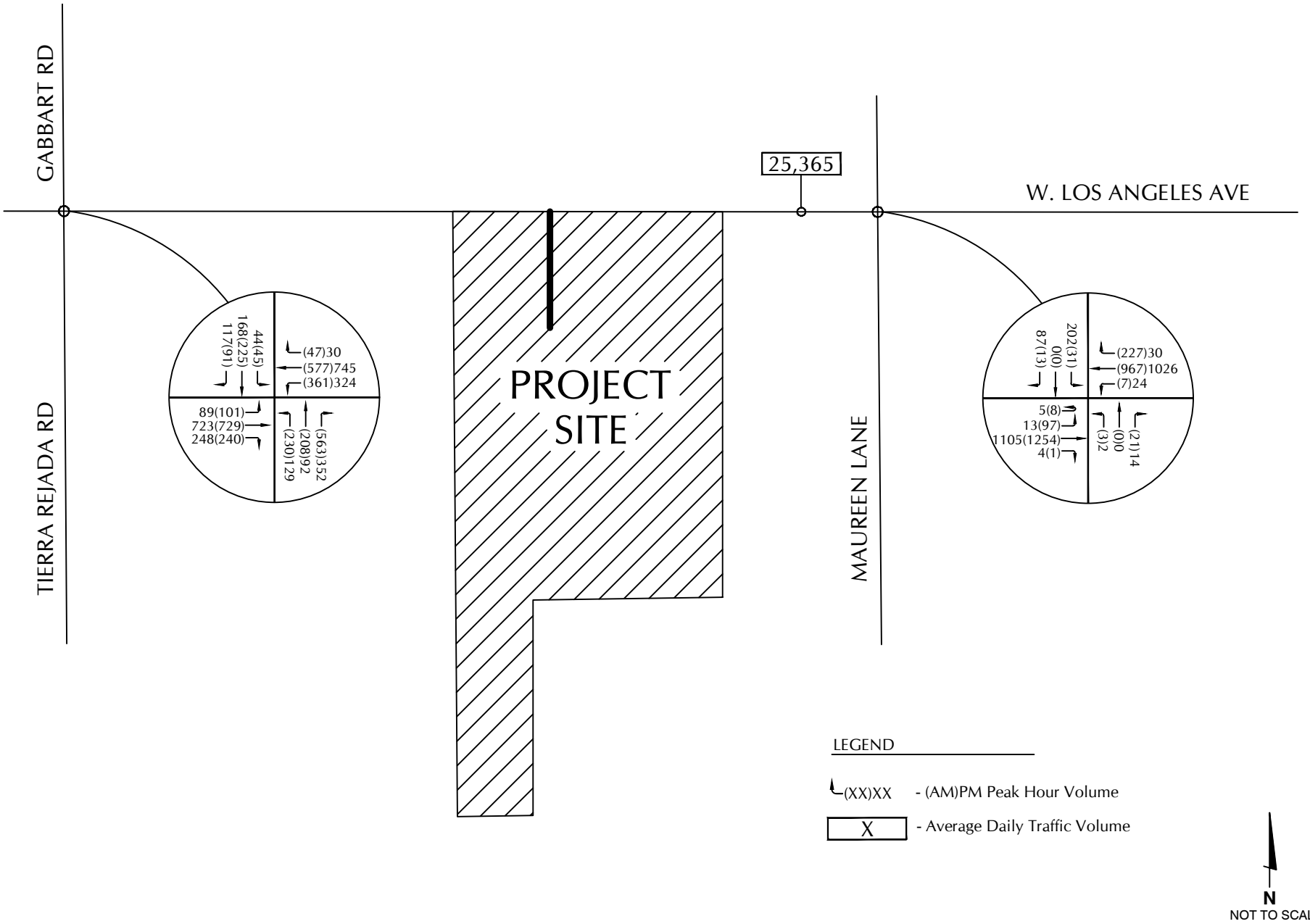

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EXISTING + PROJECT TRAFFIC VOLUMES

FIGURE 6

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Table 5
Existing + Project Levels of Service – PM Peak Hour

Intersection	ICU or Delay / LOS		Project Added	
	Existing	Existing + Project	Trips	Exceed LOS C Standard?
Los Angeles Avenue/Tierra Rejada Road	0.623/LOS B	0.625/LOS B	14	NO
Los Angeles Avenue/Maureen Lane	0.536/LOS A	0.538/LOS A	38	NO

As shown in Tables 4 and 5, the study-area intersections are forecast to continue to operate at LOS C or better under Existing + Project conditions, which meets the City's LOS C standard. Thus, the Project would be consistent with the City's adopted level of service standards.

CUMULATIVE ANALYSIS

Traffic Forecasts

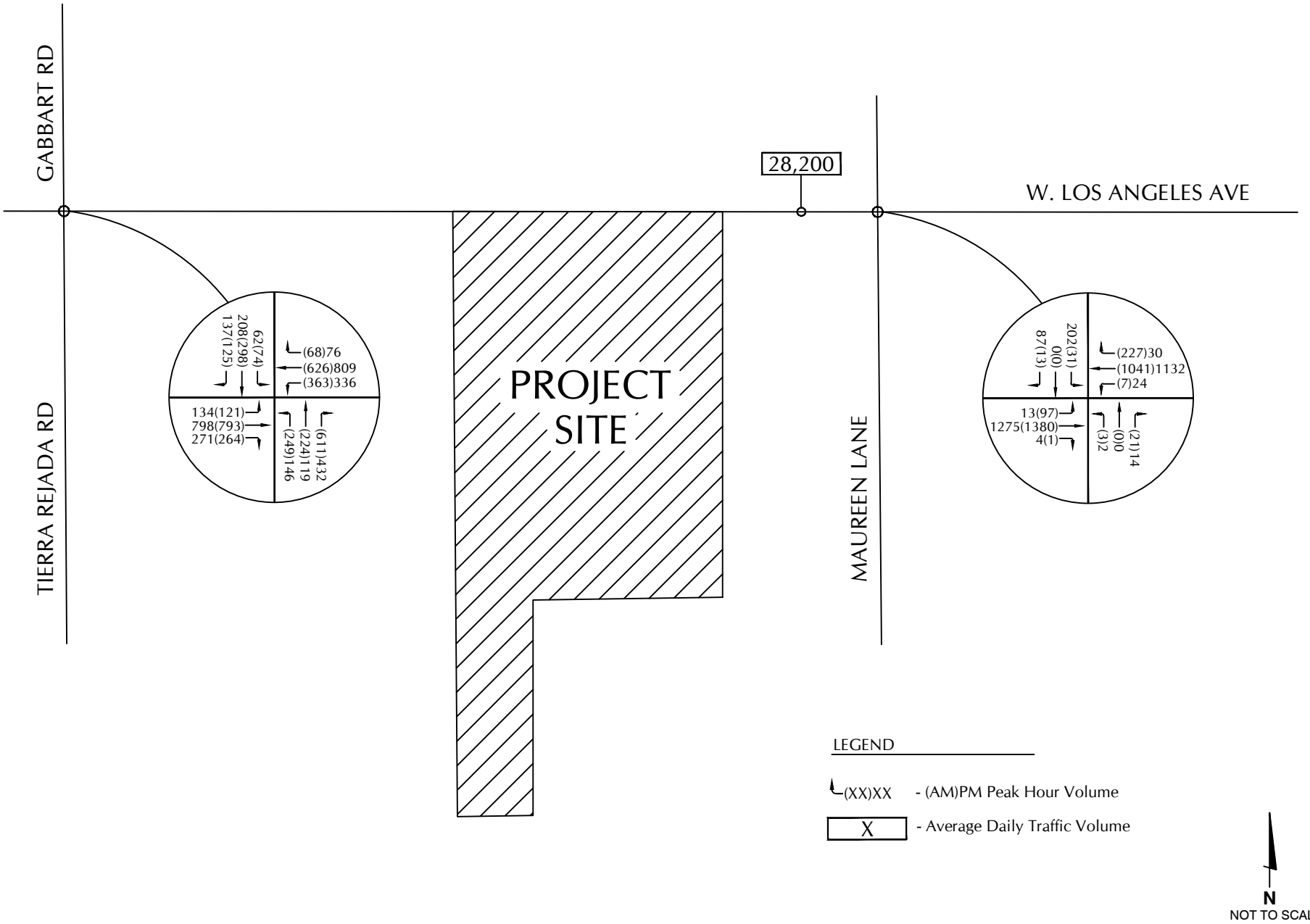
Cumulative conditions were forecast assuming traffic generated by the approved and pending development projects located in the study-area (see Technical Appendix for cumulative project list). Trip generation estimates were developed for the cumulative projects and that traffic was then assigned to the study-area street network. Cumulative traffic forecasts are shown in Figure 7 and Cumulative + Project forecasts are shown in Figure 8.

Cumulative Intersection Operations

Tables 6 and 7 compare the Cumulative and Cumulative + Project levels of service for the study-area intersections and identify locations that are forecast to exceed the City's LOS C standard.

Table 6
Cumulative + Project Levels of Service – AM Peak Hour

Intersection	ICU / LOS		Project Added	
	Cumulative	Cumulative + Project	Trips	Exceed LOS C Standard?
Los Angeles Avenue/Tierra Rejada Road	0.821/LOS D	0.823/LOS C	11	YES
Los Angeles Avenue/Maureen Lane	0.465/LOS A	0.471/LOS A	32	NO



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CUMULATIVE TRAFFIC VOLUMES

FIGURE 7

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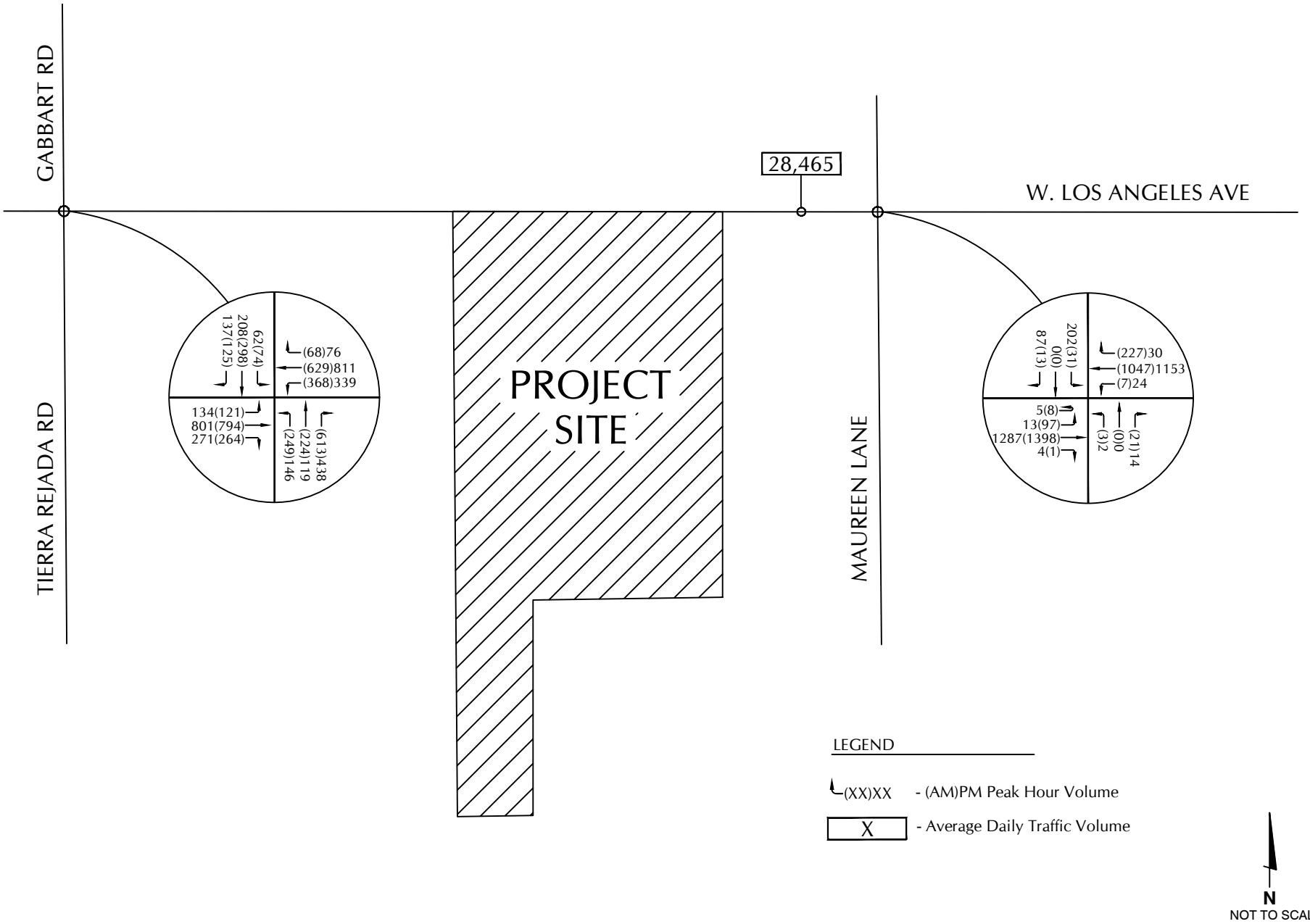

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CUMULATIVE + PROJECT TRAFFIC VOLUMES

FIGURE 8

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Table 7
Cumulative + Project Levels of Service – PM Peak Hour

Intersection	ICU / LOS		Project Added	
	Cumulative	Cumulative + Project	Trips	Exceed LOS C Standard?
Los Angeles Avenue/Tierra Rejada Road	0.688/LOS C	0.690/LOS C	11	NO
Los Angeles Avenue/Maureen Lane	0.572/LOS A	0.575/LOS A	32	NO

As shown in Table 7, the Los Angeles Avenue/Tierra Rejada Road intersection is forecast to operate at LOS D during the AM peak hour under Cumulative and Cumulative + Project conditions, which exceeds the City's LOS C standard. The Project would add 11 trips to the intersection during the AM peak period and increase the ICU by 0.002. This increase is considered a less-than-significant impact pursuant to Policy 2.1 of the City of Moorpark Circulation Element, which states: "*LOS C shall be the system performance objective. For facilities already operating at less than LOS C, if a level of service degradation of one level of service or greater is attributable to a project it will be considered significant enough to require mitigation measures.*" The ICU change attributed to the Project is 0.002 (less than ½ of 1%) – which would result in an insignificant change in traffic operations at the intersection.

SITE ACCESS AND CIRCULATION

Access to the Project site would be provided by Beltramo Ranch Road (see Figure 2 – Project Site Plan). The existing intersection allows for full access to and from Beltramo Ranch Road. The City has indicated that the intersection should be modified to restrict outbound traffic from Beltramo Ranch Road to right-turns only (left turns from Beltramo Ranch Road onto Los Angeles Road would be prohibited). Outbound traffic that is destined to the west would turn right from Beltramo Ranch Road, proceed to Maureen Avenue, and then make a U-turn to travel westbound on Los Angeles Avenue.

Table 8 lists the vehicle delays for traffic turning to/from Beltramo Ranch Road assuming the proposed modifications under Cumulative + Project conditions. Delays and levels of service were calculated using the methodology outlined in the Highway Capacity Manual (HCM).[2] As shown, vehicle delays equate to LOS C or better for traffic turning to/from Beltramo Ranch Road during the AM and PM peak commuter periods.

[2] Highway Capacity Manual, Transportation Research Board, 2016.

Table 8
Los Angeles Avenue/Beltramo Ranch Road – Cumulative + Project LOS

Intersection	Delay / LOS(a)	
	AM Peak Hour	PM Peak Hour
Los Angeles Avenue/Beltramo Ranch Road		
Inbound Left Turns	24.2 Sec./LOS C	21.3 Sec./LOS C
Inbound Right Turns	0.0 Sec./LOS A	0.0 Sec./LOS A
Outbound Right Turns	19.4 Sec./LOS C	16.9 Sec./LOS C

(a) LOS based on average delay per vehicle in seconds, pursuant to HCM methodology.

VEHICLE MILES TRAVELED ANALYSIS

Recent legislation, Senate Bill 743, is moving away from the Level of Service (LOS) metric to a Vehicle Miles Traveled (VMT) metric to evaluate whether a project results in a significant traffic impact under CEQA. Per the State's Natural Resource Agency Updated Guidelines for the Implementation of the CEQA adopted in 2018, 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.

Local agencies have discretion to develop and adopt their own thresholds or rely on thresholds recommended by other agencies. Since the City of Moorpark has not yet adopted VMT impact criteria, the VMT analyses prepared for the Project was developed using information presented in the recently updated VCTC traffic model for Ventura County and the following VMT thresholds published by the State.

CEQA Guidelines. The California Governor's Office of Planning and Research (OPR) published a technical advisory that includes recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures.[3] The recommended VMT impact threshold for residential projects is as follows:

> "Recommended threshold for residential projects: A proposed project exceeding a level of 15 percent below existing VMT per capita may indicate a significant transportation impact. Existing VMT per capita may be measured as regional VMT per capita or as city VMT per capita. Proposed development referencing a threshold based on city VMT per capita (rather than regional VMT per capita) should not cumulatively exceed the number of units specified in the SCS (Sustainable Community Strategy) for that city, and should be consistent with the SCS.

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

The VCTC traffic model provides VMT per capita data for the City of Moorpark as well as the various Traffic Analysis Zones (TAZs) within the City that are contiguous to the Project site. The threshold used to evaluate Project impacts follows the criteria mandated by the State, which states that a residential project may indicate a significant impact if the project's VMT per capita exceeds 15% below the existing VMT per capita.

Table 8 shows the existing VMT per capita for the City of Moorpark, the VMT threshold (15% below existing VMT per capita), and the Project's VMT per capita based on the VCTC traffic model data (VMT model data contained in the Technical Appendix).

Table 9
Beltramo Ranch Residential Project – VMT Impact Summary

City of Moorpark VMT(a)	VMT Impact Threshold(b)	Project VMT Estimate(c)	Impact?
20.31 per capita	17.26 per capita	16.93 per capita	NO

(a) City of Moorpark VMT per capita based on VCTC traffic model.
(b) VMT Threshold is a 15% reduction from City VMT (20.31 x 0.85 = 17.26).
(c) Project VMT per capita estimate based on VCTC model traffic analysis zones.

As shown, the existing City of Moorpark VMT is 20.31 per capita. Thus, the VMT threshold is 17.26 (15% below existing VMT per capita = 20.31 x 0.85 = 17.26) The VCTC model show that the residential units located in the Project area TAZs generate 16.93 VMT per capita, which falls below the 17.26 VMT per capita impact threshold. Thus, the Beltramo Ranch Residential Project would generate a less-than-significant CEQA impact.

●●●

REFERENCES AND PERSONS CONTACTED

Associated Transportation Engineers

Scott A. Schell, Principal Transportation Planner
Dan Dawson, Supervising Transportation Planner

References

Highway Capacity Manual, Transportation Research Board, 2016.

Highway Design Manual, California Department of Transportation, July 2020.

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

Persons Contacted

Andrew Kemp, Ventura County Transportation Commission
Nancy Johns, Wildflower Development Services

TECHNICAL APPENDIX

CONTENTS:

LEVEL OF SERVICE DEFINITIONS

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, 2000

INTERSECTION TURNING MOVEMENT COUNTS

Prepared by National Data & Surveying Services

Tierra Rejada Rd & Los Angeles Ave

Peak Hour Turning Movement Count

ID: 19-05109-011
City: Moorpark

Day: Thursday
Date: 04/18/2019

PEAK HOURS

AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 04:45 PM - 05:45 PM

COUNT PERIODS

AM: 07:00 AM - 10:00 AM
NOON: NONE
PM: 04:30 PM - 07:30 PM

SOUTHBOUND — Tierra Rejada Rd

AM	91	225	45	0	356	AM
NOON	0	0	0	0	0	NOON
PM	117	168	44	0	211	PM

EASTBOUND — Los Angeles Ave

AM	NOON	PM		
895	0	989	⇦	
0	0	0	↶	0
101	0	89	↱	1
728	0	720	→	2
240	0	248	↴	1
AM	NOON	PM		

WESTBOUND — Los Angeles Ave

PM	NOON	AM		
30	0	47	↰	1
743	0	574	←	2
321	0	356	↙	2
0	0	0	↷	0
1110	0	1334	⇨	
PM	NOON	AM		

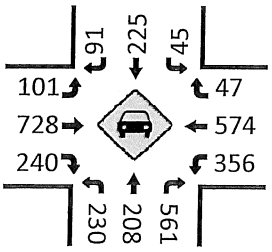
NORTHBOUND — Tierra Rejada Rd

PM	737	0	129	92	346	PM
NOON	0	0	0	0	0	NOON
AM	821	0	230	208	561	AM

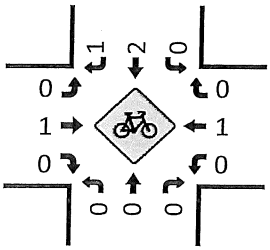
CONTROL: Signalized

TEV	3406 (AM)	0 (NOON)	3047 (PM)
PHF	0.83		0.99

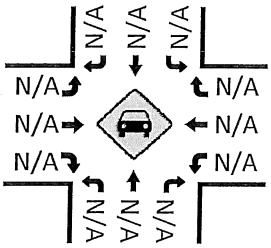
Total Vehicles (AM)



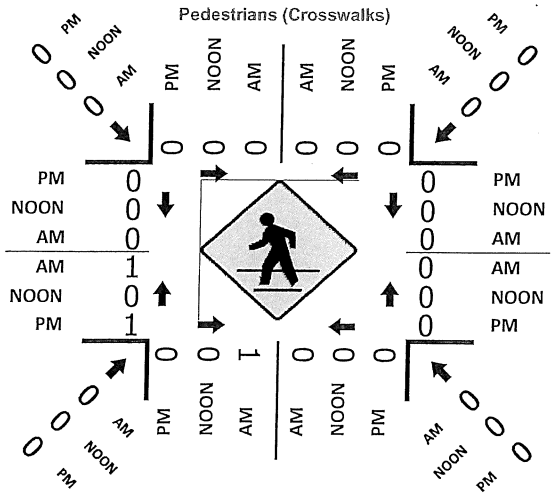
Bikes (AM)



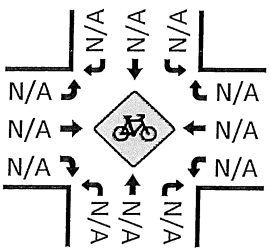
Total Vehicles (Noon)



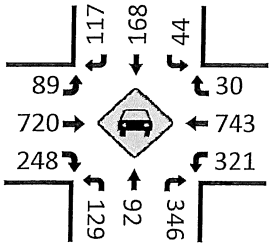
Pedestrians (Crosswalks)



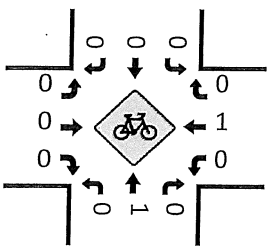
Bikes (NOON)



Total Vehicles (PM)



Bikes (PM)



CUMULATIVE PROJECT LIST

Cumulative Development Projects Trip Generation (As of April 2, 2021)

Project	Land Use	Size	ADT	A.M. Peak Hour	P.M. Peak Hour	Note
Triliad Development	Movie Studio	37 Acres	100	10	10	Approved
Pacific Communities	Single Family Residential	283 Units	2,694	212	283	Approved
Essex Moorpark, LLC	Multi-Family Residential	200 Units	1,318	92	57	Approved
Spring Road, LLC	Condominiums	95 Units	552	42	49	Approved
City Ventures	Single Family Residential	110 Units	1,047	82	110	Approved
Oakmont Senior Living	Senior Residential	77 units/beds	219	16	22	Approved/Under Construction
Birdsall Group, LLC	Single Family Residential	21 Units	200	16	12	Approved
Aldersgate Senior Housing	Senior Residential	390 Units	1,468	90	125	Approved
High Street Depot/Daly Group	Downtown Mixed-Use	13,656 sf retail and 79 apartments	1,754	66	90	Approved
Grand Moorpark/Kozar	Condominiums	66 Units	383	29	34	Approved
John C. Chiu, FLP-N	Condominiums	60 Units	349	26	31	Proposed
Beltramo Ranch	Single Family Res	47 units	378	31	43	Proposed
AHA Scattered Sites	Multi-family	56 units	410	26	31	Proposed
Hitch Ranch	Single and Multi-Family	755 units	6.394	495	6111	Proposed
Moorpark 67/Rasmussen	Single Family Residential	139 Units	1,312	103	138	Proposed
**Amazon Distribution Center	Industrial	Reuse of 189,364 sf industrial	994	-17	12	Proposed
*National Ready Mix	Batch Plant	10 acres	600	20	20	Unknown
***CEMEX	Quarry	N/A	980	276	148	Unknown
***Wayne J. Sand & Gravel	Quarry	N/A	504	92	34	Unknown
***Grimes Rock	Quarry	N/A	480	35	14	Unknown
Total Trips						

*No proposal to change or expand operations. Existing use creates significant truck traffic through Moorpark.

**Trip calculations include baseline of existing industrial use (site is developed). ADT is a gross figure and A.M./P.M. are net figures based on previous use.

***Operations under County jurisdiction but bring significant truck traffic through Moorpark. Please contact Ventura County to determine whether any active permits for expansion are being reviewed or processed.

VCTC MODEL VMT DATA

BELTRAMO RANCH VMT FORECASTS - SOURCE: VCTC MODEL DATA

VCTC TAZ	HOUSEHOLDS	RESIDENTS	VMT PER CAPITA	TOTAL VMT
60123100	221	702	11.99	8416.98
60127200	1000	2239	11.81	26442.59
60123200	665	2165	25.33	54839.45
60127100	745	3856	16.09	62043.04
TOTALS	**2631**	**8962**	**16.93**	**151742.06**

MOORPARK HOME BASE VMT =	**20.31**
HOME BASE VMT THRESHOLDS (15% LESS) =	**17.26**
PROJECT VMT =	**16.93**
IMPACT?	**NO**

PROJECT VMT ->	HOUSEHOLDS(a)	RESIDENTS PER UNIT	TOTAL RESIDENTS	VMT PER CAPITA	TOTAL VMT
	45	3.41	153	16.93	2590.55

(a) Analysis assumed 47 new units - 2 existing units to be removed.

INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS

Reference 1 - Los Angeles Avenue/Tierra Rejada Road
Reference 2 - Los Angeles Avenue/Maureen Lane
Reference 3 - Los Angeles Avenue/Beltramo Ranch Road

#19087 - BELTRAMO RANCH PROJECT REF: 01 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***APRIL 18, 2019***

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

N/S STREET: ***TIERRA REJADA ROAD***

E/W STREET: ***LOS ANGELES AVENUE***

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:	**230**	**208**	**561**	**45**	**225**	**91**	**101**	**728**	**240**	**356**	**574**	**47**
(B)	PROJECT-ADDED:	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**5**	**3**	**0**
(C)	CUMULATIVE:	**249**	**224**	**611**	**74**	**298**	**125**	**121**	**793**	**264**	**363**	**626**	**68**

GEOMETRICS

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

TRAFFIC SCENARIOS

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

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1500	230	230	249	249	0.15 *	0.15 *	0.17 *	0.17 *
NBT	1	1600	208	208	224	224	0.130	0.130	0.140	0.140
NBR	1	1500	303	304	330	331	0.202	0.203	0.220	0.221
SBL	1	1500	45	45	74	74	0.030	0.030	0.049	0.049
SBT	1	1600	225	225	298	298	0.141 *	0.141 *	0.186 *	0.186 *
SBR	1	1500	91	91	125	125	0.06	0.06	0.08	0.08
EBL	1	1500	101	101	121	121	0.07	0.07	0.08	0.08
EBT	2	3200	728	729	793	794	0.228 *	0.228 *	0.248 *	0.248 *
EBR	1	1500	240	240	264	264	0.16	0.16	0.18	0.18
WBL	2	3000	356	361	363	368	0.12 *	0.12 *	0.12 *	0.12 *
WBT	2	3200	574	577	626	629	0.179	0.180	0.196	0.197
WBR	1	1500	47	47	68	68	0.031	0.031	0.045	0.045
					LOST TIME:		0.10	0.10	0.10	0.10
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.741**	**0.742**	**0.821**	**0.823**
					SCENARIO LEVEL OF SERVICE:		**C**	**C**	**D**	**D**

NOTES:

a *Right turn volume adjusted to account for overlap phase with westbound left-turn*

Print ******

#19087 - BELTRAMO RANCH PROJECT **REF:** 01 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***APRIL 18, 2019***

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

N/S STREET: ***TIERRA REJADA ROAD***

E/W STREET: ***LOS ANGELES AVENUE***

CONTROL TYPE ***SIGNAL***

TRAFFIC VOLUME SUMMARY

		NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
VOLUMES		L	T	R	L	T	R	L	T	R	L	T	R
(A)	EXISTING:	**129**	**92**	**346**	**44**	**168**	**117**	**89**	**720**	**248**	**321**	**743**	**30**
(B)	PROJECT-ADDED:	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**3**	**0**	**3**	**2**	**0**
(C)	CUMULATIVE:	**146**	**119**	**432**	**62**	**208**	**137**	**134**	**798**	**271**	**336**	**809**	**76**

GEOMETRICS

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

TRAFFIC SCENARIOS

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

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4		
NBL	1	1500	129	129	146	146	0.09 *	0.09 *	0.10 *	0.10 *		
NBT	1	1600	92	92	119	119	0.058	0.058	0.074	0.074		
NBR	1	1500	187	190	233	237	0.125	0.127	0.155	0.158		
SBL	1	1500	44	44	62	62	0.029	0.029	0.041	0.041		
SBT	1	1600	168	168	208	208	0.105 *	0.105 *	0.130 *	0.130 *		
SBR	1	1500	117	117	137	137	0.08	0.08	0.09	0.09		
EBL	1	1500	89	89	134	134	0.06	0.06	0.09	0.09		
EBT	2	3200	720	723	798	801	0.225 *	0.226 *	0.249 *	0.250 *		
EBR	1	1500	248	248	271	271	0.17	0.17	0.18	0.18		
WBL	2	3000	321	324	336	339	0.11 *	0.11 *	0.11 *	0.11 *		
WBT	2	3200	743	745	809	811	0.232	0.233	0.253	0.253		
WBR	1	1500	30	30	76	76	0.020	0.020	0.051	0.051		
						LOST TIME:	0.10	0.10	0.10	0.10		
						TOTAL INTERSECTION CAPACITY UTILIZATION:	**0.623**	**0.625**	**0.688**	**0.690**		
						SCENARIO LEVEL OF SERVICE:	**B**	**B**	**B**	**B**		

NOTES:

a *Right turn volume adjusted to account for overlap phase with westbound left-turn*

Print ******

#19087 - BELTRAMO RANCH PROJECT **REF:** 02 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *APRIL 18, 2019*

TIME PERIOD: *AM PEAK HOUR*

N/S STREET: *MAUREEN LANE*

E/W STREET: *LOS ANGELES AVENUE*

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:	3	0	21	31	0	13	97	1236	1	7	961	227
(B) PROJECT-ADDED:	0	0	0	0	0	0	8	18	0	0	6	0
(C) CUMULATIVE:	3	0	21	31	0	13	97	1380	1	7	1024	227

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND LTR	SOUTH BOUND LTR	EAST BOUND L TT TR	WEST BOUND L TT TR

TRAFFIC SCENARIOS

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

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	0	0	3	3	3	3	-	-	-	-
NBT	1	1600	0	0	0	0	0.015 *	0.015 *	0.015 *	0.015 *
NBR	0	0	21	21	21	21	-	-	-	-
SBL	0	0	31	31	31	31	-	-	-	-
SBT	1	1600	0	0	0	0	0.028 *	0.028 *	0.028 *	0.028 *
SBR	0	0	13	13	13	13	-	-	-	-
EBL	1	1500	97	105	97	105	0.07 *	0.07 *	0.07 *	0.07 *
EBT	3	4800	1236	1254	1380	1398	0.258	0.261	0.288	0.291
EBR	0	0	1	1	1	1	-	-	-	-
WBL	1	1500	7	7	7	7	0.01	0.01	0.01	0.01
WBT	3	4800	961	967	1024	1030	0.248 *	0.249 *	0.261 *	0.262 *
WBR	0	0	227	227	227	227	-	-	-	-
					LOST TIME:		0.10	0.10	0.10	0.10
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.456**	**0.462**	**0.469**	**0.475**
					SCENARIO LEVEL OF SERVICE:		A	A	A	A

NOTES:

Printed: 05/13/21

#19087 - BELTRAMO RANCH PROJECT REF: 02 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *APRIL 18, 2019*

TIME PERIOD: *PM PEAK HOUR*

N/S STREET: *MAUREEN LANE*

E/W STREET: *LOS ANGELES AVENUE*

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:	**2**	**0**	**14**	**202**	**0**	**87**	**13**	**1093**	**4**	**24**	**1005**	**30**
(B) PROJECT-ADDED:	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**12**	**0**	**0**	**21**	**0**
(C) CUMULATIVE:	**0**	**0**	**14**	**202**	**0**	**87**	**13**	**1275**	**4**	**24**	**1132**	**30**

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND LTR	SOUTH BOUND LTR	EAST BOUND L TT TR	WEST BOUND L TT TR

TRAFFIC SCENARIOS

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

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	0	0	2	2	0	0	-	-	-	-
NBT	1	1600	0	0	0	0	0.010 *	0.010 *	0.009 *	0.009 *
NBR	0	0	14	14	14	14	-	-	-	-
SBL	0	0	202	202	202	202	-	-	-	-
SBT	1	1600	0	0	0	0	0.181 *	0.181 *	0.181 *	0.181 *
SBR	0	0	87	87	87	87	-	-	-	-
EBL	1	1500	13	18	13	18	0.01	0.01	0.01	0.01
EBT	3	4800	1093	1105	1275	1287	0.229 *	0.231 *	0.266 *	0.269 *
EBR	0	0	4	4	4	4	-	-	-	-
WBL	1	1500	24	24	24	24	0.02 *	0.02 *	0.02 *	0.02 *
WBT	3	4800	1005	1026	1132	1153	0.216	0.220	0.242	0.246
WBR	0	0	30	30	30	30	-	-	-	-
					LOST TIME:		0.10	0.10	0.10	0.10
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.536**	**0.538**	**0.572**	**0.575**
					SCENARIO LEVEL OF SERVICE:		**A**	**A**	**A**	**A**

NOTES:

Printed: 05/13/21

HCS7 Two-Way Stop-Control Report

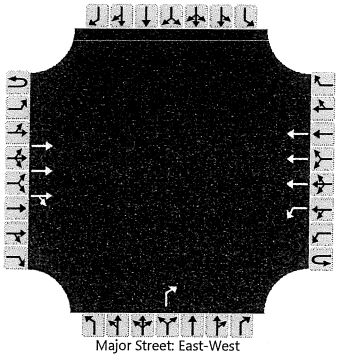
General Information

Analyst	DLD
Agency/Co.	ATE
Date Performed	5/13/21
Analysis Year	
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE + PROJECT

Site Information

Intersection	LA AVE/BELTRAMO RANCH RD
Jurisdiction	City of Moorpark
East/West Street	LA AVENUE
North/South Street	BELTRAMO RANCH ROAD
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	3	0	0	1	3	0		0	0	1		0	0	0
Configuration			T	TR		L	T					R				
Volume (veh/h)			1478	3	0	6	1065					26				
Percent Heavy Vehicles (%)					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)						5.3						7.1				
Critical Headway (sec)						5.36						7.16				
Base Follow-Up Headway (sec)						3.1						3.9				
Follow-Up Headway (sec)						3.13						3.93				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						7						28				
Capacity, c (veh/h)						194						278				
v/c Ratio						0.03						0.10				
95% Queue Length, Q_{95} (veh)						0.1						0.3				
Control Delay (s/veh)						24.2						19.4				
Level of Service (LOS)						C						C				
Approach Delay (s/veh)					0.1				19.4							
Approach LOS									C							

HCS7 Two-Way Stop-Control Report

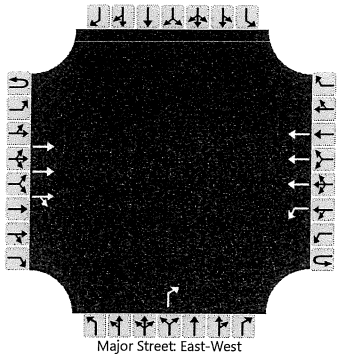
General Information

Analyst	DLD
Agency/Co.	ATE
Date Performed	5/13/21
Analysis Year	
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE + PROJECT

Site Information

Intersection	LA AVE/BELTRAMO RANCH RD
Jurisdiction	City of Moorpark
East/West Street	LA AVENUE
North/South Street	BELTRAMO RANCH ROAD
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	3	0	0	1	3	0		0	0	1		0	0	0
Configuration			T	TR		L	T					R				
Volume (veh/h)			1292	9	0	21	1226					17				
Percent Heavy Vehicles (%)					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)						5.3						7.1				
Critical Headway (sec)						5.36						7.16				
Base Follow-Up Headway (sec)						3.1						3.9				
Follow-Up Headway (sec)						3.13						3.93				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						23						18				
Capacity, c (veh/h)						243						322				
v/c Ratio						0.09						0.06				
95% Queue Length, Q_{95} (veh)						0.3						0.2				
Control Delay (s/veh)						21.3						16.9				
Level of Service (LOS)						C						C				
Approach Delay (s/veh)					0.4				16.9							
Approach LOS									C							

TECHNICAL APPENDIX

CONTENTS:

LEVEL OF SERVICE DEFINITIONS

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, 2000

INTERSECTION TURNING MOVEMENT COUNTS

Prepared by National Data & Surveying Services

Tierra Rejada Rd & Los Angeles Ave

Peak Hour Turning Movement Count

ID: 19-05109-011
City: Moorpark

Day: Thursday
Date: 04/18/2019

PEAK HOURS

AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 04:45 PM - 05:45 PM

COUNT PERIODS

AM: 07:00 AM - 10:00 AM
NOON: NONE
PM: 04:30 PM - 07:30 PM

Tierra Rejada Rd — SOUTHBOUND

AM	91	225	45	0	356	AM
NOON	0	0	0	0	0	NOON
PM	117	168	44	0	211	PM

Los Angeles Ave — EASTBOUND

AM	NOON	PM	
895	0	989	
0	0	0	0
101	0	89	1
728	0	720	2
240	0	248	1
AM	NOON	PM	

Los Angeles Ave — WESTBOUND

PM	NOON	AM	
30	0	47	1
743	0	574	2
321	0	356	2
0	0	0	0
1110	0	1334	
PM	NOON	AM	

Tierra Rejada Rd — NORTHBOUND

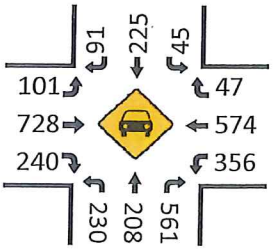
PM	737	0	129	92	346	PM
NOON	0	0	0	0	0	NOON
AM	821	0	230	208	561	AM

CONTROL

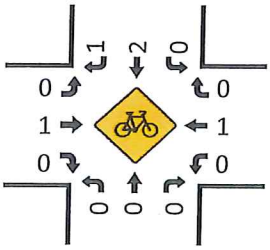
Signalized

TEV	3406 AM	0 NOON	3047 PM
PHF	0.83		0.99

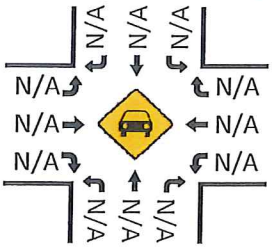
Total Vehicles (AM)



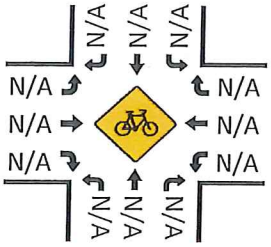
Bikes (AM)



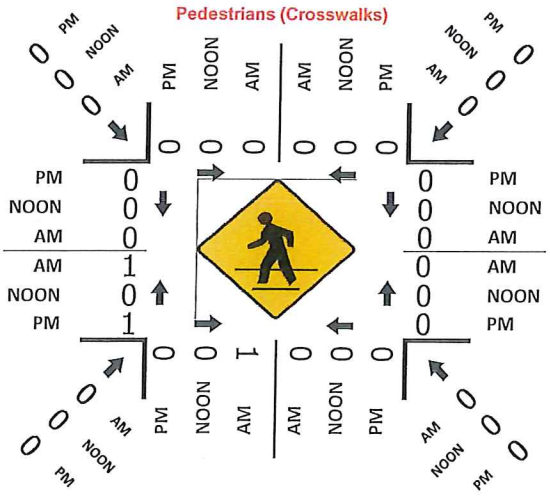
Total Vehicles (Noon)



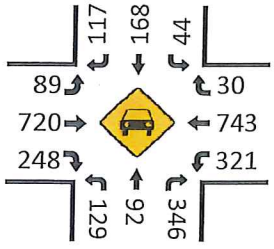
Bikes (NOON)



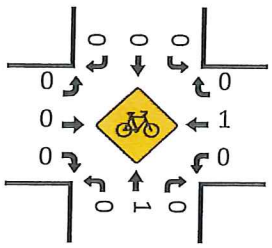
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



Prepared by National Data & Surveying Services

Moorpark Ave & Los Angeles Ave

Peak Hour Turning Movement Count

ID: 19-05109-012
City: Moorpark

Day: Thursday
Date: 04/18/2019

PEAK HOURS

AM: 07:45 AM - 08:45 AM
NOON: NONE
PM: 04:45 PM - 05:45 PM

COUNT PERIODS

AM: 07:00 AM - 10:00 AM
NOON: NONE
PM: 04:30 PM - 07:30 PM

Moorpark Ave — SOUTHBOUND

AM	105	44	164	0	348	AM
NOON	0	0	0	0	0	NOON
PM	94	112	195	0	340	PM
	1.3	0.3	1.3	0		

Los Angeles Ave — EASTBOUND

AM	NOON	PM	
999	0	1089	
0	0	0	0
141	0	148	1
968	0	934	3
41	0	55	0

Los Angeles Ave — WESTBOUND

PM	NOON	AM	
109	0	121	1
949	0	830	2
269	0	99	1
0	0	0	0
1261	0	1235	

CONTROL

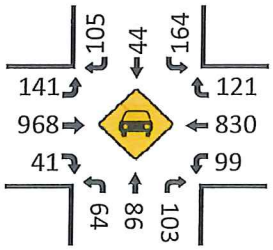
Signalized

TEV	2766	0	3126
	AM	NOON	PM
PHF	0.91		0.98

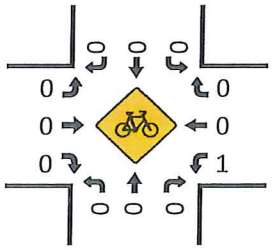
Moorpark Ave — NORTHBOUND

	0	1.5	0.5	1		
PM	436	0	46	83	132	PM
NOON	0	0	0	0	0	NOON
AM	184	0	64	86	103	AM

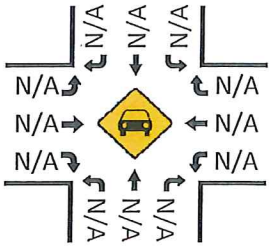
Total Vehicles (AM)



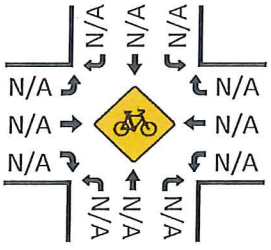
Bikes (AM)



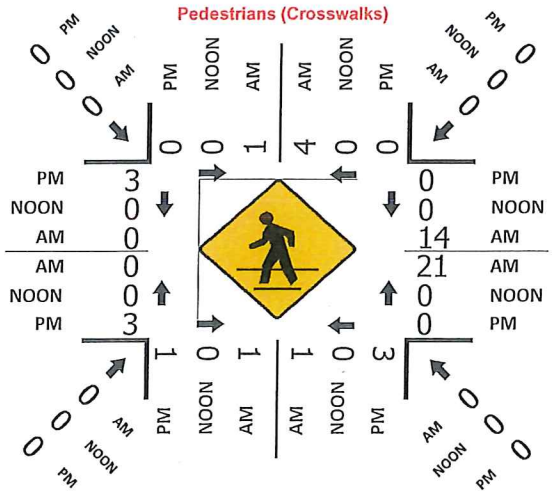
Total Vehicles (Noon)



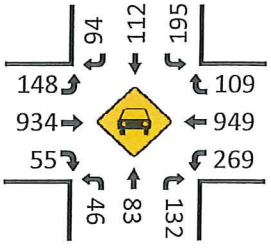
Bikes (NOON)



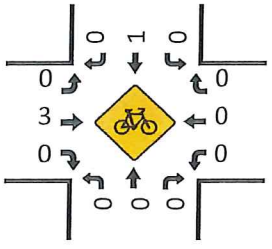
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



Prepared by National Data & Surveying Services

Miller Pkwy/Science Dr & Los Angeles Ave

Peak Hour Turning Movement Count

ID: 19-05109-014
City: Moorpark

Day: Thursday
Date: 04/18/2019

PEAK HOURS	
AM	07:45 AM - 08:45 AM
NOON	NONE
PM	04:30 PM - 05:30 PM

COUNT PERIODS	
AM	07:00 AM - 10:00 AM
NOON	NONE
PM	04:30 PM - 07:30 PM

Miller Pkwy/Science Dr — SOUTHBOUND

	Right	Thru	Left	U-Turn	Departing (↑)
AM	15	1	10	0	178
NOON	0	0	0	0	0
PM	40	17	108	0	34
Lanes	0.3	0.3	0.3	0	

Los Angeles Ave — EASTBOUND

Movement	Lanes	AM	NOON	PM
Departing (⇦)		1096	0	1837
U-Turn	0	1	0	9
Left	1	54	0	13
Thru	3	1342	0	1235
Right	1	107	0	109

Los Angeles Ave — WESTBOUND

Movement	Lanes	PM	NOON	AM
Right	1	17	0	114
Thru	3	1587	0	1021
Left	2	101	0	68
U-Turn	0	0	0	0
Departing (⇨)		1426	0	1410

Miller Pkwy/Science Dr — NORTHBOUND

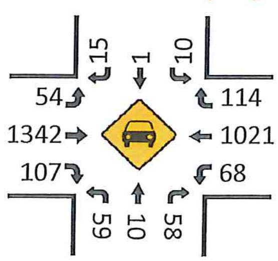
	Departing (⇩)	U-Turn	Left	Thru	Right
Lanes		0	2	1	1
PM	230	3	201	4	83
NOON	0	0	0	0	0
AM	176	0	59	10	58

CONTROL

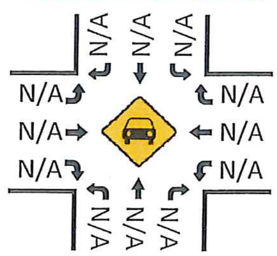
Signalized

	AM	NOON	PM
TEV	2860	0	3527
PHF	0.96		0.98

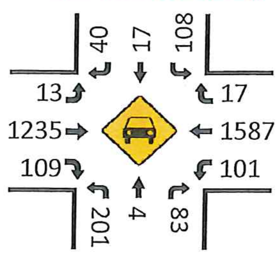
Total Vehicles (AM)



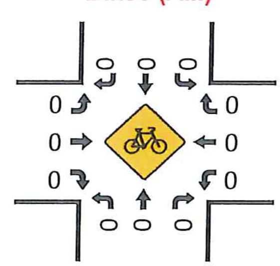
Total Vehicles (Noon)



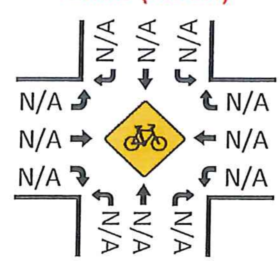
Total Vehicles (PM)



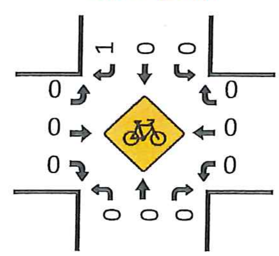
Bikes (AM)



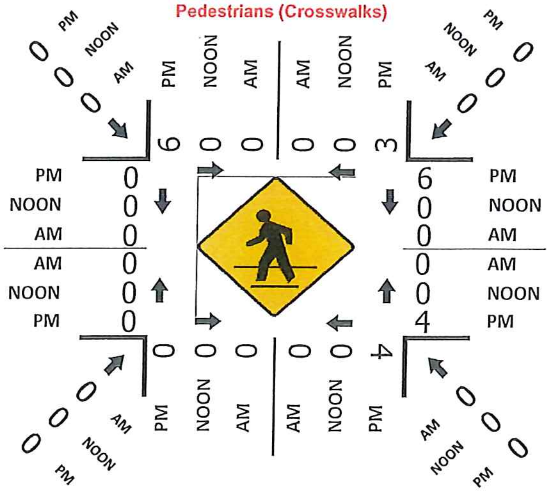
Bikes (NOON)



Bikes (PM)



Pedestrians (Crosswalks)



Prepared by National Data & Surveying Services

SR-23 SB Ramps & Los Angeles Ave

Peak Hour Turning Movement Count

ID: 19-05109-015
City: Moorpark

Day: Thursday
Date: 04/18/2019

PEAK HOURS	COUNT PERIODS
07:45 AM - 08:45 AM	07:00 AM - 10:00 AM
NONE	NONE
04:30 PM - 05:30 PM	04:30 PM - 07:30 PM

SR-23 SB Ramps — SOUTHBOUND

AM	842	2	28	0	0	AM
NOON	0	0	0	0	0	NOON
PM	897	0	37	0	0	PM

Los Angeles Ave — EASTBOUND

AM	NOON	PM	
1324	0	1886	⇦
0	0	0	↶ 0
0	0	0	↷ 0
755	0	761	→ 2
728	0	666	↘ 2
AM	NOON	PM	

WESTBOUND — Los Angeles Ave

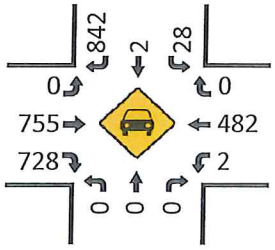
PM	NOON	AM	
0	0	0	↶ 0
989	0	482	← 1
27	0	2	↶ 1
0	0	0	↶ 0
798	0	783	⇨
PM	NOON	AM	

CONTROL			
Signalized			
TEV	2839	0	3377
	AM	NOON	PM
PHF	0.94		0.97

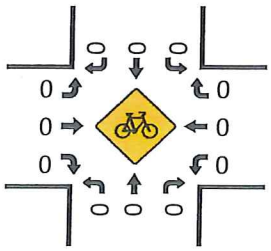
NORTHBOUND — SR-23 SB Ramps

PM	693	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	732	0	0	0	0	AM

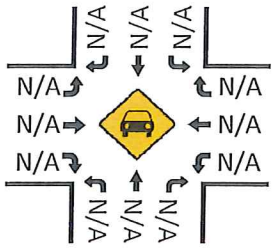
Total Vehicles (AM)



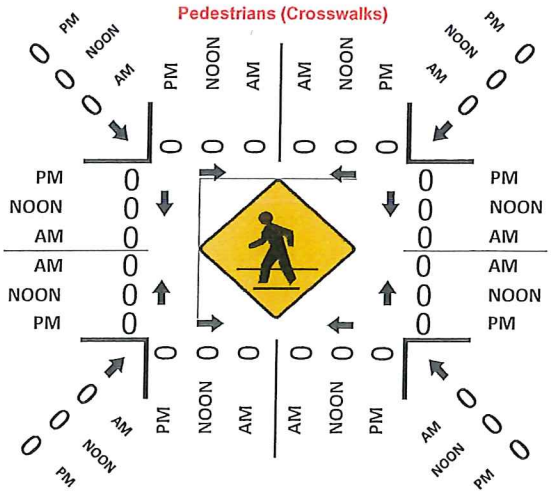
Bikes (AM)



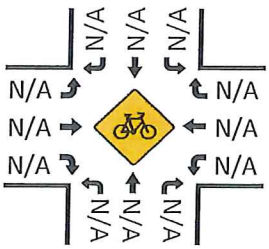
Total Vehicles (Noon)



Pedestrians (Crosswalks)

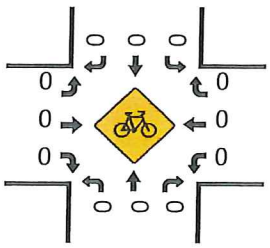


Bikes (NOON)



Total Vehicles (PM)

Bikes (PM)



Prepared by National Data & Surveying Services

SR-23 NB Ramps & Los Angeles Ave

Peak Hour Turning Movement Count

ID: 19-05109-016
City: Moorpark

Day: Thursday
Date: 04/18/2019

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	07:00 AM - 10:00 AM
NONE	NONE
04:30 PM - 05:30 PM	04:30 PM - 07:30 PM

SR-23 NB Ramps — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

Los Angeles Ave — EASTBOUND

AM	NOON	PM	
506	0	1029	
0	0	0	0
0	0	0	0
43	0	21	2
711	0	770	2
AM	NOON	PM	

CONTROL

Signalized

TEV	1299 AM	0 NOON	1863 PM
PHF	0.86		0.92

Los Angeles Ave — WESTBOUND

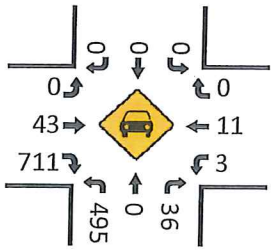
PM	NOON	AM	
0	0	0	0
72	0	11	1
34	0	3	0
0	0	0	0
30	0	79	
PM	NOON	AM	

SR-23 NB Ramps — NORTHBOUND

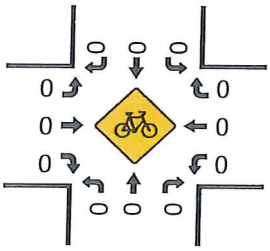
PM	804	0	957	0	9	PM
NOON	0	0	0	0	0	NOON
AM	714	0	495	0	36	AM

0 2 0 1

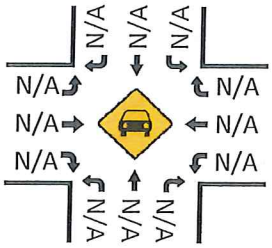
Total Vehicles (AM)



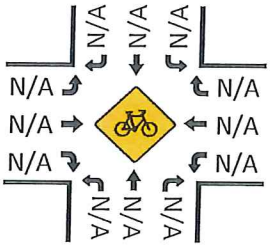
Bikes (AM)



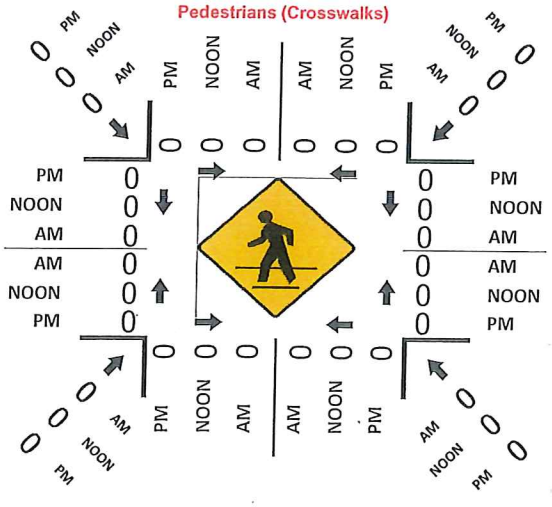
Total Vehicles (Noon)



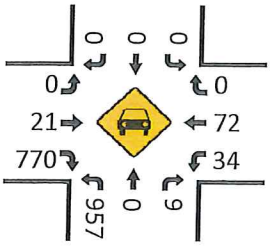
Bikes (NOON)



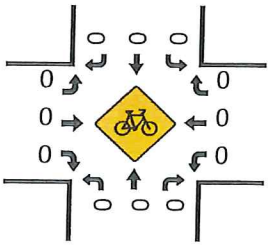
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



CUMULATIVE PROJECT LIST

City of Moorpark, Community Development Department
799 Moorpark Avenue, Moorpark, CA 93021, 805-517-6230
LAND USE AND DEVELOPMENT PROJECTS

QUARTERLY STATUS REPORT FOR DECEMBER 2021

This Report is Available on the City's Webpage - www.moorparkca.gov

APPLICANT / DEVELOPER	COMMON PROJECT NAME	CASE PLANNER	SUBMITTAL DATE	APPLICATION COMPLETE OR INCOMPLETE	SITE ADDRESS OR LOCATION	PERMIT(S)	CEQA STATUS	APPLICATION STATUS	PROJECT DESCRIPTION	ACRES (APPX.)
RESIDENTIAL PROJECTS – IN REVIEW										
HITCH RANCH PARTNERS C/O DPS: DENNIS HARDGRAVE 651 VIA ALONDRA #714 CAMARILLO, CA 93012 805-484-8303 dennis@devplan.net COMSTOCK HOMES HARRIET RAPISTA 2301 ROSECRANS AVE #1150 EL SEGUNDO, CA 90245 310-546-5781 X235 Hrapista@Comstock-homes.com	HITCH RANCH SPECIFIC PLAN SPECIFIC PLAN AREA 1	DOUG SPONDELLO dspondello@moorparkca.gov (805) 517-6251	01/17/2019	COMPLETE	NORTH OF UNION PACIFIC RAILROAD TRACKS AND WEST OF TERMINUS OF CASEY ROAD	SP No. 1 / 2019-01 TTM 2019-01 RPD 2019-01 ZC 2019-01 GPA 2020-01 DA 2019-01	ENVIRONMENTAL IMPACT REPORT (IN PROCESS)	IN REVIEW PROCESS	SPECIFIC PLAN INCLUDING 755 SINGLE AND MULTI-FAMILY RESIDENCES, OPEN SPACE, MANUFACTURED SLOPES, DETENTION BASINS, PRIVATE RECREATION, PUBLIC PARK	277
JOHN C. CHIU, FLP-N C/O JOHN NEWTON 159 MOONSONG COURT MOORPARK, CA 93021 805-529-3494 newtoncnslt@msn.com	EVERETT STREET TERRACES	SHANNA FARLEY sfarley@moorparkca.gov (805) 517-6236	12/05/2005	COMPLETE	NORTHEAST CORNER OF EVERETT STREET AND WALNUT CANYON ROAD	RPD 2005-02 GPA 2005-02 ZC 2005-02 TTM 5739 DA 2005-04 SPA No. 4 to DTSP 95-1	INITIAL STUDY (IN PROCESS)	IN REVIEW PROCESS	60 CONDOMINIUM RESIDENCES	2.43
WEST POINTE HOMES MOORPARK 67, LLC JAMES RASMUSSEN 26500 WEST AGOURA ROAD #652 CALABASAS, CA 91302 805-370-0165 james@rasmussendevelopment.com	NORTH RANCH	DOUG SPONDELLO dspondello@moorparkca.gov (805) 517-6251	10/31/2016	INCOMPLETE	5979 GABBERT ROAD	RPD 2016-02 GPA 2016-02 ZC 2016-02 TTM 5847 DA 2016-02	INITIAL STUDY (IN PROCESS)	IN REVIEW PROCESS	134 SINGLE FAMILY HOMES AND 5 ESTATE LOTS	68.26
JOE OFTELIE WARMINGTON RESIDENTIAL 3090 PULLMAN STREET COSTA MESA, CA 92626 (714)557-5511 joftelie@warmingtongroup.com	BELTRAMO RANCH	SHANNA FARLEY sfarley@moorparkca.gov (818) 642-6458	06/04/2021	COMPLETE	SOUTH OF LOS ANGELES AVENUE, EAST OF TIERRA REJADA ROAD, AND WEST OF MAUREEN LANE	GPA 2021-01 DA 2021-01 ZCH 2021-01 VTTM 2021-01 RPD 2021-01	INITIAL STUDY (IN PROCESS)	IN REVIEW PROCESS	NEW RESIDENTIAL COMMUNITY CONSISTING OF 47 SINGLE-FAMILY DETACHED HOMES AND PROGRAMMED OPEN SPACE AREAS	7.42
RESIDENTIAL PROJECTS – APPROVED, NOT YET UNDER CONSTRUCTION										
THE DALY GROUP / VINCE DALY 31255 CEDAR VALLEY DRIVE #323 WESTLAKE VILLAGE, CA 91361 805-309-6100 vincedaly@icloud.com	HIGH STREET STATION	CARLENE SAXTON csaxton@moorparkca.gov (805) 517-6236	09/6/2018	COMPLETE	226 HIGH STREET	RPD 2018-01 DA 2018-01 DDA 2018-01	MITIGATED NEGATIVE DECLARATION	APPROVED 10/7/20	79 APARTMENTS AND 13,656 SQUARE FEET COMMERCIAL MIXED USE	2.15

City of Moorpark, Community Development Department
799 Moorpark Avenue, Moorpark, CA 93021, 805-517-6230
LAND USE AND DEVELOPMENT PROJECTS

QUARTERLY STATUS REPORT FOR DECEMBER 2021

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APPLICANT / DEVELOPER	COMMON PROJECT NAME	CASE PLANNER	SUBMITTAL DATE	APPLICATION COMPLETE OR INCOMPLETE	SITE ADDRESS OR LOCATION	PERMIT(S)	CEQA STATUS	APPLICATION STATUS	PROJECT DESCRIPTION	ACRES (APPX.)
ALDERSGATE INVESTMENT, LLC ERNEST MANSI / MATT MANSI 300 ESPLANADE DRIVE #430 OXNARD, CA 93036 805-988-4114 ernie@aldersgatehome.com	CASEY ROAD SENIOR COMMUNITY	FREDDY CARRILLO fcarrillo@moorparkca.gov (805) 517-6224	09/3/2013	N/A	NORTH OF CASEY ROAD AND WEST OF WALNUT CANYON ROAD	RPD 2013-01 GPA 2013-02 ZC 2013-02 DA 2013-01	MITIGATED NEGATIVE DECLARATION	APPROVED 03/6/2019	390-UNIT SENIOR RETIREMENT COMMUNITY	50
			12/21/2021	UNDER REVIEW		FIRST AMENDMENT TO DA	UNDER REVIEW	UNDER REVIEW	ALLOW AFFORDABLE UNITS TO BE ONSITE AND FOR RENT AND SPLIT ONE BUILDING INTO THREE BUILDINGS.	
BIRDSALL GROUP, LLC SCOTT BIRDSALL 2300 ALESSANDRO DRIVE VENTURA, CA 93001 805-643-3200 scott@birdsall.io	CANYON CREST	SHANNA FARLEY sfarley@moorparkca.gov (805) 517-6236	08/13/2004	N/A	MARINE VIEW DRIVE, EAST OF WALNUT CANYON ROAD AT CHAMPIONSHIP DRIVE	RPD 2004-05 GPA 2004-03 ZC 2004-02 VTTM 5347 DA 2006-01	MITIGATED NEGATIVE DECLARATION	APPROVED 03/17/2006	21 SINGLE FAMILY RESIDENCES	42
CITY VENTURES MICHELLE THRAKULCHAVEE 3121 MICHELSON DRIVE #150 IRVINE, CA 92612 949-258-7536 michellet@cityventures.com	VISTAS AT MOORPARK	FREDDY CARRILLO fcarrillo@moorparkca.gov (805) 517-6224	05/06/1998	N/A	EAST OF WALNUT CANYON ROAD, NORTH OF WICKS ROAD	RPD 2014-01 GPA 1998-01 ZC 1998-01 VTTM 5130 DA 1998-03	MITIGATED NEGATIVE DECLARATION	APPROVED 03/18/2015	110 SINGLE FAMILY RESIDENCES	72
ESSEX MOORPARK, L.P. BOB LINDER 17461 DERIAN AVE #110 IRVINE, CA, 92614 949-929-8407 blinder@essex.com	ESSEX MOORPARK APARTMENTS	FREDDY CARRILLO fcarrillo@moorparkca.gov (805) 517-6224	09/24/2004	N/A	SOUTH OF CASEY ROAD AND WEST OF WALNUT CANYON ROAD	RPD 2012-02 GPA 2004-05 ZC 2004-04 DA	MITIGATED NEGATIVE DECLARATION	APPROVED 03/01/2017	200 APARTMENT RESIDENCES	11
			06/07/2021	N/A		FIRST AMENDMENT TO DA	PREVIOUSLY ADOPTED MITIGATED NEGATIVE DECLARATION	APPROVED 09/15/2021	200 APARTMENT RESIDENCES ALL AFFORDABLE	
PACIFIC COMMUNITIES NELSON CHUNG 1000 DOVE STREET #100 NEWPORT BEACH, CA 92660 949-660-8988 nelson@pcbinc.com	PACIFIC ARROYO • VERBENA (Detached Townhouses) • FUCHSIA (Single-Family Detached)	SHANNA FARLEY sfarley@moorparkca.gov (805) 517-6236	04/15/2016	N/A	SOUTH OF LOS ANGELES AVENUE AND EAST OF MAUREEN LANE	RPD 2016-01 GPA 2016-01 ZC 2016-01 VTTM 5882 DA 2016-01	MITIGATED NEGATIVE DECLARATION	APPROVED 09/20/2017	284 SINGLE FAMILY RESIDENCES	37.09
SPRING ROAD, LLC MIKE ASHLEY/DON DUNCAN 5300 WHITMAN ROAD,	DUNCAN/ASHLEY 4875 SPRING ROAD	FREDDY CARRILLO fcarrillo@moorparkca.gov (805) 517-6224	11/17/2015	N/A	4875 SPRING ROAD AND 384 LOS ANGELES AVENUE	RPD 2015-02 GPA 2015-02 ZC 2015-03	MITIGATED NEGATIVE DECLARATION	APPROVED 12/06/2017	95 UNIT TOWNHOUSE CONDOMINIUM	8

City of Moorpark, Community Development Department
799 Moorpark Avenue, Moorpark, CA 93021, 805-517-6230
LAND USE AND DEVELOPMENT PROJECTS
QUARTERLY STATUS REPORT FOR DECEMBER 2021
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APPLICANT / DEVELOPER	COMMON PROJECT NAME	CASE PLANNER	SUBMITTAL DATE	APPLICATION COMPLETE OR INCOMPLETE	SITE ADDRESS OR LOCATION	PERMIT(S)	CEQA STATUS	APPLICATION STATUS	PROJECT DESCRIPTION	ACRES (APPX.)
HIDDEN HILLS, CA 91302 818-888-6469 mike@aci5300.com						VTTM 5972 DA 2015-01				
MENASHE KOZAR 12725 VENTURA BLVD. SUITE D STUDIO CITY, CA 91604 818-927-4130 manny@summerlandpartners.com	GREEN ISLAND VILLAS	FREDDY CARRILLO fcarrillo@moorparkca.gov (805) 517-6224	10/10/2014	N/A	635 LOS ANGELES AVENUE	RPD 2014-02 GPA 2014-01 ZC 2014-01 TT 5869 DA 2014-03	NEGATIVE DECLARATION	APPROVED 02/19/2020	69 TOWNHOUSE CONDOMINIUMS	4
			11/13/2020	N/A		MOD 1 TO RPD 2014-02 FIRST AMENDMENT TO DA 2014-03	PREVIOUSLY ADOPTED NEGATIVE DECLARATION	APPROVED 09/01/2021	63 TOWNHOUSE CONDOMINIUMS	
RESIDENTIAL PROJECTS – UNDER CONSTRUCTION										
OAKMONT SENIOR LIVING ATTN: JAMES LAWSON, AICP 9240 OLD REDWOOD HIGHWAY, SUITE 200 WINDSOR, CA 95492 james.lawson@oakmontsl.com	OAKMONT SENIOR LIVING	DOUG SPONDELLO dspondello@moorparkca.gov (805) 517-6251	04/20/2018	N/A	13960 PEACH HILL ROAD	CPD 2018-01	MITIGATED NEGATIVE DECLARATION	UNDER CONSTRUCTION	77 UNIT SENIOR LIVING FACILITY	2.78
COMMERCIAL / INDUSTRIAL / OTHER PROJECTS – IN REVIEW										
PATRIOT INVESTORS, LP SHIMON HEIDINGSFELD 6061 GABBERT ROAD MOORPARK, CA 93021 (805) 807-8634 Rabbi@jewishmoorpark.com	SYNAGOGUE AND JEWISH CENTER	FREDDY CARRILLO fcarrillo@moorparkca.gov (805) 517-6224	06/24/2020	INCOMPLETE	6061 GABBERT ROAD	CUP 2020-03	EXEMPT FROM CEQA	IN REVIEW PROCESS	SYNAGOGUE AND JEWISH CENTER	5.5
TOM SCHLENDER 774 WILDWOOD AVENUE THOUSAND OAKS, CA 91360 (805) 231-7300 TOMS@WDCAPPLICANCES.COM	WAREHOUSE DISCOUNT CENTER DEVELOPMENT AGREEMENT AMENDMENT	SHANNA FARLEY sfarley@moorparkca.gov (805) 517-6236	5/4/2020	COMPLETE	14349 WHITE SAGE ROAD	AMENDMENT 1 TO DA 2004-02	NEGATIVE DECLARATION (PENDING)	INITIAL STUDY/NEGATIVE DECLARATION (IN PROCESS)	DA AMENDMENT TO CONSIDER EXPANDED USES ALLOWED ON SITE	6.08
PATRIOT INVESTORS, LP MARTIN TEITELBAUM 29601 AGOURA ROAD AGOURA HILLS, CA 91301 (805) 383-2221 Martin@mtconstruct.com	PATRIOT OFFICE COMPLEX AND TRACT MAP	SHANNA FARLEY sfarley@moorparkca.gov (805) 517-6236	09/22/2021	INCOMEPLETE	858 PATRIOT DRIVE	CPD 2021-01 VTTM 2021-02	PREVIOUSLY ADOPTED EIR	IN REVIEW PROCESS	28,955 SQUARE-FOOT OFFICE COMPLEX WITH 7 SHELL BUILDINGS.	2.59

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APPLICANT / DEVELOPER	COMMON PROJECT NAME	CASE PLANNER	SUBMITTAL DATE	APPLICATION COMPLETE OR INCOMPLETE	SITE ADDRESS OR LOCATION	PERMIT(S)	CEQA STATUS	APPLICATION STATUS	PROJECT DESCRIPTION	ACRES (APPX.)
COMMERCIAL / INDUSTRIAL / OTHER PROJECTS – APPROVED, NOT YET UNDER CONSTRUCTION										
A-B PROPERTIES C/O JOHN NEWTON 159 MOONSONG COURT MOORPARK, CA 93021 805-529-3494 newtoncnslt@msn.com	TENTATIVE TRACT NO. 5906 (A RESUBDIVISION OF TRACT 5147)	FREDDY CARRILLO fcarrillo@moorparkca.gov (805) 517-6224	08/17/2012	N/A	NORTH OF UNION PACIFIC RAILROAD TRACKS, WEST OF GABBERT ROAD	TT 5906 (PRIOR TR 5147)	MITIGATED NEGATIVE DECLARATION	FINAL MAP APPROVED	17 LOT INDUSTRIAL SUBDIVISION	36
TRILIAD DEVELOPMENT VALERIE DRAEGER 270 CONEJO RIDGE AVENUE #200 THOUSAND OAKS, CA 91361 (805) 379-9800 mail@triliad.com	MOORPARK WEST STUDIOS	SHANNA FARLEY sfarley@moorparkca.gov (805) 517-6236	03/23/2009	N/A	LOS ANGELES AVENUE, WEST OF SCE SUBSTATION	IPD 2009-01 GPA 2009-01 ZC 2009-01 DA 2009-02	MITIGATED NEGATIVE DECLARATION	APPROVED 10/05/2011	MOTION PICTURE STUDIO COMPLEX	37
NEARON,NICK RINI 101 YGNACIO VALLEY ROAD, SUITE 450 WALNUT CREEK, CA 94596 (925) 743-3300 NRini@nearon.com	NEARON	FREDDY CARRILLO fcarrillo@moorparkca.gov (805) 517-6224	04/12/2017	N/A	400 SCIENCE DRIVE	TPM 2016-01 IPD 2017-01	EXEMPT FROM CEQA	APPROVED 12/6/2017	35,330 SQUARE-FOOT INDUSTRIAL BUILDING	2.2
PAUL MINOO 4M INVESTMENT CORPORTATION 6222 WILSHIRE BLVD, SUITE 270 LOS ANGELES, CA 90048 (213) 624.4040 x100 paul@4minvestment.com	5751 CONDOR DRIVE	FREDDY CARRILLO fcarrillo@moorparkca.gov (805) 517-6224	11/19/2019	N/A	5751 CONDOR DRIVE	IPD 2019-01 CUP 2020-02	EXEMPT FROM CEQA	APPROVED 07/15/2020	48,211 SQ. FT. INDUSTRIAL BUILDING	3.5
			10/30/2020	N/A		MOD 1 TO IPD 2019-01 AND CUP 2020-02		APPROVED 06/16/2021	UNDERGROUNDING OF UTILITY POLES AND SKYLIGHTS	
ABDUL SALEHI 14711 DARTHMOUTH CIRCLE TUSTIN, CA 92780 (949) 701-3346 abdul.salehi@twc.com	13816 PRINCETON AVENUE	FREDDY CARRILLO fcarrillo@moorparkca.gov (805) 517-6224	08/05/2020	COMPLETE	13816 PRINCETON AVENUE	CPD 2020-01 CUP 2020-04	EXEMPT FROM CEQA	APPROVED 07/07/2021	DEVELOP A 6,186 SQ. FT. AUTO REPAIR SHOP	0.57
SUNBELT ENTERPRISES 5715 Mesmer Avenue Los Angeles, CA 90230 Frank Marasco (805) 338-4140 Frankmarasco45@gmail.com	Hilltop (Sunbelt/Kavlico)	CARLENE SAXTON csaxton@moorparkca.gov (805) 517-6281	12/23/2021	N/A	Hilltop Parcel (APN 513-0-010-285 and 513-0-010-295)	GPA 2015-01 CH 2015-02		APPROVED 06/01/2016 and 07/20/2016	ZONE CHANGE FROM RE TO M-1	36
						Modification to Deed Restriction	EXEMPT FROM CEQA	PENDING	MODIFICATION TO ALLOW RESIDENTIAL USES AS PART OF THE DEED RESTRICTION.	

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APPLICANT / DEVELOPER	COMMON PROJECT NAME	CASE PLANNER	SUBMITTAL DATE	APPLICATION COMPLETE OR INCOMPLETE	SITE ADDRESS OR LOCATION	PERMIT(S)	CEQA STATUS	APPLICATION STATUS	PROJECT DESCRIPTION	ACRES (APPX.)
COMMERCIAL / INDUSTRIAL / OTHER PROJECTS – UNDER CONSTRUCTION										
DOUG HINRICHS 18831 BARDEEN AVENUE, ST 100 IRVINE, CA 92612 (949) 862-2135 Doug.hinrichs@hparchs.com	DCX6- AMAZON	PHILIP NEUMANN pneumann@moorparkca.gov (805) 517-6230	01/28/2020	COMPLETE	6000 CONDOR DRIVE	CUP 2020-01	MITIGATED NEGATIVE DECLARATION	UNDER CONSTRUCTION	CONVERSION OF AN EXISTING INDUSTRIAL BUILDING INTO A 189,364 SQ.FT. DISTRIBUTION AND TRANSPORTATION FACILITY	11.78

VCTC MODEL VMT DATA

BELTRAMO RANCH VMT FORECASTS - SOURCE: VCTC MODEL DATA

VCTC TAZ	HOUSEHOLDS	RESIDENTS	VMT PER CAPITA	TOTAL VMT
60123100	221	702	11.99	8416.98
60127200	1000	2239	11.81	26442.59
60123200	665	2165	25.33	54839.45
60127100	745	3856	16.09	62043.04
TOTALS	**2631**	**8962**	**16.93**	**151742.06**

MOORPARK HOME BASE VMT =	**20.31**
HOME BASE VMT THRESHOLDS (15% LESS) =	**17.26**
PROJECT VMT =	**16.93**
IMPACT?	**NO**

PROJECT VMT ->	HOUSEHOLDS(a)	RESIDENTS PER UNIT	TOTAL RESIDENTS	VMT PER CAPITA	TOTAL VMT
	45	3.41	153	16.93	2590.55

(a) Analysis assumed 47 new units - 2 existing units to be removed.

INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS

Reference 1 - Los Angeles Avenue/Tierra Rejada Road
Reference 2 - Los Angeles Avenue/Maureen Lane
Reference 3 - Los Angeles Avenue/Moorpark Avenue
Reference 4 - Los Angeles Avenue/Miller Parkway
Reference 5 - State Route 23 Southbound Ramps/Los Angeles Avenue
Reference 6 - State Route 23 Northbound Ramps/Los Angeles Avenue

#19087 - BELTRAMO RANCH PROJECT REF: 01 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***APRIL 18, 2019***

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

N/S STREET: ***TIERRA REJADA ROAD***

E/W STREET: ***LOS ANGELES AVENUE***

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:	**230**	**208**	**561**	**45**	**225**	**91**	**101**	**728**	**240**	**356**	**574**	**47**
(B) PROJECT-ADDED:	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**5**	**2**	**0**
(C) CUMULATIVE:	**230**	**215**	**565**	**70**	**250**	**100**	**110**	**820**	**290**	**400**	**645**	**60**

GEOMETRICS

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

TRAFFIC SCENARIOS

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

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1500	230	230	230	230	0.15 *	0.15 *	0.15 *	0.15 *
NBT	1	1600	208	208	215	215	0.130	0.130	0.134	0.134
NBR	1	1500	303	304	305	306	0.202	0.203	0.203	0.204
SBL	1	1500	45	45	70	70	0.030	0.030	0.047	0.047
SBT	1	1600	225	225	250	250	0.141 *	0.141 *	0.156 *	0.156 *
SBR	1	1500	91	91	100	100	0.06	0.06	0.07	0.07
EBL	1	1500	101	101	110	110	0.07	0.07	0.07	0.07
EBT	2	3200	728	729	820	821	0.228 *	0.228 *	0.256 *	0.257 *
EBR	1	1500	240	240	290	290	0.16	0.16	0.19	0.19
WBL	2	3000	356	361	400	405	0.12 *	0.12 *	0.13 *	0.14 *
WBT	2	3200	574	576	645	647	0.179	0.180	0.202	0.202
WBR	1	1500	47	47	60	60	0.031	0.031	0.040	0.040
					LOST TIME:		0.10	0.10	0.10	0.10
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.741**	**0.742**	**0.798**	**0.801**
					SCENARIO LEVEL OF SERVICE:		C	C	C	C

NOTES:

a *Right turn volume adjusted to account for overlap phase with westbound left-turn*

Print ******

#19087 - BELTRAMO RANCH PROJECT REF: 01 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***APRIL 18, 2019***

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

N/S STREET: ***TIERRA REJADA ROAD***

E/W STREET: ***LOS ANGELES AVENUE***

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:	**129**	**92**	**346**	**44**	**168**	**117**	**89**	**720**	**248**	**321**	**743**	**30**
(B)	PROJECT-ADDED:	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**2**	**0**	**3**	**2**	**0**
(C)	CUMULATIVE:	**130**	**-110**	**350**	**65**	**190**	**130**	**105**	**850**	**295**	**350**	**1000**	**65**

GEOMETRICS

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

TRAFFIC SCENARIOS

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

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1500	129	129	130	130	0.09 *	0.09 *	0.09 *	0.09 *
NBT	1	1600	92	92	-110	-110	0.058	0.058	0.000	0.000
NBR	1	1500	187	190	189	192	0.125	0.127	0.126	0.128
SBL	1	1500	44	44	65	65	0.029	0.029	0.043	0.043
SBT	1	1600	168	168	190	190	0.105 *	0.105 *	0.119 *	0.119 *
SBR	1	1500	117	117	130	130	0.08	0.08	0.09	0.09
EBL	1	1500	89	89	105	105	0.06	0.06	0.07	0.07
EBT	2	3200	720	722	850	852	0.225 *	0.226 *	0.266 *	0.266 *
EBR	1	1500	248	248	295	295	0.17	0.17	0.20	0.20
WBL	2	3000	321	324	350	353	0.11 *	0.11 *	0.12 *	0.12 *
WBT	2	3200	743	745	1000	1002	0.232	0.233	0.313	0.313
WBR	1	1500	30	30	65	65	0.020	0.020	0.043	0.043
					LOST TIME:		0.10	0.10	0.10	0.10
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.623**	**0.625**	**0.689**	**0.690**
					SCENARIO LEVEL OF SERVICE:		**B**	**B**	**B**	**B**

NOTES:

a *Right turn volume adjusted to account for overlap phase with westbound left-turn*

Print ******

#19087 - BELTRAMO RANCH PROJECT REF: 02 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *APRIL 18, 2019*

TIME PERIOD: *AM PEAK HOUR*

N/S STREET: *MAUREEN LANE*

E/W STREET: *LOS ANGELES AVENUE*

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:	3	0	21	31	0	13	97	1236	1	7	961	227
(B) PROJECT-ADDED:	0	0	0	0	0	0	7	17	0	0	6	0
(C) CUMULATIVE:	5	0	25	35	0	15	100	1350	5	10	1085	230

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND LTR	SOUTH BOUND LTR	EAST BOUND L TT TR	WEST BOUND L TT TR

TRAFFIC SCENARIOS

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

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	0	0	3	3	5	5	-	-	-	-
NBT	1	1600	0	0	0	0	0.015 *	0.015 *	0.019 *	0.019 *
NBR	0	0	21	21	25	25	-	-	-	-
SBL	0	0	31	31	35	35	-	-	-	-
SBT	1	1600	0	0	0	0	0.028 *	0.028 *	0.031 *	0.031 *
SBR	0	0	13	13	15	15	-	-	-	-
EBL	1	1500	97	104	100	107	0.07 *	0.07 *	0.07 *	0.07 *
EBT	3	4800	1236	1253	1350	1367	0.258	0.261	0.282	0.286
EBR	0	0	1	1	5	5	-	-	-	-
WBL	1	1500	7	7	10	10	0.01	0.01	0.01	0.01
WBT	3	4800	961	967	1085	1091	0.248 *	0.249 *	0.274 *	0.275 *
WBR	0	0	227	227	230	230	-	-	-	-
					LOST TIME:		0.10	0.10	0.10	0.10
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.456**	**0.461**	**0.491**	**0.496**
					SCENARIO LEVEL OF SERVICE:		A	A	A	A

NOTES:

Printed: 02/07/22

#19087 - BELTRAMO RANCH PROJECT **REF:** 02 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *APRIL 18, 2019*

TIME PERIOD: *PM PEAK HOUR*

N/S STREET: *MAUREEN LANE*

E/W STREET: *LOS ANGELES AVENUE*

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:	**2**	**0**	**14**	**202**	**0**	**87**	**13**	**1093**	**4**	**24**	**1005**	**30**
(B) PROJECT-ADDED:	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**11**	**0**	**0**	**20**	**0**
(C) CUMULATIVE:	**5**	**0**	**15**	**205**	**0**	**90**	**15**	**1245**	**5**	**25**	**1320**	**35**

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND LTR	SOUTH BOUND LTR	EAST BOUND L TT TR	WEST BOUND L TT TR

TRAFFIC SCENARIOS

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

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	0	0	2	2	5	5	-	-	-	-
NBT	1	1600	0	0	0	0	0.010 *	0.010 *	0.013 *	0.013 *
NBR	0	0	14	14	15	15	-	-	-	-
SBL	0	0	202	202	205	205	-	-	-	-
SBT	1	1600	0	0	0	0	0.181 *	0.181 *	0.184 *	0.184 *
SBR	0	0	87	87	90	90	-	-	-	-
EBL	1	1500	13	18	15	20	0.01	0.01	0.01	0.01
EBT	3	4800	1093	1104	1245	1256	0.229 *	0.231 *	0.260 *	0.263 *
EBR	0	0	4	4	5	5	-	-	-	-
WBL	1	1500	24	24	25	25	0.02 *	0.02 *	0.02 *	0.02 *
WBT	3	4800	1005	1025	1320	1340	0.216	0.220	0.282	0.286
WBR	0	0	30	30	35	35	-	-	-	-
					LOST TIME:		0.10	0.10	0.10	0.10
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.536**	**0.538**	**0.574**	**0.577**
					SCENARIO LEVEL OF SERVICE:		A	A	A	A

NOTES:

Printed: 02/07/22

#19087 - BELTRAMO RANCH PROJECT REF: 03 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***APRIL 18, 2019***

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

N/S STREET: ***MOORPARK AVENUE***

E/W STREET: ***LOS ANGELES AVENUE***

CONTROL TYPE ***SIGNAL***

TRAFFIC VOLUME SUMMARY

	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
VOLUMES	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	**64**	**86**	**103**	**164**	**44**	**105**	**141**	**968**	**41**	**99**	**830**	**121**
(B) PROJECT-ADDED:	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**15**	**0**	**0**	**6**	**0**
(C) CUMULATIVE:	**65**	**90**	**105**	**220**	**45**	**130**	**180**	**1135**	**45**	**100**	**1130**	**150**

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L LT R	L LTR R	L TT TR	L TT R

TRAFFIC SCENARIOS

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

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	0	0	64	64	65	65	-	-	-	-
NBT	2	3200	86	86	90	90	0.047	0.047	0.048	0.048
NBR	1	1500	56	56	57	57	0.037	0.037	0.038	0.038
SBL	0	0	164	164	220	220	-	-	-	-
SBT	3	4800	44	44	45	45	0.065 *	0.065 *	0.082 *	0.082 *
SBR	0	0	105	105	130	130	-	-	-	-
EBL	1	1500	141	142	180	181	0.09	0.10	0.12	0.12
EBT	3	4800	968	983	1135	1150	0.210 *	0.213 *	0.246 *	0.249 *
EBR	0	0	41	41	45	45	-	-	-	-
WBL	1	1500	99	99	100	100	0.07 *	0.07 *	0.07 *	0.07 *
WBT	2	3200	830	836	1130	1136	0.259	0.261	0.353	0.355
WBR	1	1500	121	121	150	150	0.081	0.081	0.100	0.100
					LOST TIME:		0.10	0.10	0.10	0.10
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.441**	**0.444**	**0.495**	**0.498**
					SCENARIO LEVEL OF SERVICE:		A	A	A	A

NOTES:

a *Right turn volume adjusted to account for overlap phase with westbound left-turn*

Print ******

#19087 - BELTRAMO RANCH PROJECT REF: 03 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***APRIL 18, 2019***

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

N/S STREET: ***MOORPARK AVENUE***

E/W STREET: ***LOS ANGELES AVENUE***

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:	**46**	**83**	**132**	**195**	**112**	**94**	**148**	**934**	**55**	**269**	**949**	**109**
(B) PROJECT-ADDED:	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**9**	**0**	**0**	**18**	**0**
(C) CUMULATIVE:	**50**	**85**	**135**	**290**	**115**	**130**	**160**	**1250**	**55**	**270**	**1200**	**200**

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L LT R	L LT R R	L TT TR	L TT R

TRAFFIC SCENARIOS

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

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	0	0	46	46	50	50	-	-	-	-
NBT	2	3200	83	83	85	85	0.040	0.040	0.042	0.042
NBR	1	1500	71	71	73	73	0.047	0.047	0.049	0.049
SBL	0	0	195	195	290	290	-	-	-	-
SBT	3	4800	112	112	115	115	0.084 *	0.084 *	0.111 *	0.112 *
SBR	0	0	94	95	130	131	-	-	-	-
EBL	1	1500	148	149	160	161	0.10	0.10	0.11	0.11
EBT	3	4800	934	943	1250	1259	0.206 *	0.208 *	0.272 *	0.274 *
EBR	0	0	55	55	55	55	-	-	-	-
WBL	1	1500	269	269	270	270	0.18 *	0.18 *	0.18 *	0.18 *
WBT	2	3200	949	967	1200	1218	0.297	0.302	0.375	0.381
WBR	1	1500	109	109	200	200	0.073	0.073	0.133	0.133
					LOST TIME:		0.10	0.10	0.10	0.10
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.569**	**0.571**	**0.663**	**0.666**
					SCENARIO LEVEL OF SERVICE:		**A**	**A**	**B**	**B**

NOTES:

a *Right turn volume adjusted to account for overlap phase with westbound left-turn*

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#19087 - BELTRAMO RANCH PROJECT REF: 04 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***APRIL 18, 2019***

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

N/S STREET: ***MILLER PARKWAY***

E/W STREET: ***LOS ANGELES AVENUE***

CONTROL TYPE ***SIGNAL***

TRAFFIC VOLUME SUMMARY

	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
VOLUMES	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	**59**	**10**	**58**	**10**	**1**	**15**	**55**	**1342**	**107**	**68**	**1021**	**114**
(B) PROJECT-ADDED:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**13**	**0**	**0**	**6**	**0**
(C) CUMULATIVE:	**60**	**10**	**60**	**10**	**5**	**15**	**55**	**1345**	**110**	**70**	**1305**	**115**

GEOMETRICS

	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
LANE GEOMETRICS	LL T R	LTR	L TTT R	LL TTT R

TRAFFIC SCENARIOS

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

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	2	3000	59	59	60	60	0.02 *	0.02 *	0.02 *	0.02 *
NBT	1	1600	10	10	10	10	0.006	0.006	0.006	0.006
NBR	1	1500	31	31	32	32	0.021	0.021	0.021	0.021
SBL	0	0	10	10	10	10	-	-	-	-
SBT	1	1600	1	1	5	5	0.016 *	0.016 *	0.019 *	0.019 *
SBR	0	0	15	15	15	15	-	-	-	-
EBL	1	1500	55	55	55	55	0.04	0.04	0.04	0.04
EBT	3	4800	1342	1355	1345	1358	0.280 *	0.282 *	0.280 *	0.283 *
EBR	1	1500	107	107	110	110	0.07	0.07	0.07	0.07
WBL	2	3000	68	68	70	70	0.02 *	0.02 *	0.02 *	0.02 *
WBT	3	4800	1021	1027	1305	1311	0.213	0.214	0.272	0.273
WBR	1	1500	114	114	115	115	0.076	0.076	0.077	0.077
					LOST TIME:		0.10	0.10	0.10	0.10
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.439**	**0.441**	**0.442**	**0.445**
					SCENARIO LEVEL OF SERVICE:		A	A	A	A

NOTES:

a *Right turn volume adjusted to account for overlap phase with westbound left-turn*

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#19087 - BELTRAMO RANCH PROJECT REF: 04 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***APRIL 18, 2019***

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

N/S STREET: ***MILLER PARKWAY***

E/W STREET: ***LOS ANGELES AVENUE***

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:	**204**	**4**	**83**	**108**	**17**	**40**	**22**	**1235**	**109**	**101**	**1587**	**17**
(B) PROJECT-ADDED:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**15**	**0**
(C) CUMULATIVE:	**210**	**5**	**90**	**110**	**20**	**40**	**25**	**1540**	**110**	**110**	**1720**	**20**

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	LL T R	LTR	L TTT R	LL TTT R

TRAFFIC SCENARIOS

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

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	2	3000	204	204	210	210	0.07 *	0.07 *	0.07 *	0.07 *
NBT	1	1600	4	4	5	5	0.003	0.003	0.003	0.003
NBR	1	1500	45	45	49	49	0.030	0.030	0.033	0.033
SBL	0	0	108	108	110	110	-	-	-	-
SBT	1	1600	17	17	20	20	0.103 *	0.103 *	0.106 *	0.106 *
SBR	0	0	40	40	40	40	-	-	-	-
EBL	1	1500	22	22	25	25	0.02	0.02	0.02	0.02
EBT	3	4800	1235	1243	1540	1548	0.257 *	0.259 *	0.321 *	0.323 *
EBR	1	1500	109	109	110	110	0.07	0.07	0.07	0.07
WBL	2	3000	101	101	110	110	0.03 *	0.03 *	0.04 *	0.04 *
WBT	3	4800	1587	1602	1720	1735	0.331	0.334	0.358	0.361
WBR	1	1500	17	17	20	20	0.011	0.011	0.013	0.013
					LOST TIME:		0.10	0.10	0.10	0.10
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.562**	**0.564**	**0.634**	**0.636**
					SCENARIO LEVEL OF SERVICE:		**A**	**A**	**B**	**B**

NOTES:

a *Right turn volume adjusted to account for overlap phase with westbound left-turn*

Print ******

#19087 - BELTRAMO RANCH PROJECT

REF: 05 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *APRIL 18, 2019*

TIME PERIOD: *AM PEAK HOUR*

N/S STREET: *STATE ROUTE 23/118 SOUTHBOUND RAMPS*

E/W STREET: *LOS ANGELES AVENUE*

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:	0	0	0	28	2	842	0	755	728	2	482	0
(B) PROJECT-ADDED:	0	0	0	0	0	2	0	5	6	0	2	0
(C) CUMULATIVE:	0	0	0	30	5	980	0	915	890	5	610	0

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
		LT R	TT R	L T

TRAFFIC SCENARIOS

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

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL		0	0	0	0	0	-	-	-	-
NBT		0	0	0	0	0	-	-	-	-
NBR		0	0	0	0	0	-	-	-	-
SBL	0	0	28	28	30	30	-	-	-	-
SBT	1	1600	2	2	5	5	0.019 *	0.019 *	0.022 *	0.022 *
SBR	1	1500	842	844	980	982	0.56	0.56	0.65	0.66
EBL	0	0	0	0	0	0	-	-	-	-
EBT	2	3200	755	760	915	920	0.236	0.238	0.286	0.288
EBR	1	1500	728	734	890	896	0.49	0.49	0.59	0.60
WBL	1	1500	2	2	5	5	0.00	0.00	0.00	0.00
WBT	1	1600	482	484	610	612	0.301 *	0.303 *	0.381 *	0.383 *
WBR	0	0	0	0	0	0	-	-	-	-
					LOST TIME:		0.10	0.10	0.10	0.10
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.420**	**0.422**	**0.503**	**0.505**
					SCENARIO LEVEL OF SERVICE:		A	A	A	A

NOTES:

a *Right turn volume adjusted to account for overlap phase with westbound left-turn*

Print ******

#19087 - BELTRAMO RANCH PROJECT

REF: 05 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *APRIL 18, 2019*

TIME PERIOD: *PM PEAK HOUR*

N/S STREET: *STATE ROUTE 23/118 SOUTHBOUND RAMPS*

E/W STREET: *LOS ANGELES AVENUE*

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:	0	0	0	37	0	897	0	761	666	27	989	0
(B) PROJECT-ADDED:	0	0	0	0	0	6	0	3	4	0	7	0
(C) CUMULATIVE:	0	0	0	40	0	900	0	935	680	30	1150	0

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
		LT R	TT R	L T

TRAFFIC SCENARIOS

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

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL		0	0	0	0	0	-	-	-	-
NBT		0	0	0	0	0	-	-	-	-
NBR		0	0	0	0	0	-	-	-	-
SBL	0	0	37	37	40	40	-	-	-	-
SBT	1	1600	0	0	0	0	0.023 *	0.023 *	0.025 *	0.025 *
SBR	1	1500	897	903	900	906	0.60	0.60	0.60	0.60
EBL	0	0	0	0	0	0	-	-	-	-
EBT	2	3200	761	764	935	938	0.238	0.239	0.292	0.293
EBR	1	1500	666	670	680	684	0.44	0.45	0.45	0.46
WBL	1	1500	27	27	30	30	0.02	0.02	0.02	0.02
WBT	1	1600	989	996	1150	1157	0.618 *	0.623 *	0.719 *	0.723 *
WBR	0	0	0	0	0	0	-	-	-	-
					LOST TIME:		0.10	0.10	0.10	0.10
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.741**	**0.746**	**0.844**	**0.848**
					SCENARIO LEVEL OF SERVICE:		**C**	**C**	**D**	**D**

NOTES:

a *Right turn volume adjusted to account for overlap phase with westbound left-turn*

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#19087 - BELTRAMO RANCH PROJECT REF: 06 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***APRIL 18, 2019***

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

N/S STREET: ***STATE ROUTE23/118 NORTHBOUND RAMPS***

E/W STREET: ***LOS ANGELES AVENUE***

CONTROL TYPE ***SIGNAL***

TRAFFIC VOLUME SUMMARY

	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
VOLUMES	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	**495**	**0**	**36**	**0**	**0**	**0**	**0**	**43**	**711**	**3**	**11**	**0**
(B) PROJECT-ADDED:	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**
(C) CUMULATIVE:	**600**	**0**	**40**	**0**	**0**	**0**	**0**	**45**	**900**	**5**	**15**	**0**

GEOMETRICS

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

TRAFFIC SCENARIOS

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

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4		
NBL	2	3000	495	497	600	602	0.17 *	0.17 *	0.20 *	0.20 *		
NBT	0	0	0	0	0	0	-	-	-	-		
NBR	1	1500	19	19	22	22	0.013	0.013	0.015	0.015		
SBL		0	0	0	0	0	-	-	-	-		
SBT		0	0	0	0	0	-	-	-	-		
SBR		0	0	0	0	0	-	-	-	-		
EBL	0	0	0	0	0	0	-	-	-	-		
EBT	2	3200	43	43	45	45	0.236 *	0.237 *	0.295 *	0.297 *		
EBR	0	0	711	716	900	905	-	-	-	-		
WBL	0	0	3	3	5	5	-	-	-	-		
WBT	1	1600	11	11	15	15	0.009	0.009	0.013	0.013		
WBR	0	0	0	0	0	0	-	-	-	-		
					LOST TIME:		0.10	0.10	0.10	0.10		
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.501**	**0.503**	**0.595**	**0.598**		
					SCENARIO LEVEL OF SERVICE:		A	A	A	A		

NOTES:

a *Right turn volume adjusted to account for overlap phase with westbound left-turn*

Print ******

#19087 - BELTRAMO RANCH PROJECT REF: 06 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***APRIL 18, 2019***

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

N/S STREET: ***STATE ROUTE 23/118 NORTHBOUND RAMPS***

E/W STREET: ***LOS ANGELES AVENUE***

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:	**957**	**0**	**9**	**0**	**0**	**0**	**0**	**21**	**770**	**34**	**72**	**0**
(B) PROJECT-ADDED:	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**
(C) CUMULATIVE:	**1100**	**0**	**10**	**0**	**0**	**0**	**0**	**25**	**950**	**35**	**80**	**0**

GEOMETRICS

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

TRAFFIC SCENARIOS

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

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	2	3000	957	964	1100	1107	0.32 *	0.32 *	0.37 *	0.37 *
NBT	0	0	0	0	0	0	-	-	-	-
NBR	1	1500	5	5	5	5	0.003	0.003	0.003	0.003
SBL		0	0	0	0	0	-	-	-	-
SBT		0	0	0	0	0	-	-	-	-
SBR		0	0	0	0	0	-	-	-	-
EBL	0	0	0	0	0	0	-	-	-	-
EBT	2	3200	21	21	25	25	0.007	0.007	0.008	0.008
EBR	1	1500	770	773	950	953	0.51	0.52	0.63	0.64
WBL	0	0	34	34	35	35	-	-	-	-
WBT	1	1600	72	72	80	80	0.066 *	0.066 *	0.072 *	0.072 *
WBR	0	0	0	0	0	0	-	-	-	-
		LOST TIME:					0.10	0.10	0.10	0.10
		TOTAL INTERSECTION CAPACITY UTILIZATION:					**0.485**	**0.487**	**0.539**	**0.541**
		SCENARIO LEVEL OF SERVICE:					A	A	A	A

NOTES:

a *Right turn volume adjusted to account for overlap phase with westbound left-turn*

Print ******

HCS7 Two-Way Stop-Control Report

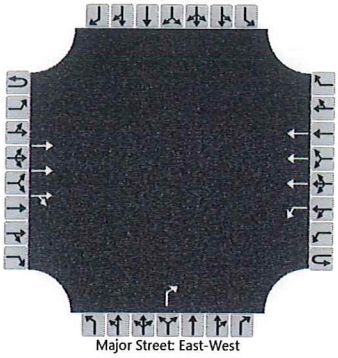
General Information

Analyst	DLD
Agency/Co.	ATE
Date Performed	5/13/21
Analysis Year	
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE + PROJECT

Site Information

Intersection	LA AVE/BELTRAMO RANCH RD
Jurisdiction	City of Moorpark
East/West Street	LA AVENUE
North/South Street	BELTRAMO RANCH ROAD
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	3	0	0	1	3	0		0	0	1		0	0	0
Configuration			T	TR		L	T					R				
Volume (veh/h)			1455	3	0	6	1112					24				
Percent Heavy Vehicles (%)					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)						5.3						7.1				
Critical Headway (sec)						5.36						7.16				
Base Follow-Up Headway (sec)						3.1						3.9				
Follow-Up Headway (sec)						3.13						3.93				

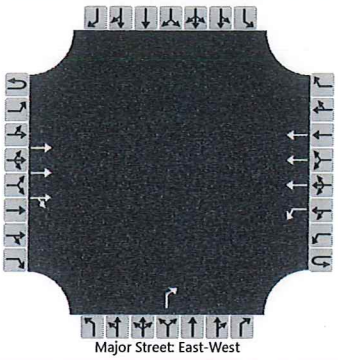
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						7						26				
Capacity, c (veh/h)						200						283				
v/c Ratio						0.03						0.09				
95% Queue Length, Q_{95} (veh)						0.1						0.3				
Control Delay (s/veh)						23.6						19.0				
Level of Service (LOS)						C						C				
Approach Delay (s/veh)					0.1				19.0							
Approach LOS									C							

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	DLD	Intersection	LA AVE/BELTRAMO RANCH RD
Agency/Co.	ATE	Jurisdiction	City of Moorpark
Date Performed	5/13/21	East/West Street	LA AVENUE
Analysis Year		North/South Street	BELTRAMO RANCH ROAD
Time Analyzed	PM PEAK HOUR	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	CUMULATIVE + PROJECT		

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	3	0	0	1	3	0		0	0	1		0	0	0
Configuration			T	TR		L	T					R				
Volume (veh/h)			1265	9	0	20	1420					16				
Percent Heavy Vehicles (%)					3	3						3				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized									No							
Median Type | Storage	Left Only								2							

Critical and Follow-up Headways

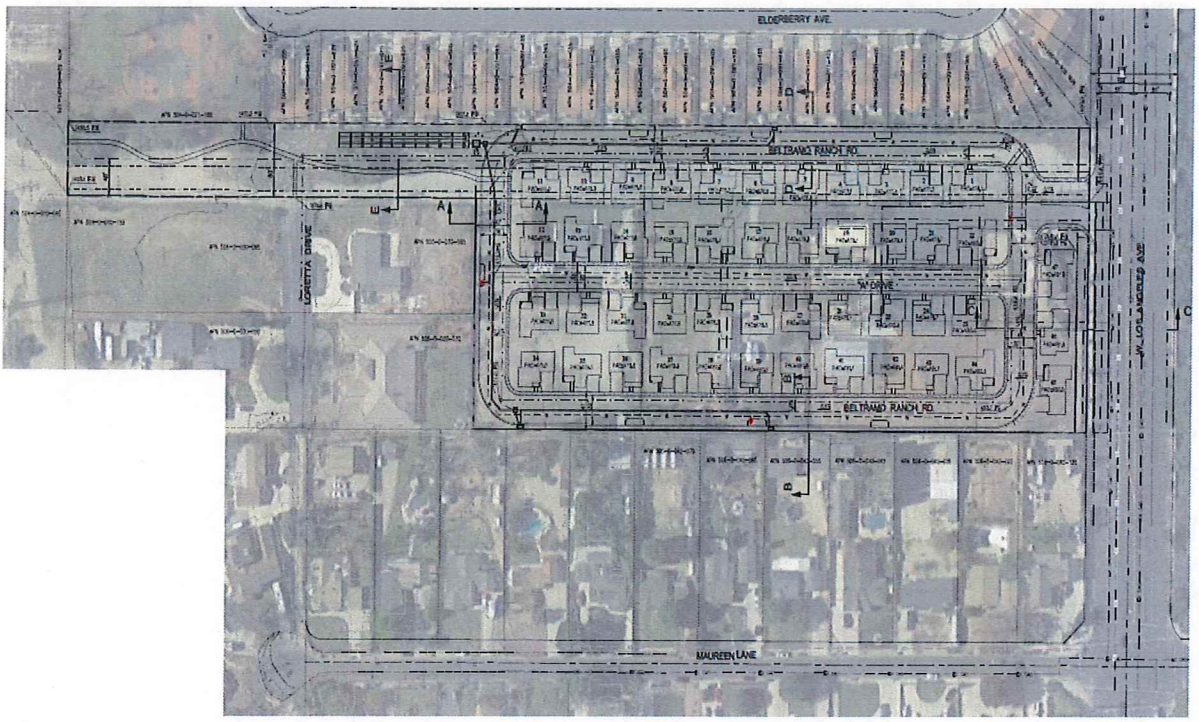
Base Critical Headway (sec)						5.3						7.1				
Critical Headway (sec)						5.36						7.16				
Base Follow-Up Headway (sec)						3.1						3.9				
Follow-Up Headway (sec)						3.13						3.93				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						22						17				
Capacity, c (veh/h)						252						329				
v/c Ratio						0.09						0.05				
95% Queue Length, Q_{95} (veh)						0.3						0.2				
Control Delay (s/veh)						20.7						16.5				
Level of Service (LOS)						C						C				
Approach Delay (s/veh)					0.3				16.5							
Approach LOS									C							

BELTRAMO RANCH RESIDENTIAL PROJECT
CITY OF MOORPARK, CALIFORNIA

REVISED TRAFFIC AND CIRCULATION STUDY



February 11, 2022 **ATE #19087**

Warmington Residential
3090 Pullman Street
Costa Mesa, California 92625

ASSOCIATED TRANSPORTATION ENGINEERS
100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110-1686 * (805) 687-4418 * FAX (805) 682-8509

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Since 1978

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

February 11, 2022 19087R02

Mr. Joe Oftelie, Vice President of Community Development
Warmington Residential
3090 Pullman Street
Costa Mesa, California 92625

REVISED TRAFFIC AND CIRCULATION STUDY
FOR THE BELTRAMO RANCH RESIDENTIAL PROJECT, CITY OF MOORPARK

Associated Transportation Engineers (ATE) has prepared the following revised traffic and circulation study for the Beltramo Ranch Residential Project, proposed in the City of Moorpark. The revised traffic and circulation study address comments provide by the City of Moorpark and Caltrans staff. It is understood that the study will be submitted to the City for environmental review.

We appreciate the opportunity to assist you with the Project.

Associated Transportation Engineers

Scott A. Schell
Principal Transportation Planner

CONTENTS

TABLES

FIGURES

INTRODUCTION

The following report contains an analysis of the traffic and circulation issues associated with the Beltramo Ranch Residential Project (the "Project") proposed in the City of Moorpark. The report evaluates existing and future traffic operations within the Project study area to determine the Project's consistency with the City's transportation policies. The roadways and intersections analyzed in the study were determined based on input provided by City of Moorpark and Caltrans staff. An evaluation of the Project's potential CEQA impacts is also provided based on the State's new CEQA requirements adopted under Senate Bill 743.

PROJECT DESCRIPTION

The Project site is located on the south side of Los Angeles Avenue (State Route 118) between Tierra Rejada Road and Maureen Avenue, as illustrated on Figure 1. The Project is located on a 7.2-acre site that is occupied by the Four Square Church and two single family residential homes. The Project is proposing to redevelop the site and construct 47 single family housing units. Figure 2 illustrates the Project site plan. Site access would be provided via Beltramo Ranch Road, which would be realigned. The access connection would allow left-turns and right-turns inbound but restrict outbound movements to right-turns. The realigned Beltramo Ranch Road access connection to Los Angeles Avenue would be designed to Caltrans standards.

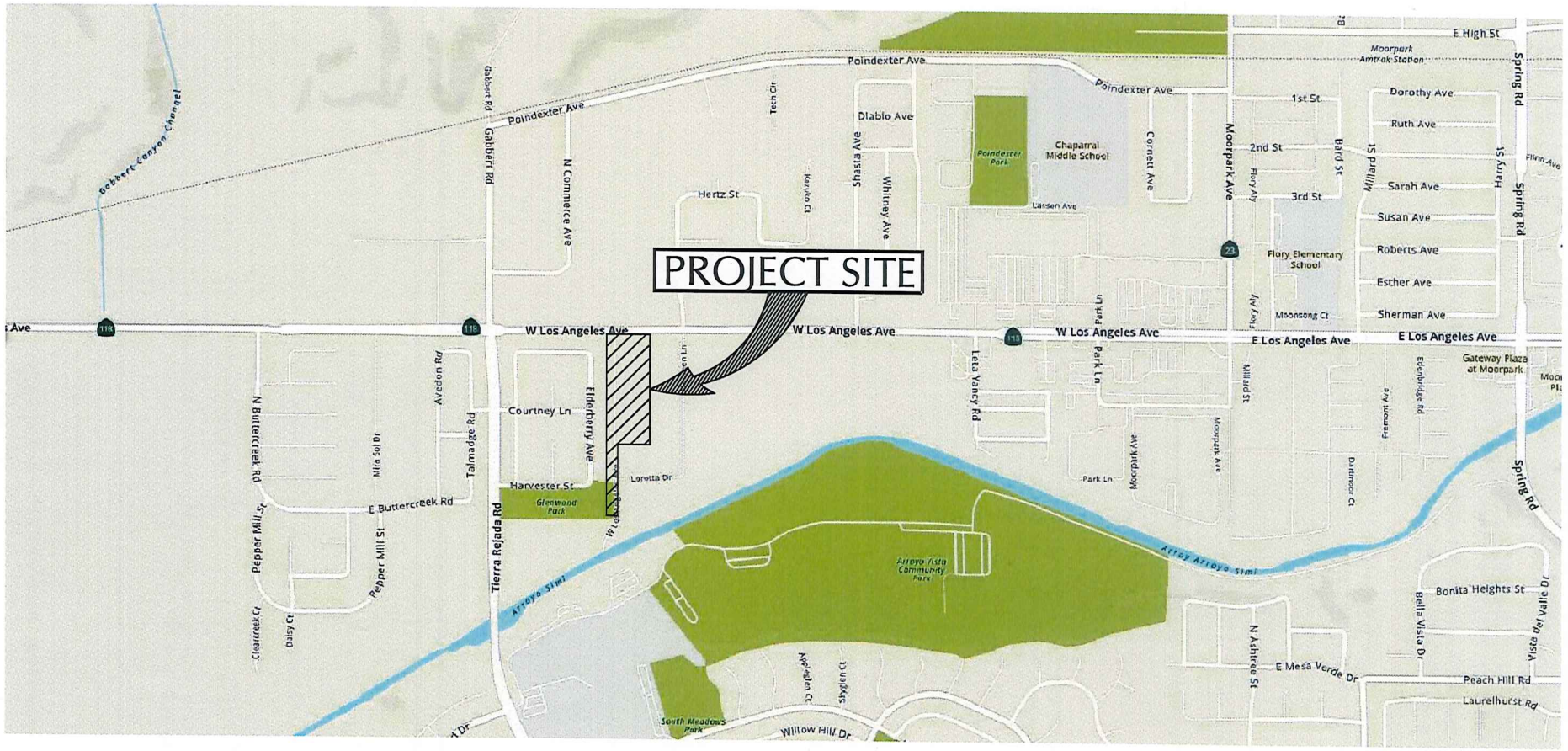
EXISTING CONDITIONS

Street Network

The Project site is served by a network of highways, arterial, collector, and local streets. Figure 3 illustrates the study-area street network, including the traffic controls and lane geometries at the key study-area intersections identified for analysis. The following text provides a brief discussion of the existing street network.

State Route 118 (Los Angeles Avenue), located adjacent to the Project site, is a 2- to 6-lane arterial highway that extends from the State Route 126 (Santa Paula Freeway) in the City of Ventura to State Route 210 (Foothill Freeway) east of the City of San Fernando. Access to the Project site would be provided via the Beltramo Ranch Road connection to Los Angeles Avenue.

State Route 23 (Moorpark Avenue), located east of the Project site, is a 2- to 6-lane arterial highway that extends north from the State Route 1 (Pacific Coast Highway) in Malibu to State Route 126 in the City of Fillmore. In the City of Moorpark, State Route 23 merges with State Route 118 as Los Angeles Avenue, then becomes Moorpark Avenue. At Moorpark Avenue, State Route 23 becomes a 2 to 3-lane roadway with a center left-turn lane in the study-area. State Route 23 serves as the primary north-south route between the Cities of Moorpark and Fillmore. Moorpark Avenue is signalized at Los Angeles Avenue.



ASSOCIATED TRANSPORTATION ENGINEERS

PROJECT SITE LOCATION

FIGURE 1

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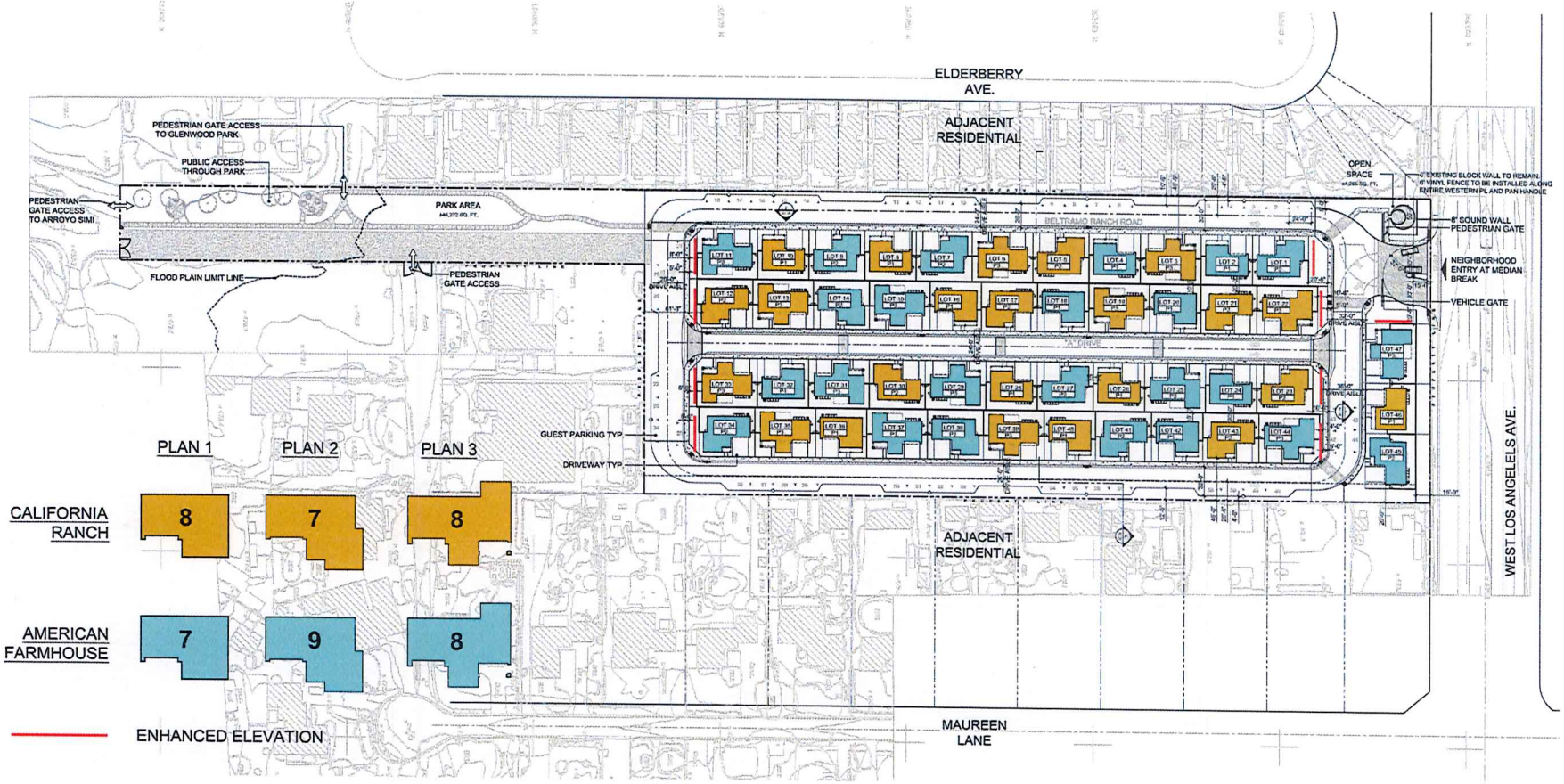

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PROJECT SITE PLAN

FIGURE 2

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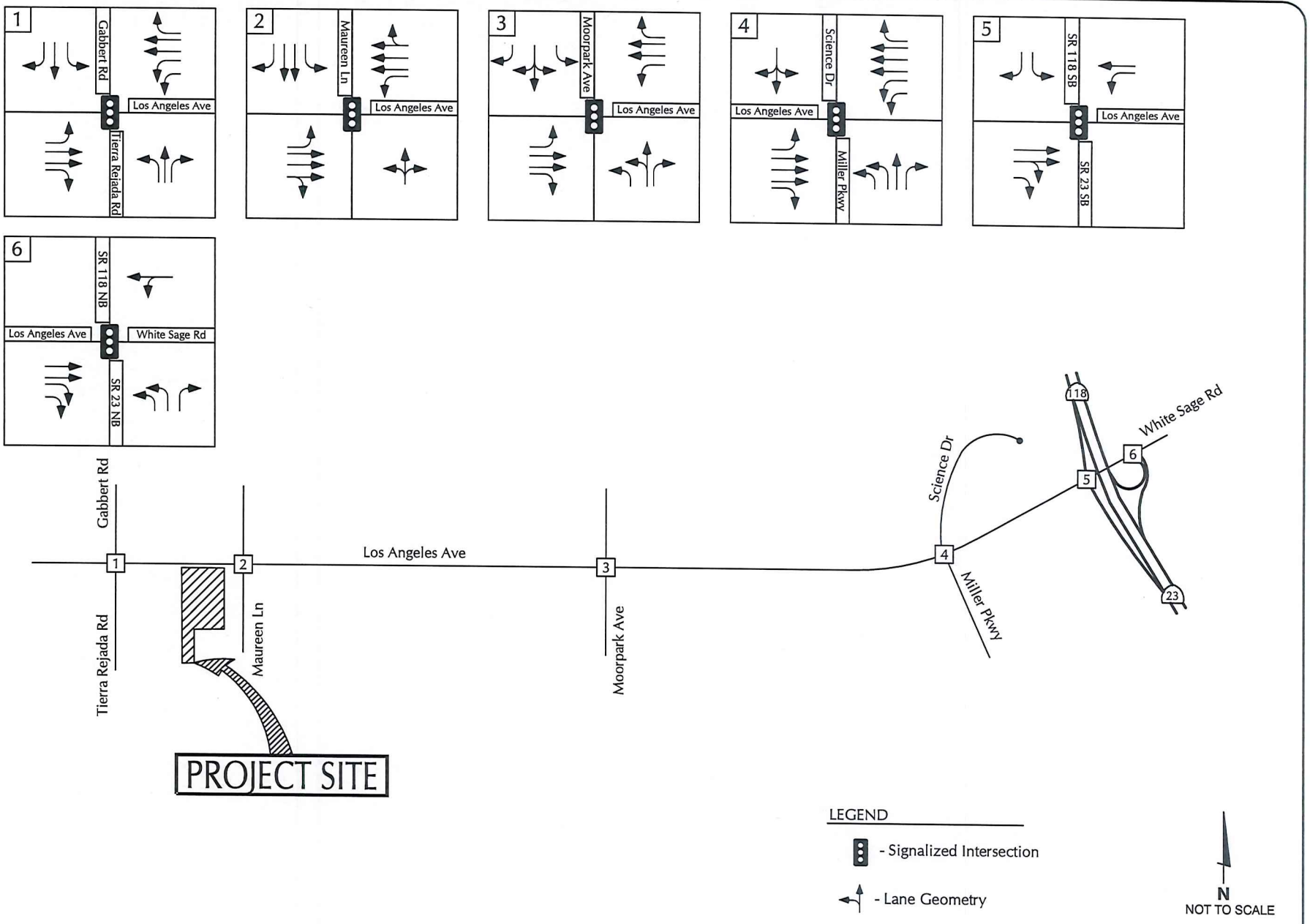

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EXISTING LANE GEOMETRY AND TRAFFIC CONTROL

FIGURE 3

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Tierra Rejada Road, located west of the Project site, is a 4-lane divided arterial roadway that extends south from Los Angeles Avenue and then easterly to the City of Simi Valley. Tierra Rejada Road is signalized at Los Angeles Avenue.

Miller Parkway, located east of the Project site, is a 2-lane divided roadway that extends south from Los Angeles Avenue to Tierra Rejada Road. Miller Parkway serves commercial and residential uses south of Los Angeles Avenue. Miller Parkway is signalized at Los Angeles Avenue.

Maureen Lane, located east of the Project site, is a 2-lane roadway that extends north and south from Los Angeles Avenue. Maureen Lane serves industrial uses north of Los Angeles Avenue and residential uses south of Los Angeles Avenue. Maureen Lane is signalized at Los Angeles Avenue.

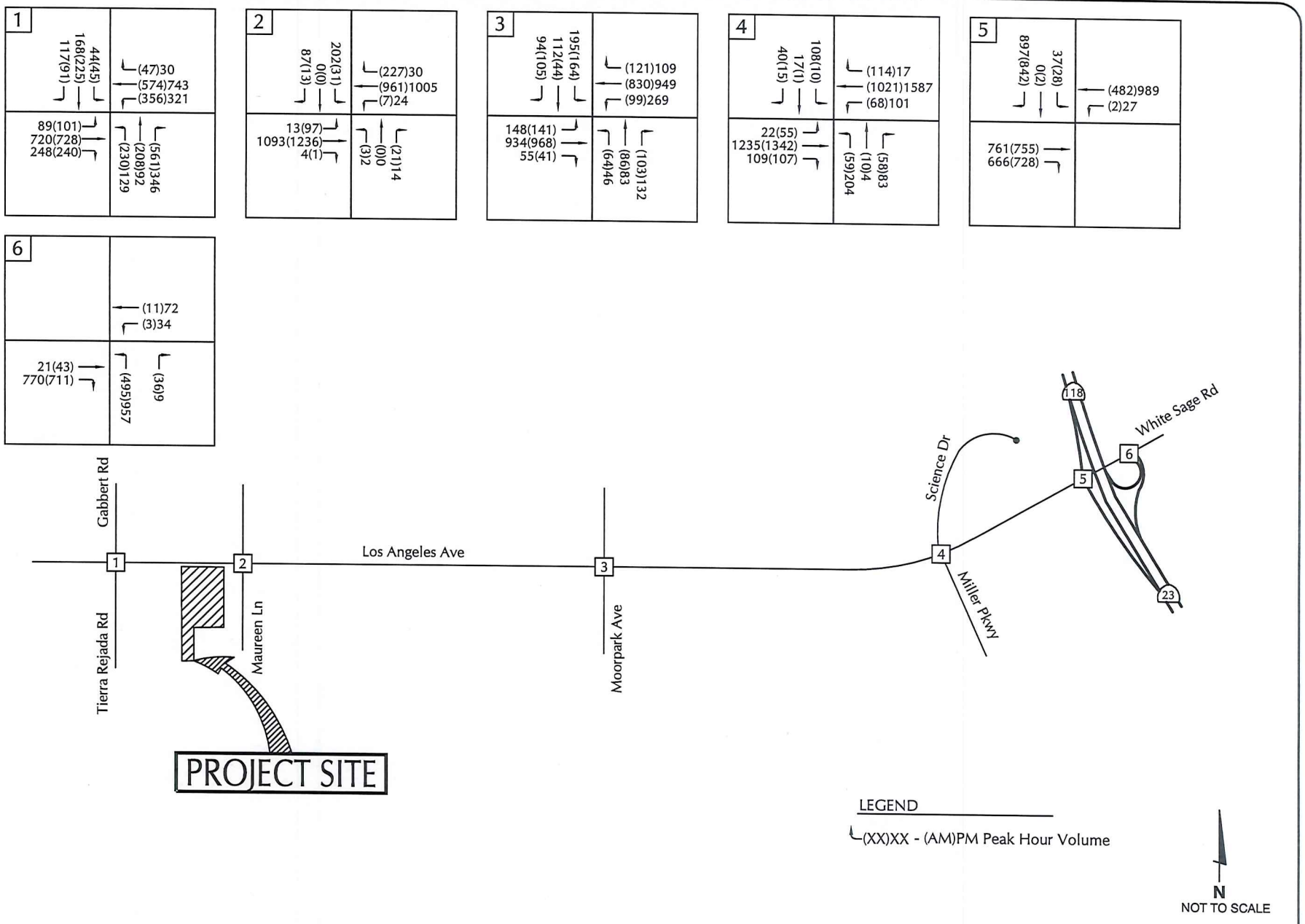
Intersection Operations

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 Moorpark considers LOS C as the performance standard for intersections (maintain LOS C or better).

Existing peak hour traffic volumes for the Los Angeles Avenue/Tierra Rejada intersection were obtained from traffic counts collected in 2019 by the City (see Technical Appendix for count data). Figure 4 illustrates the existing AM and PM peak hour traffic volumes for the study-area intersections. Levels of service were calculated for the signalized intersections using the "Intersection Capacity Utilization" (ICU) methodology, which is the level of service method adopted by the City for signalized intersections. Existing levels of service are listed in Table 1.

Table 1
Existing Levels of Service

Intersection	Control	AM Peak Hour		PM Peak Hour	
		ICU	LOS	ICU	LOS
Los Angeles Avenue/Tierra Rejada Road	Signal	0.741	LOS C	0.623	LOS B
Los Angeles Avenue/Maureen Lane	Signal	0.456	LOS A	0.536	LOS A
Los Angeles Avenue/Moorpark Avenue	Signal	0.441	LOS A	0.569	LOS A
Los Angeles Avenue/Miller Lane	Signal	0.439	LOS A	0.562	LOS A
State Route 23 SB Ramps/Los Angeles Avenue	Signal	0.420	LOS A	0.741	LOS C
State Route 23NB Ramps/Los Angeles Avenue	Signal	0.501	LOS A	0.485	LOS A



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EXISTING TRAFFIC VOLUMES

FIGURE 4

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The data presented in Table 1 show that the study-area intersections currently operate in the LOS A-C during the AM and PM peak hours, which meet the City's LOS C operating standard.

CITY OF MOORPARK TRANSPORTATION POLICIES

Pursuant to Policy 2.1 of the City's Circulation Element, Level of Service (LOS) C shall be the system performance objective. For facilities already operating at less than LOS C, the system performance objective shall be to maintain or improve the current level of service. The City of Moorpark, "Guidelines for Preparing Traffic and Circulation Studies" states that if a level of service degradation of one level of service or greater is attributable to a project it will be considered significant enough to require mitigation measures. The City's criteria also states that a level of service degradation of less than one level of service may also be considered significant, depending on circumstances.

PROJECT-SPECIFIC ANALYSIS

Project Trip Generation

Trip generation estimates were calculated for the existing and proposed land uses based on rates presented in the Institute of Transportation Engineers (ITE) Trip Generation manual.[1] The ITE rates for Single Family Detached Housing (Land Use #210) and Church (Land Use #560) were applied in the trip generation calculations. Table 2 shows the trip generation estimates for the Project (a detailed calculation worksheet is contained in the Technical Appendix for reference).

Table 2
Project Trip Generation

Land Use	Size	Average Daily Trips		AM Peak Hour		PM Peak Hour	
		Rate	Trips	Rate	Trips	Rate	Trips
Proposed							
Single Family Residential	47 Units	9.43	444	0.70	33	0.94	44
Existing							
Church	6,820 SF	7.60	52	0.32	2	0.49	3
Single Family Residential	2 Units	9.43	19	0.70	1	0.94	2
Total			71		3		5
Net Trip Generation			**372**		**30**		**39**

As shown in Table 2, the Project is forecast to generate 444 average daily trips (ADT), with 33 trips occurring during the AM peak hour and 44 trips occurring during the PM peak hour. The existing church and residential uses generated 71 average daily trips (ADT), with 3 trips occurring during the AM peak hour and 5 trips occurring during the PM peak

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

Project Trip Distribution

Trip distribution percentages were developed for the Project based on data derived from existing traffic patterns in the study area and consideration of the land uses in the surrounding area. Table 3 presents the trip distribution percentages developed for the Project. Figure 5 illustrates the trip distribution pattern and the assignment of Project traffic at the study-area intersections.

Table 3
Project Trip Distribution

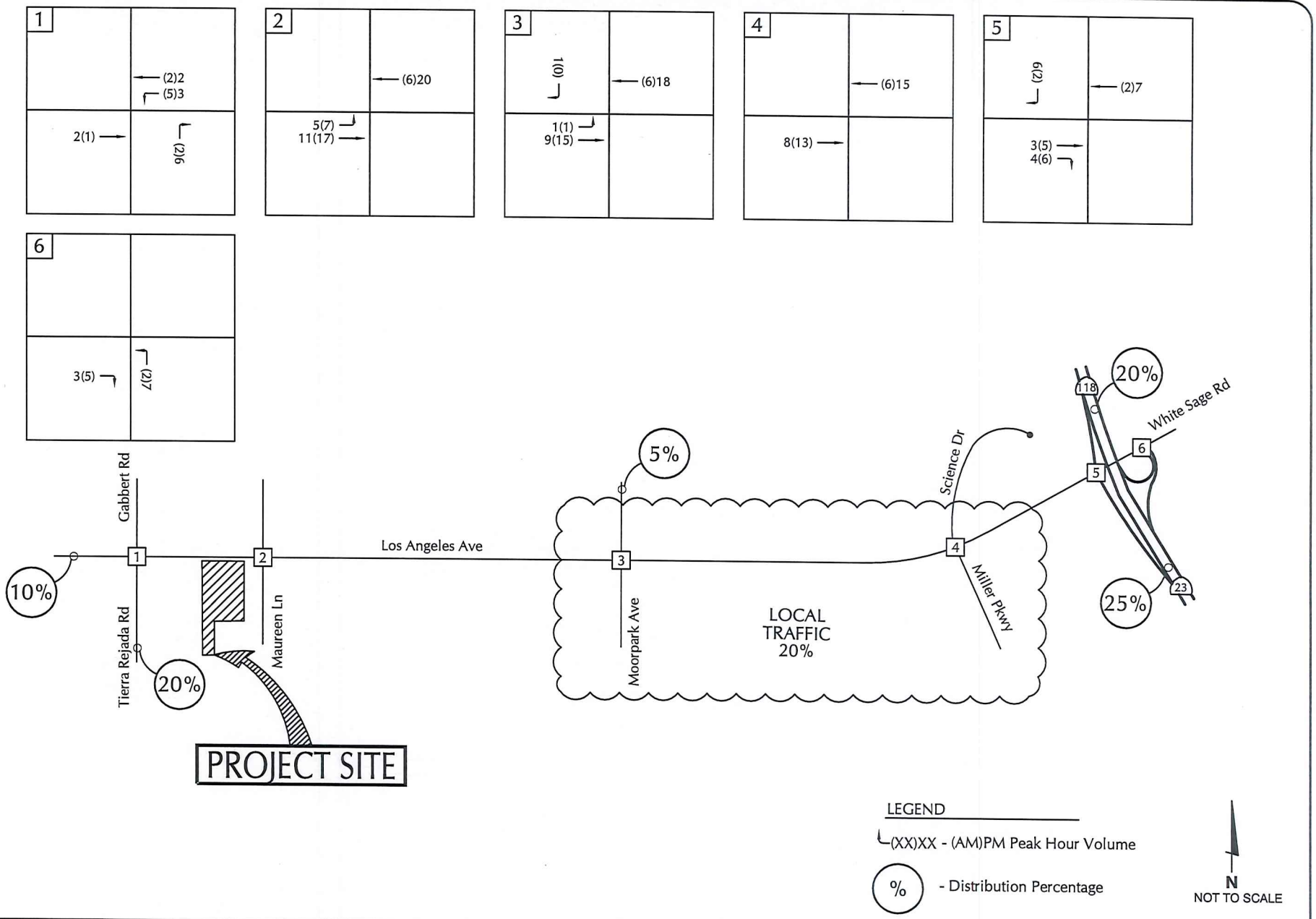
Route	Origin/Destination	Distribution %
State Route 23/118	North	20%
State Route 23/118	South	25%
Moorpark Road	North	5%
Los Angeles Avenue	West	10%
Tierra Rejada Road	South	20%
Local Commercial Area		20%
	Total	**100%**

Existing + Project Intersection Operations

Levels of service were calculated for the study-area intersections assuming the Existing + Project traffic volumes shown on Figure 6. Tables 4 and 5 compare the Existing and Existing + Project levels of service and identify locations that are forecast to exceed the City's LOS C standard.

Table 4
Existing + Project Levels of Service – AM Peak Hour

Intersection	ICU / LOS		Project Added	
	Existing	Existing + Project	Trips	Exceed LOS C Standard?
Los Angeles Avenue/Tierra Rejada Road	0.741/LOS C	0.742/LOS C	10	NO
Los Angeles Avenue/Maureen Lane	0.456/LOS A	0.461/LOS A	30	NO
Los Angeles Avenue/Moorpark Avenue	0.441/LOS A	0.444/LOS A	22	NO
Los Angeles Avenue/Miller Parkway	0.439/LOS A	0.441/LOS A	19	NO
State Route 23 SB Ramps/Los Angeles Avenue	0.562/LOS A	0.564/LOS A	15	NO
State Route 23 NB Ramps/Los Angeles Avenue	0.741/LOS C	0.746/LOS C	7	NO



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PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

FIGURE 5

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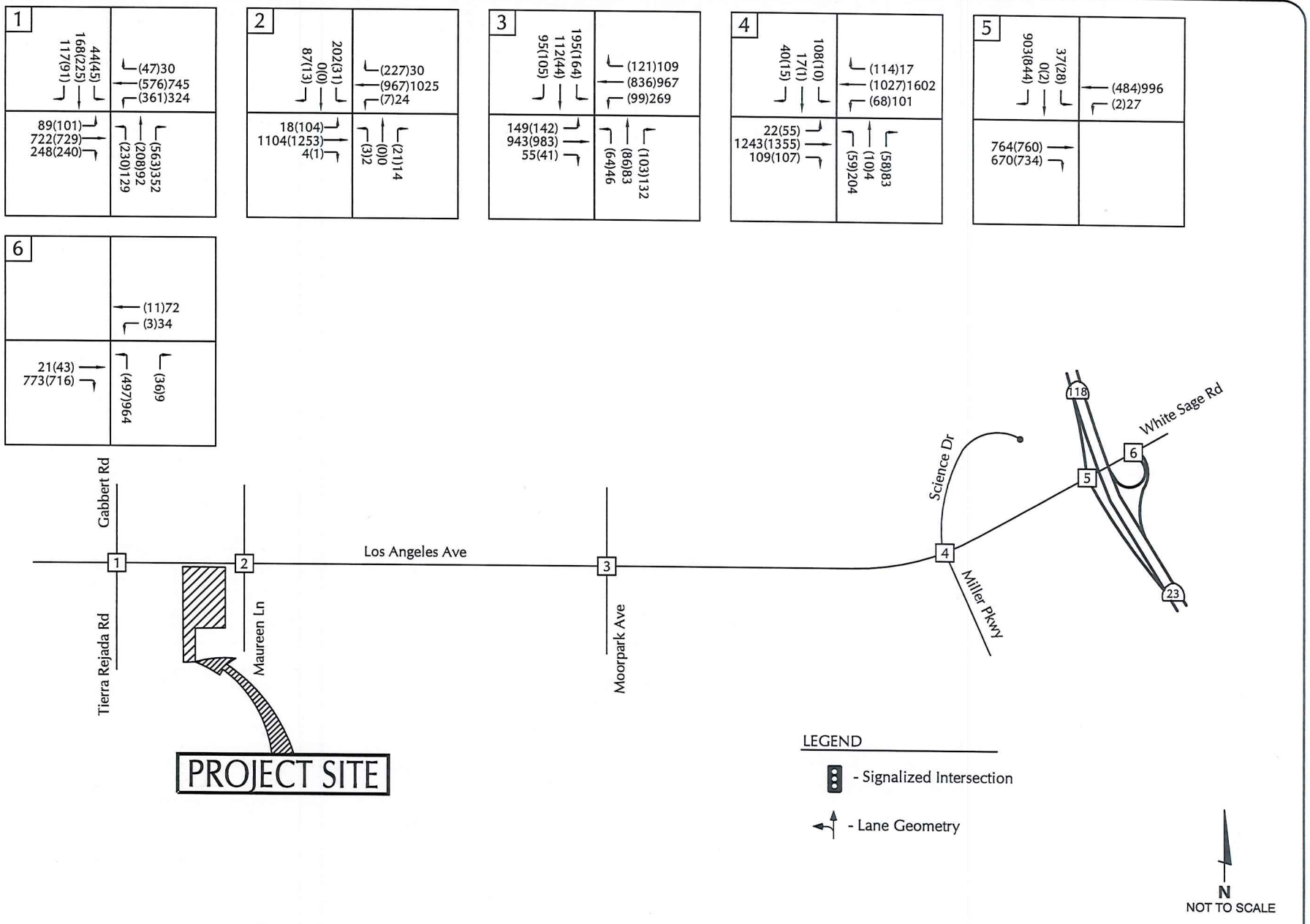

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EXISTING + PROJECT TRAFFIC VOLUMES

FIGURE 6

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Table 5
Existing + Project Levels of Service – PM Peak Hour

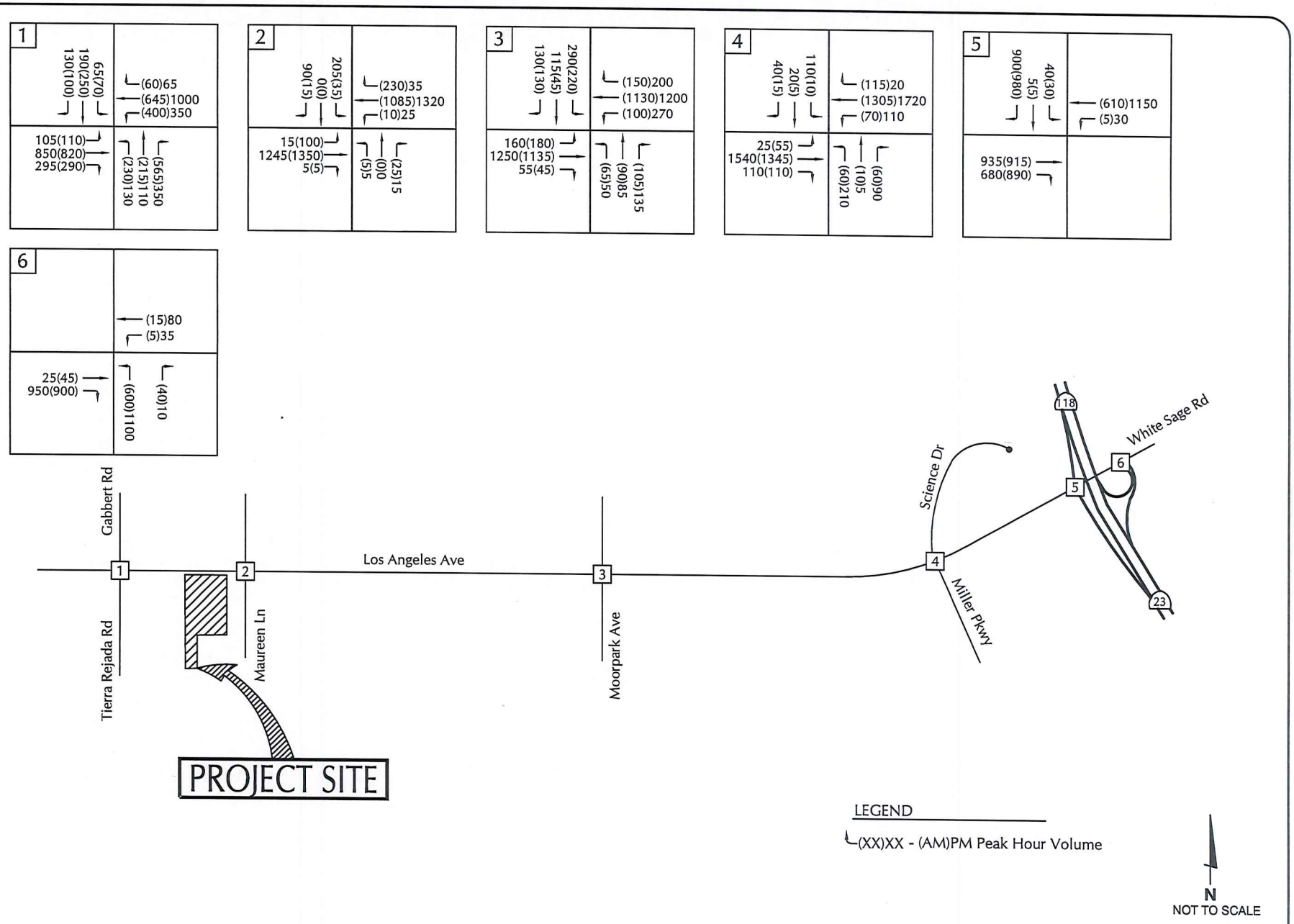
Intersection	ICU or Delay / LOS		Project Added	
	Existing	Existing + Project	Trips	Exceed LOS C Standard?
Los Angeles Avenue/Tierra Rejada Road	0.623/LOS B	0.625/LOS B	13	NO
Los Angeles Avenue/Maureen Lane	0.536/LOS A	0.538/LOS A	36	NO
Los Angeles Avenue/Moorpark avenue	0.569/LOS A	0.571/LOS A	29	NO
Los Angeles Avenue/Miller Parkway	0.562/LOS A	0.564/LOS A	23	NO
State Route 23 SB Ramps/Los Angeles Avenue	0.741/LOS C	0.746/LOS C	20	NO
State Route 23 NB Ramps/Los Angeles Avenue	0.485/LOS A	0.487/LOS A	10	NO

As shown in Tables 4 and 5, the study-area intersections are forecast to continue to operate at LOS C or better under Existing + Project conditions, which meets the City's LOS C standard. Thus, the Project would be consistent with the City's adopted level of service standards.

CUMULATIVE ANALYSIS

Traffic Forecasts

Cumulative conditions were forecast assuming traffic generated by the approved and pending development projects located in the study-area (see Technical Appendix for cumulative project list). Trip generation estimates were developed for the cumulative projects and that traffic was then assigned to the study-area street network. Cumulative traffic forecasts are shown in Figure 7 and Cumulative + Project forecasts are shown in Figure 8.



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CUMULATIVE TRAFFIC VOLUMES

FIGURE 7

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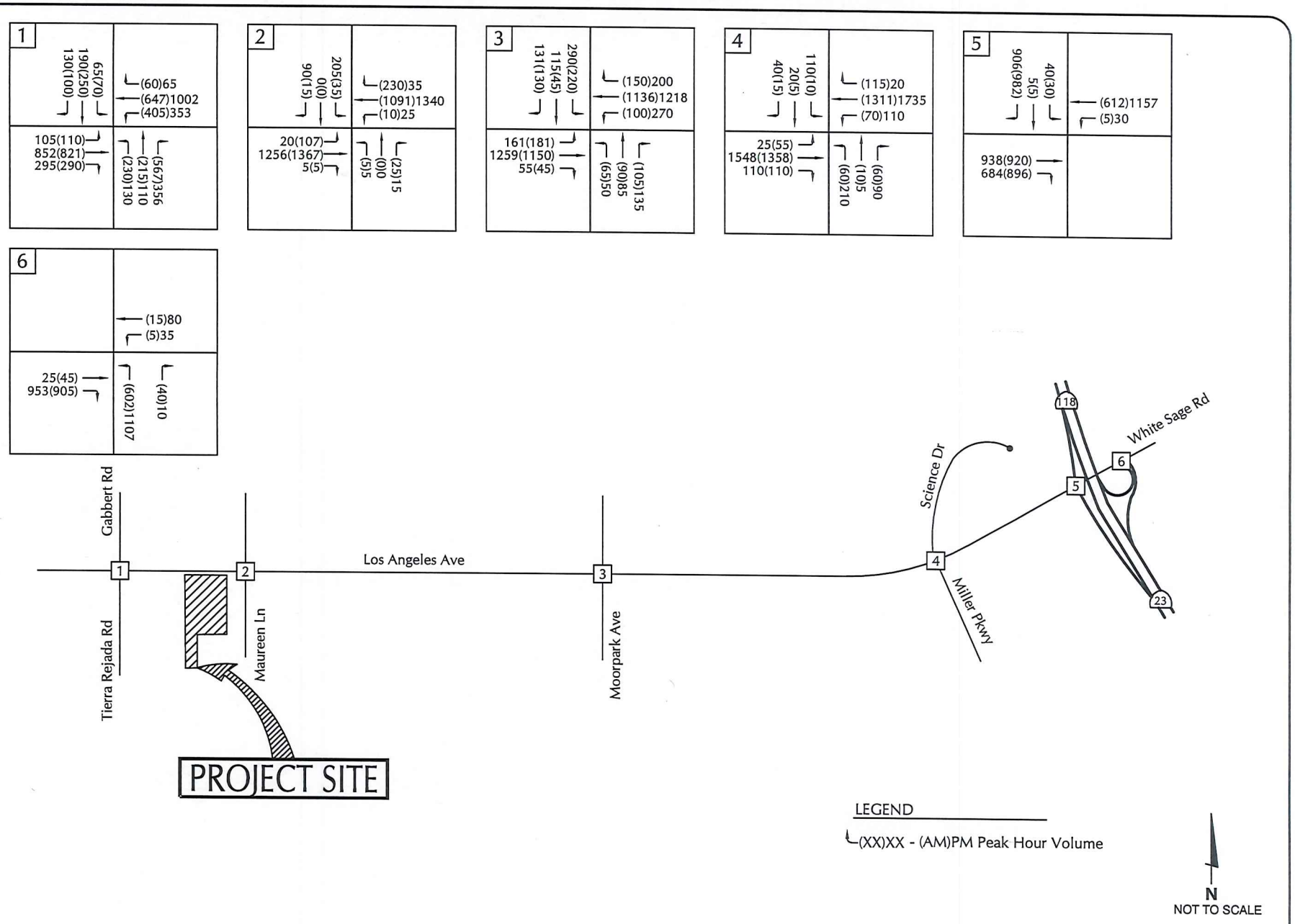

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CUMULATIVE + PROJECT TRAFFIC VOLUMES

FIGURE 8

GM - ATE#19087

Cumulative Intersection Operations

Tables 6 and 7 compare the Cumulative and Cumulative + Project levels of service for the study-area intersections and identify locations that are forecast to exceed the City's LOS C standard.

Table 6
Cumulative + Project Levels of Service – AM Peak Hour

Intersection	ICU / LOS		Project Added	
	Cumulative	Cum.+ Project	Trips	Exceed LOS C Standard?
Los Angeles Avenue/Tierra Rejada Road	0.798/LOS C	0.801/LOS C	13	NO
Los Angeles Avenue/Maureen Lane	0.491/LOS A	0.496/LOS A	30	NO
Los Angeles Avenue/Moorpark Avenue	0.495/LOS A	0.498/LOS A	22	NO
Los Angeles Avenue/Miller Parkway	0.442/LOS A	0.445/LOS A	19	NO
State Route 23 SB Ramps/Los Angeles Avenue	0.503/LOS A	0.505/LOS A	15	NO
State Route 23 NB Ramps/Los Angeles Avenue	0.595/LOS A	0.598/LOS A	7	NO

Table 7
Cumulative + Project Levels of Service – PM Peak Hour

Intersection	ICU / LOS		Project Added	
	Cumulative	Cum.+ Project	Trips	Exceed LOS C Standard?
Los Angeles Avenue/Tierra Rejada Road	0.689/LOS C	0.690/LOS C	13	NO
Los Angeles Avenue/Maureen Lane	0.574/LOS A	0.577/LOS A	36	NO
Los Angeles Avenue/Moorpark Avenue	0.663/LOS B	0.666/LOS B	29	NO
Los Angeles Avenue/Miller Parkway	0.634/LOS B	0.636/LOS B	23	NO
State Route 23 SB Ramps/Los Angeles Avenue	0.844/LOS D	0.848/LOS D	20	YES
State Route 23 NB Ramps/Los Angeles Avenue	0.539/LOS A	0.541/LOS A	10	NO

As shown in Table 7, the State Route 23 southbound ramps/Los Angeles Avenue intersection is forecast to operate at LOS D during the PM peak hour under Cumulative and Cumulative + Project conditions, which exceeds the City's LOS C standard. The Project would add 11 trips to the intersection during the PM peak period and increase the ICU by 0.004. This increase is considered a less-than-significant impact pursuant to Policy 2.1 of the City of Moorpark Circulation Element, which states: *"LOS C shall be the system performance objective. For facilities already operating at less than LOS C, if a level of service degradation of one level of*

service or greater is attributable to a project it will be considered significant enough to require mitigation measures." The ICU change attributed to the Project is 0.002 (less than ½ of 1%) – which would result in an insignificant change in traffic operations at the intersection.

SITE ACCESS AND CIRCULATION

Access to the Project site would be provided by Beltramo Ranch Road (see Figure 2 – Project Site Plan). The existing intersection allows for full access to and from Beltramo Ranch Road. The City has indicated that the intersection should be modified to restrict outbound traffic from Beltramo Ranch Road to right-turns only (left turns from Beltramo Ranch Road onto Los Angeles Road would be prohibited). Outbound traffic that is destined to the west would turn right from Beltramo Ranch Road, proceed to Maureen Avenue, and then make a U-turn to travel westbound on Los Angeles Avenue.

Table 8 lists the vehicle delays for traffic turning to/from Beltramo Ranch Road assuming the proposed modifications under Cumulative + Project conditions. Delays and levels of service were calculated using the methodology outlined in the Highway Capacity Manual (HCM).[2] As shown, vehicle delays equate to LOS C or better for traffic turning to/from Beltramo Ranch Road during the AM and PM peak commuter periods.

Table 8
Los Angeles Avenue/Beltramo Ranch Road – Cumulative + Project LOS

Intersection	Delay / LOS(a)	
	AM Peak Hour	PM Peak Hour
Los Angeles Avenue/Beltramo Ranch Road		
Inbound Left Turns (Westbound)	23.6 Sec./LOS C	20.7 Sec./LOS C
Inbound Right Turns (Eastbound)	0.0 Sec./LOS A	0.0 Sec./LOS A
Outbound Right Turns	19.0 Sec./LOS C	16.5 Sec./LOS C

(a) LOS based on average delay per vehicle in seconds, pursuant to HCM methodology.

Queue Analysis

Caltrans staff expressed concerns regarding the spacing between the Project driveway and the adjacent intersections. A queue analysis was conducted to determine if there is adequate spacing between the adjacent intersections for left and right turn movements at the Los Angeles Avenue/Tierra Rejada intersection, the Los Angeles Avenue/Project Driveway intersection, and the Los Angeles Avenue/Maureen Lane intersection.

ATE utilized the "Synchro" software to evaluate the queues at the three study-area intersections Table 9 shows the 95th percentile queue lengths for the eastbound left-turn and

[2] Highway Capacity Manual, Transportation Research Board, 2016.

eastbound right-turn movements at the Los Angeles Avenue/Maureen Lane intersection during the AM and PM peak hour periods. The 95th percentile queue length is the queue that is exceeded 5% of the time during the peak hour.

Table 9
Storage Requirement at the Los Angeles Avenue/Maureen Lane Intersection

Movement	Existing Storage	95% Queue Length	
		AM Peak Hour	PM Peak Hour
Eastbound Left-Turn	145 feet	142 feet	49 feet
Eastbound Right-Turn	420 feet	98 feet	124 feet

The queuing analysis found that there is sufficient distance eastbound between the Los Angeles Avenue/Maureen Lane and the Project driveway intersection to store eastbound vehicles during red phases. The existing storage provided for left-turns and right-turns was determined to be sufficient.

Table 10 shows the 95th percentile queue lengths for the westbound left-turn and eastbound right-turn movements at the Los Angeles Avenue/Project Driveway intersection during the AM and PM peak periods.

Table 10
Storage Requirement at the Los Angeles Avenue/Project Driveway Intersection

Movement	Existing Storage	95% Queue Length	
		AM Peak Hour	PM Peak Hour
Westbound Left-Turn	100 feet	37 feet	24 feet
Eastbound Right-Turn	200 feet	0 feet	0 feet

The queuing analysis found that there is sufficient distance westbound between the Los Angeles Avenue/Project driveway and Los Angeles Avenue/Maureen Lane intersection to store vehicles waiting for a gap in the eastbound traffic flow. The existing storage provided for left-turns and right-turns was determined to also be sufficient.

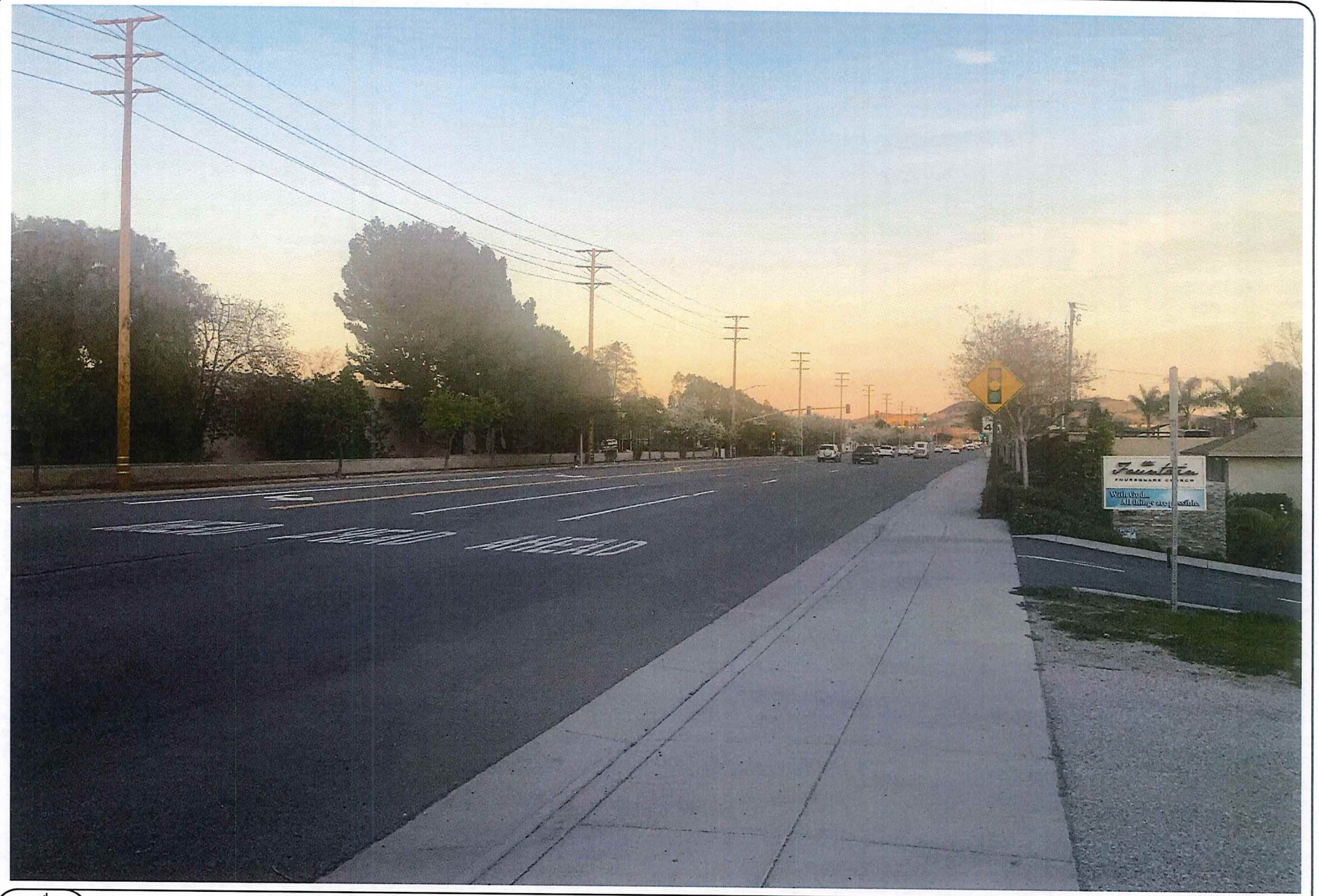
Table 11 shows the 95th percentile queue lengths for the westbound left-turn and westbound right-turn movements at the Los Angeles Avenue/Tierra Rejada Road intersection during the AM and PM peak hour periods.

Table 11
Storage Requirement at the Los Angeles Avenue/Tierra Rejada Road Intersection

Movement	Existing Storage	95% Queue Length	
		AM Peak Hour	PM Peak Hour
Westbound Left-Turn	410 feet	176 feet	230 feet
Westbound Right-Turn	900 feet	56 feet	37 feet

The queuing analysis found that there is sufficient distance westbound between the Los Angeles Avenue/Tierra Rejada Road and the Los Angeles Avenue/Project driveway intersection to store vehicles during red phases. The existing storage provided for left-turns and right-turns was determined to be sufficient.

ATE conducted a field review to verify the Synchro queue analysis results. As shown in the pictures on Figures 9 and 10, conflicts between the Project driveway and the adjacent intersections are not expected. During the PM peak hour when residents are returning home, the eastbound left-turns to Maureen Lane are low and would not be impacted by the westbound left-turn movement into the Project driveway. Maureen Lane north of Los Angeles Avenue provides access to light industrial uses and the Moorpark School District offices. During the PM peak hour period, employees are departing the area and not arriving. During the PM peak hour, the westbound queue at the Tierra Rejada intersection would not impact the operation of the Project driveway. The pictures on Figures 9 and 10 show that the queues at the adjacent signalized intersections would not conflict with the Projects driveway intersection. The photos confirm the Synchro queue analysis which concluded that there would be adequate storage to accommodate the turning movements without conflicting with the turning movements at the adjacent intersections. There is physical space between the Project driveway and Maureen Lane to extend the existing eastbound or westbound left-turn storage lane.



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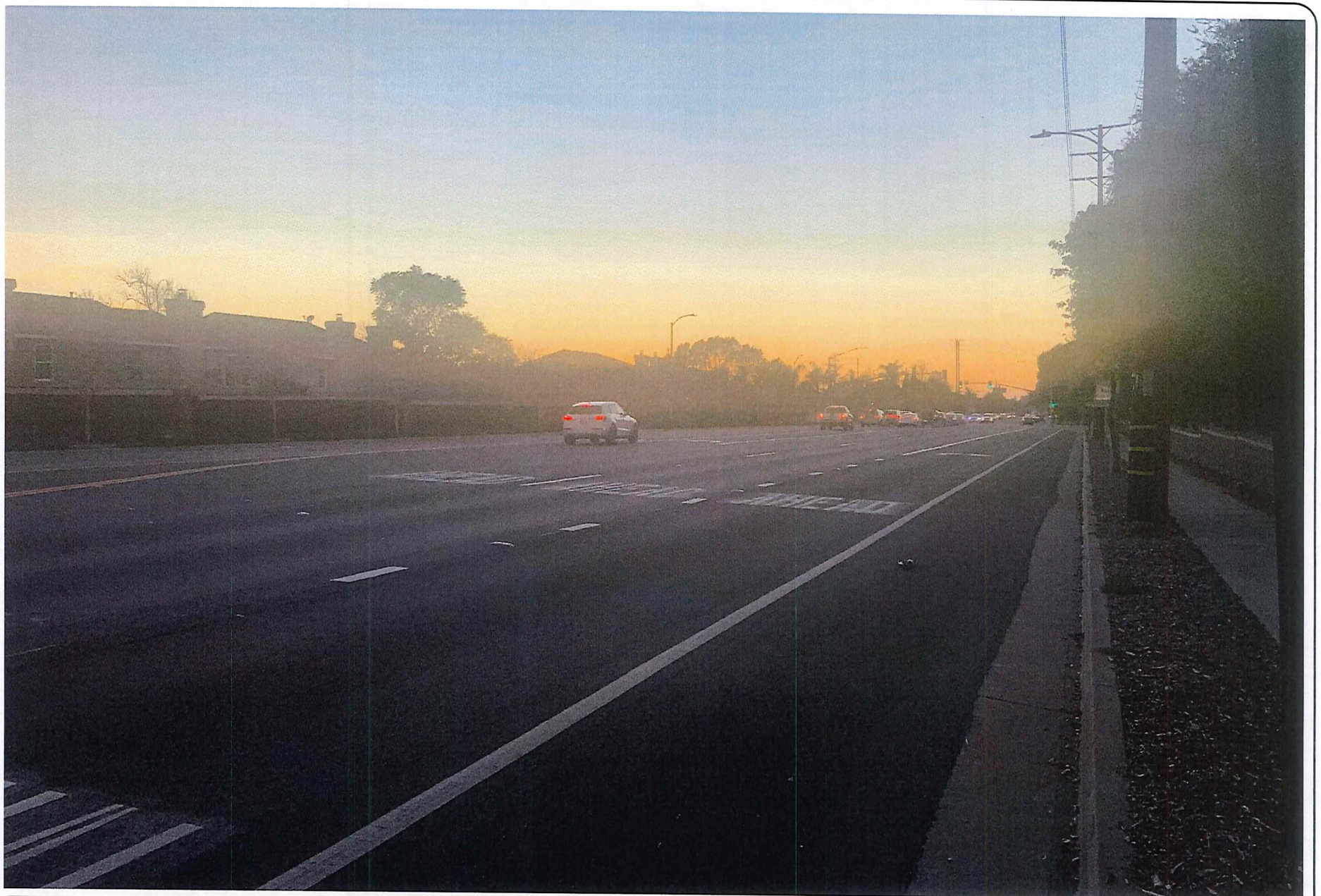
LOOKING EAST TOWARD MAUREEN LANE

FIGURE 9

GM - ATE#19087



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LOOKING WEST TOWARD TIERRA REJADA ROAD

FIGURE 10

GM - ATE#19087

VEHICLE MILES TRAVELED ANALYSIS

Recent legislation, Senate Bill 743, is moving away from the Level of Service (LOS) metric to a Vehicle Miles Traveled (VMT) metric to evaluate whether a project results in a significant traffic impact under CEQA. Per the State's Natural Resource Agency Updated Guidelines for the Implementation of the CEQA adopted in 2018, 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.

Local agencies have discretion to develop and adopt their own thresholds or rely on thresholds recommended by other agencies. Since the City of Moorpark has not yet adopted VMT impact criteria, the VMT analyses prepared for the Project was developed using information presented in the recently updated VCTC traffic model for Ventura County and the following VMT thresholds published by the State.

CEQA Guidelines. The California Governor's Office of Planning and Research (OPR) published a technical advisory that includes recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures.[3] The recommended VMT impact threshold for residential projects is as follows:

> "Recommended threshold for residential projects: A proposed project exceeding a level of 15 percent below existing VMT per capita may indicate a significant transportation impact. Existing VMT per capita may be measured as regional VMT per capita or as city VMT per capita. Proposed development referencing a threshold based on city VMT per capita (rather than regional VMT per capita) should not cumulatively exceed the number of units specified in the SCS (Sustainable Community Strategy) for that city and should be consistent with the SCS.

The VCTC traffic model provides VMT per capita data for the City of Moorpark as well as the various Traffic Analysis Zones (TAZs) within the City that are contiguous to the Project site. The threshold used to evaluate Project impacts follows the criteria mandated by the State, which states that a residential project may indicate a significant impact if the project's VMT per capita exceeds 15% below the existing VMT per capita.

Table 8 shows the existing VMT per capita for the City of Moorpark, the VMT threshold (15% below existing VMT per capita), and the Project's VMT per capita based on the VCTC traffic model data (VMT model data contained in the Technical Appendix).

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

Table 12
Beltramo Ranch Residential Project – VMT Impact Summary

City of Moorpark VMT(a)	VMT Impact Threshold(b)	Project VMT Estimate(c)	Impact?
20.31 per capita	17.26 per capita	16.93 per capita	NO

(a) City of Moorpark VMT per capita based on VCTC traffic model.
(b) VMT Threshold is a 15% reduction from City VMT (20.31 x 0.85 = 17.26).
(c) Project VMT per capita estimate based on VCTC model traffic analysis zones.

As shown, the existing City of Moorpark VMT is 20.31 per capita. Thus, the VMT threshold is 17.26 (15% below existing VMT per capita = 20.31 x 0.85 = 17.26) The VCTC model show that the residential units located in the Project area TAZs generate 16.93 VMT per capita, which falls below the 17.26 VMT per capita impact threshold. Thus, the Beltramo Ranch Residential Project would generate a less-than-significant CEQA impact.

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REFERENCES AND PERSONS CONTACTED

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