LLG

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Irvine
San Diego

August 24, 2026

Ms. Sophia Mitchell
Sophia Mitchell & Associates
P.O. Box 1700
Gualala, CA 95445

LLG Reference: 3-25-4009

Subject: **Sunrise Assisted Living – Transportation Assessment**
San Marcos, California

Dear Ms. Mitchell:

Linscott, Law & Greenspan (LLG), Engineers has prepared this transportation assessment for the Sunrise Assisted Living project (hereafter referred to as the "Project"). The Project proposes development of an assistant living and memory care facility with access off of San Elijo Road and Paseo Plomo. The majority of the Project is located within San Marcos and a small portion of the site is included in Carlsbad. The project applicant is requesting approval of a Site Development Plan (SDP23-0002) to construct a two-story, 93,375 s.f. assisted living and memory care facility consisting of 92 units above 25,100 s.f. of below grade parking. This Mitigated Negative Declaration is analyzing 97 units and up to 129 beds to provide flexibility for the project applicant to respond to changing market conditions.

A Mitigated Negative Declaration (MND) was approved in 2019 for the *Artis Senior Living project*, a 64-unit assisted living facility. The previously approved project was evaluated in accordance with the SANTEC/ITE Guidelines for Traffic Impact Studies, and was determined to be below the thresholds requiring a traffic study. The proposed 97-unit Assisted Living project, in accordance with the City of San Marcos Transportation Impact Analysis Guidelines, also remains below the thresholds for requiring a Local Transportation Analysis (LTA), as it is anticipated to generate fewer than 1,000 daily vehicle trips and fewer than 100 peak hour vehicle trips and is consistent with the General Plan. However, although an LTA is not required, a Transportation Assessment may be prepared for land use projects to evaluate the effects of a development on the circulation network, primarily related to local access and circulation in the vicinity of the Project site. The Project would also align with the vision, goals, and objectives of the City's Active Transportation Plan.

David S. Shender, PE
John A. Boarman, PE
Richard E. Barretto, PE
Keil D. Maberry, PE
KC Yellapu, PE
Dave Roseman, PE
Shankar Ramakrishnan, PE

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Figure 1 shows the Vicinity Map. ***Figure 2*** shows the Project Area Map. ***Figure 3*** shows the Project site plan.

EXISTING CONDITIONS / EXISTING TRAFFIC VOLUMES

The following is a description of the existing street network in the study area.

San Elijo Road is classified as a four-lane Major Arterial in the *City of San Marcos Mobility Element*. San Elijo Road is currently constructed as a four-lane divided roadway. The posted speed limit is 45 mph. On-street parking is prohibited. Sidewalks and Class II bike lanes are provided on both sides of the roadway.

Paseo Plomo is an unclassified roadway. Paseo Plomo is currently constructed as a two-lane undivided private roadway. There is no posted speed limit. On-street parking is prohibited. Sidewalks are provided on the west side of the roadway.

Rancho Santa Fe Road is classified as a six-lane Prime Arterial in the *City of San Marcos Mobility Element*. Rancho Santa Fe is currently constructed as a six-lane divided roadway. The posted speed limit is 45 north of Melrose Drive within City of San Marcos jurisdiction, and 55 mph south of Melrose Drive within City of Carlsbad jurisdiction. On-street parking is prohibited. Sidewalks and Class II bike lanes are provided on both sides of the roadway. The nearest bus stop is located on Rancho Santa Fe Road, just north of San Elijo Road. This bus stop serves North County Transit District (NCTD) bus routes 304 and 604.

Figure 4 shows the Existing Conditions Diagram. ***Figure 5*** shows the Existing traffic volumes. Due to the very low trip generation, the study area consists of only the San Elijo Road / Paseo Plomo intersection. ***Attachment A*** contains the manual count sheets.

TRIP GENERATION/DISTRIBUTION/ASSIGNMENT

The Project traffic generation calculations were conducted using the trip generation rates published in *SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002* for congregate care facilities. As mentioned, a Mitigated Negative Declaration (MND) was approved in 2019 for the Artis Senior Living project, a 64-unit assisted living facility with a calculated trip generation of 160 Average Daily Traffic (ADT). A new developer has since purchased the land and is proposing a larger assisted living facility. The new project proposes 97 units. Based on the Project description, the congregate care facility trip rate of 2.5/dwelling unit was used. This trip rate accounts for all trips to/from the facility including residents who drive and other trips to and from the facility, including employees, visitors, delivery vehicles, and other vehicles servicing the facility.

Table 1 shows a trip generation comparison of the original approved Project and the proposed Project. The proposed Sunrise Assisted Living Project is calculated to generate 243 ADT, with 10 trips during the AM peak hour (6 inbound and 4 outbound), and 19 trips during the PM peak hour (10 inbound and 9 outbound). As shown in *Table 1*, when compared to the approved Project for the site, the Project is calculated to generate **83 more ADT** than the previously approved project which was calculated to generate 160 ADT.

The Project traffic distribution was based on the site location, existing traffic patterns in the area and anticipated traffic routes to and from the site, considering the existing raised median on San Elijo Road fronting the Project site. Due to this raised median, the majority of Project traffic traveling from the north, east and west are anticipated to make a southbound right-turn at the San Elijo Road / Melrose Drive intersection. Of this traffic, 20% is expected to make a westbound right-turn into the Project site at San Elijo Road, while the remaining 80% will make a westbound right-turn onto Paseo Plomo and into one of the three Project driveways along Paseo Plomo. The majority of traffic from the south will make a northbound right-turn at the San Elijo Road / Rancho Sante Fe Road intersection, followed by an eastbound to westbound U-turn at the San Elijo Road / Melrose Drive intersection. The Project traffic distribution assumes 25% of trips oriented to/from the north, 45% of trips oriented to/from the south, and 25% of trips oriented to/from the east, and 5% of trips oriented to/from the west.

Figure 6 shows the Project traffic distribution. ***Figure 7*** shows the proposed Sunrise Assisted Living Project traffic volumes.

NEAR-TERM TRAFFIC VOLUME FORECAST

Based on the *City of San Marcos Transportation Analysis Guidelines (dated November 16, 2020)*, the Interim Year conditions for a transportation analysis is based on one of SANDAG's pre-established interim year scenario models, depending on whichever is closest to the project's Near-Term anticipated opening year. The Project is anticipated to have full occupancy in late 2027/early 2028. Therefore, SANDAG's Year 2025 was used as the Interim Year for this report.

To forecast future traffic volumes for Near-Term (Year 2027) conditions, the SANDAG ABM2+ Year 2025 and Year 2035 models were utilized to obtain the growth per year percent. Based on the SANDAG models, traffic volumes surrounding the Project site: San Elijo Road and Rancho Santa Fe Road are anticipated to decrease in the later years. Therefore, to be conservative, a 2% per year for 2 years was deemed appropriate and applied to the Existing traffic volumes to obtain Near-Term traffic volumes. Project traffic volumes were then added to obtain Near-Term + Project traffic volumes.

Figure 8 shows the Near-Term without Project traffic volumes. ***Figure 9*** shows the Near-Term + Project traffic volumes.

ANALYSIS RESULTS

The following section presents the intersection analysis at the San Elijo Road / Paseo Plomo intersection and a discussion of the Project access. ***Table 2*** summarizes the peak hour operations at the San Elijo Road / Paseo Plomo intersection for the Near-Term scenarios. As shown in *Table 2*, the San Elijo Road / Paseo Plomo intersection is calculated to operate at LOS C or better during both the AM and PM peak hours for all analysis scenarios.

Attachment B contains the Existing intersection analysis worksheets. ***Attachment C*** contains the Near-Term without Project intersection analysis worksheets. ***Attachment D*** contains the Near-Term + Project intersection analysis worksheets.

SITE ACCESS DISCUSSION

Access to the Project site from public roadway will be via one (1) unsignalized right-in/right-out only driveway on San Elijo Road, which will serve the bi-directional pick-up/drop-off area. This driveway fronts a four-lane divided roadway. In addition, there will be three (3) unsignalized full-access driveways off the existing two-lane undivided Paseo Plomo private road, located approximately 260 feet west of the San Elijo Road Project driveway: one as the western terminus to the bi-directional pick-up/drop-off area, one at the garage parking, and one at the trash/loading zone at the northernmost part of the site. The City of San Marcos Traffic Impact Analysis Guidelines require an analysis for all Project driveways. However, a more conservative approach was taken by combining all trips from the three Paseo Plomo driveways into a single access point, rather than analyzing them individually, which would show each access point operating better than what is reported in *Table 2*. Therefore, for the purposes of this analysis, these three driveways on Paseo Plomo were treated as a single access point, and only the San Elijo Road / Paseo Plomo intersection, which is expected to be the most heavily used by Project traffic on public roadways, was analyzed. As shown in *Table 2*, the intersection is calculated to operate at LOS C or better during the AM and PM peak hours.

CONCLUSIONS

The Project proposes the construction of a three-story, 97-unit assisted living facility in the City of San Marcos. The San Elijo Road / Paseo Plomo intersection is calculated to operate acceptably at LOS C or better during both the AM and PM peak hours for all analysis scenarios. Therefore, no further improvements are recommended under any of the analysis scenarios.

Please let us know if you have any questions. Thank you.

Sincerely,

Linscott, Law & Greenspan, Engineers

John Boarman, P.E.
Principal

Renald Espiritu
Transportation Engineer III

cc: File

TABLES

Table 1: Project Trip Generation
Table 2: Intersection Operations

FIGURES

Figure 1: Vicinity Map
Figure 2: Project Area Map
Figure 3: Project Site Plan
Figure 4: Existing Conditions Diagram
Figure 5: Existing Traffic Volumes
Figure 6: Project Traffic Distribution
Figure 7: Project Traffic Volumes
Figure 8: Near-Term without Project Traffic Volumes
Figure 9: Near-Term + Project Traffic Volumes

ATTACHMENT

Attachment A: Intersection Manual Count Sheets
Attachment B: Existing Peak Hour Intersection Analysis Worksheets
Attachment C: Near-Term without Project Peak Hour Intersection Analysis Worksheets
Attachment D: Near-Term + Project Peak Hour Intersection Analysis Worksheets

TABLE 1
TRIP GENERATION

Land Use	Size	Daily Trip Ends (ADTs)		AM Peak Hour					PM Peak Hour				
		Rate [a]	Volume	% of ADT [a]	In:Out Split [a]	Volume			% of ADT [a]	In:Out Split	Volume		
						In	Out	Total			In	Out	Total
Artis Senior Living *(Approved. For informational purposes only)*	64 DU	2.5 / DU[b]	160	4%	60:40	4	2	6	8%	50:50	7	6	13
Sunrise Assisted Living *(Proposed)*	97 DU	2.5 / DU[b]	243	4%	60:40	6	4	10	8%	50:50	10	9	19

Footnotes:
a. Rates are based on *SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002.*
b. Based on congregate care facility rate of 2.5/DU.

TABLE 2
NEAR-TERM INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Existing		Near-Term		Near-Term + Project		Δ[c]
			Delay[a]	LOS[b]	Delay[a]	LOS[b]	Delay[a]	LOS[b]	
1. San Elijo Rd / Paseo Plomo	TWSC[d]	AM PM	13.6 15.4	B C	14.0 15.9	B C	14.1 15.9	B C	0.1 0.0

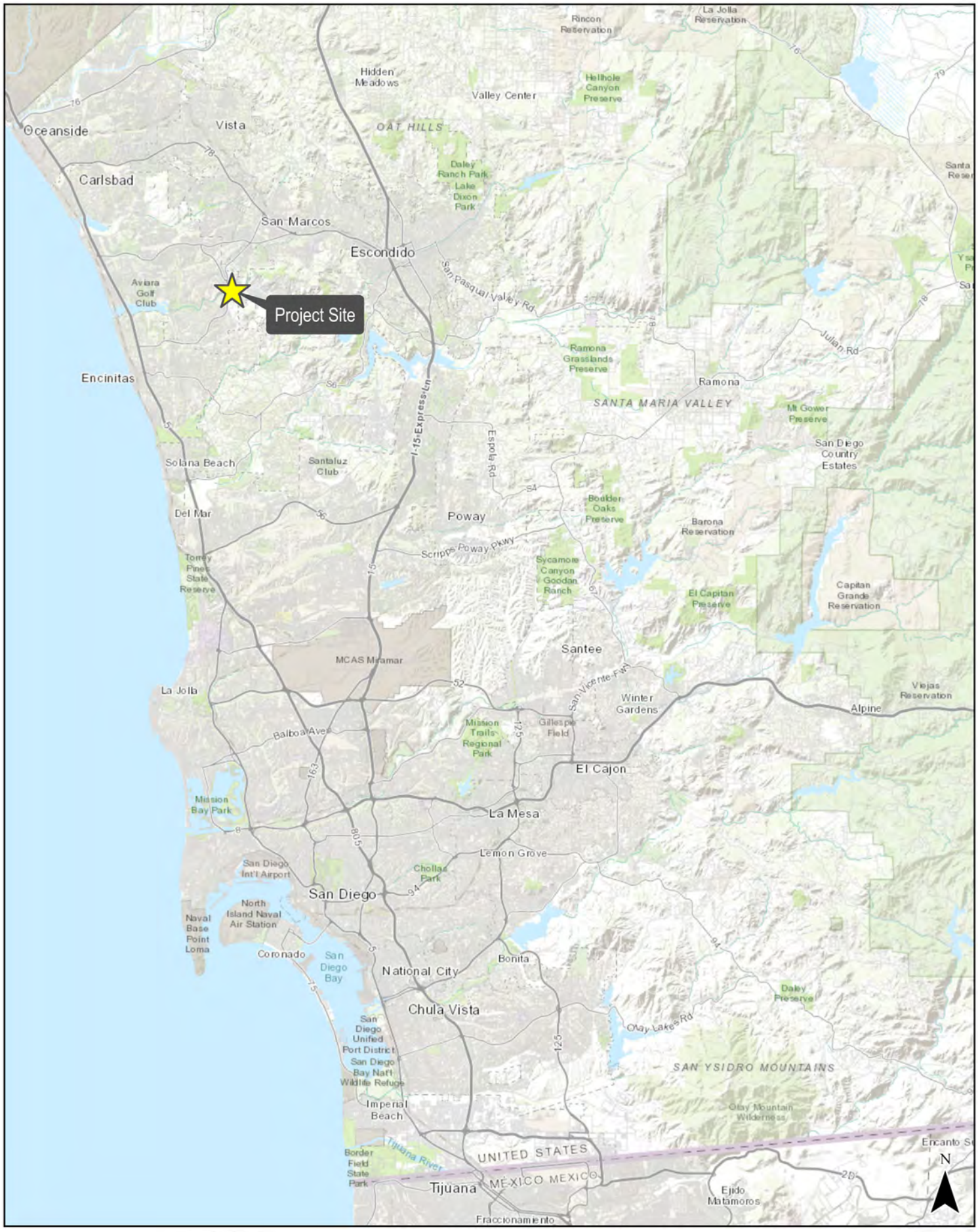
Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. Δ denotes an increase in delay due to project.
d. TWSC – Two-Way Stop-Controlled intersection.

UNSIGNALIZED

DELAY/LOS THRESHOLDS

Delay	LOS
0.0 ≤ 10.0	A
10.1 to 15.0	B
15.1 to 25.0	C
25.1 to 35.0	D
35.1 to 50.0	E
≥ 50.1	F



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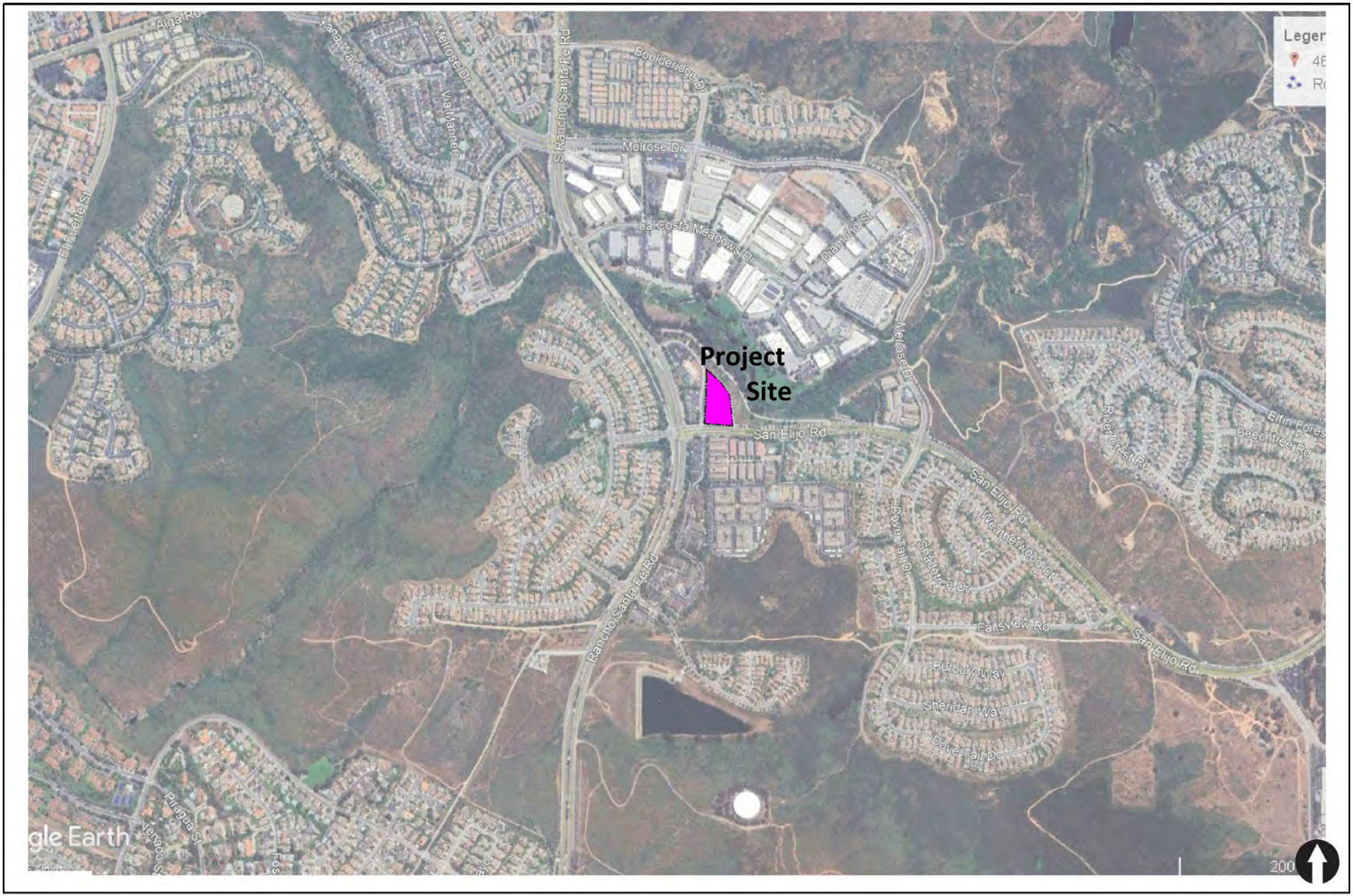
Date: 4/10/2025

SanGIS, Bureau of Land Management, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

Figure 1
Vicinity Map

SUNRISE ASSISTED LIVING



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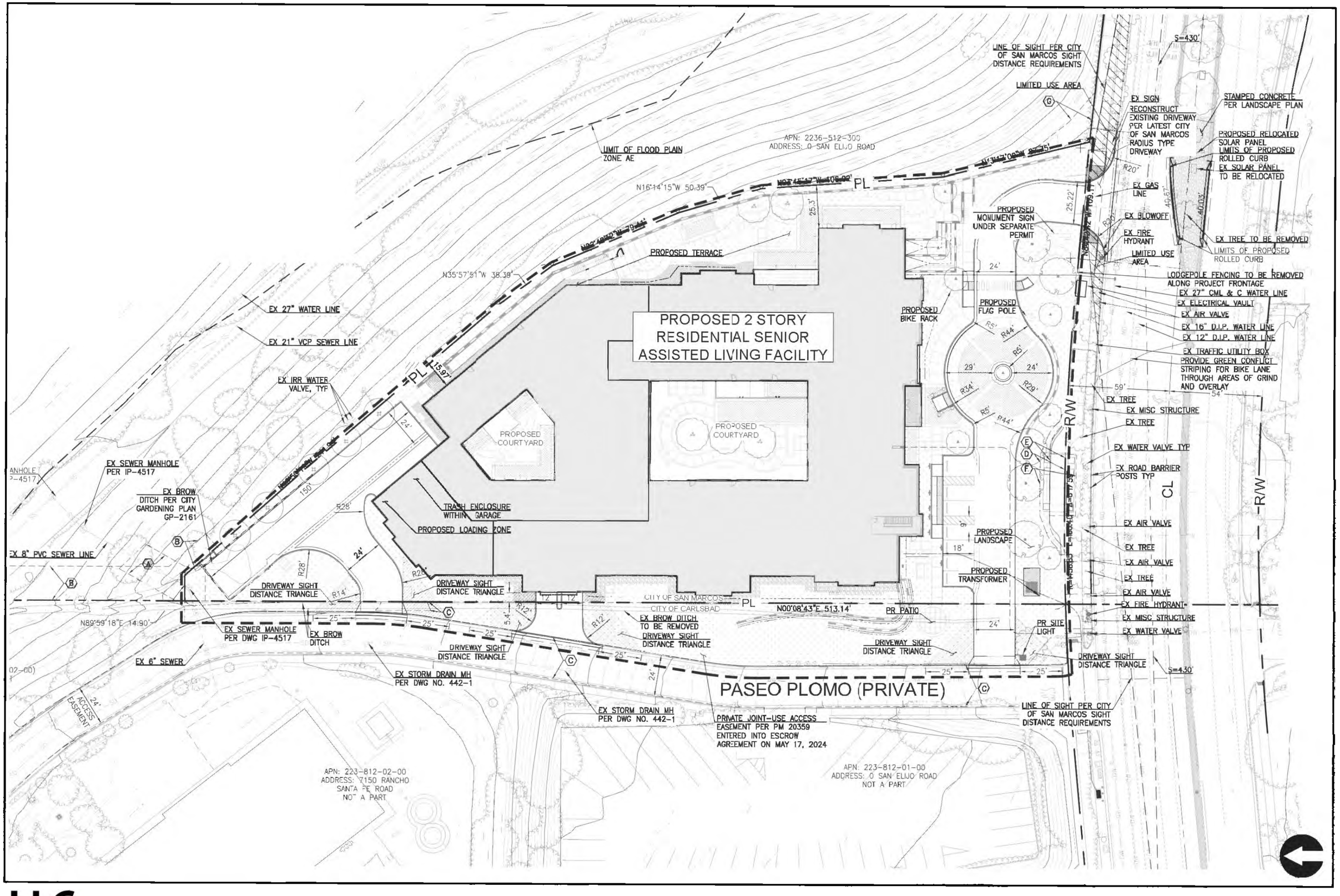
Date: 04/30/25

Figure 2

Project Area Map

Sunrise Assisted Living



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Date: 08/26/26

Figure 3

Site Plan

SUNRISE ASSISTED LIVING

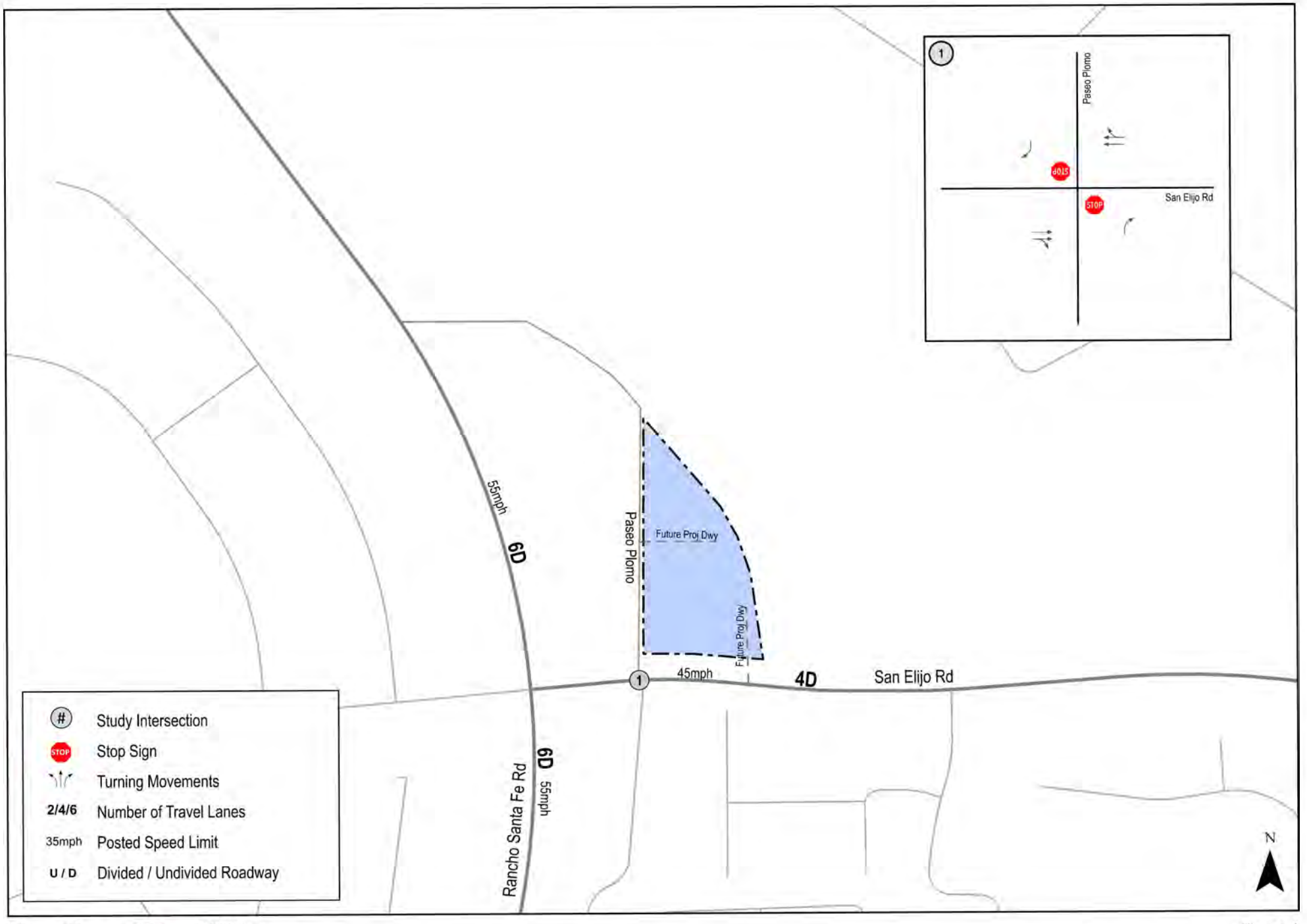

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Figure 4
Existing Conditions Diagram

SUNRISE ASSISTED LIVING

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Date: 4/10/2025

Figure 5
Existing Traffic Volumes

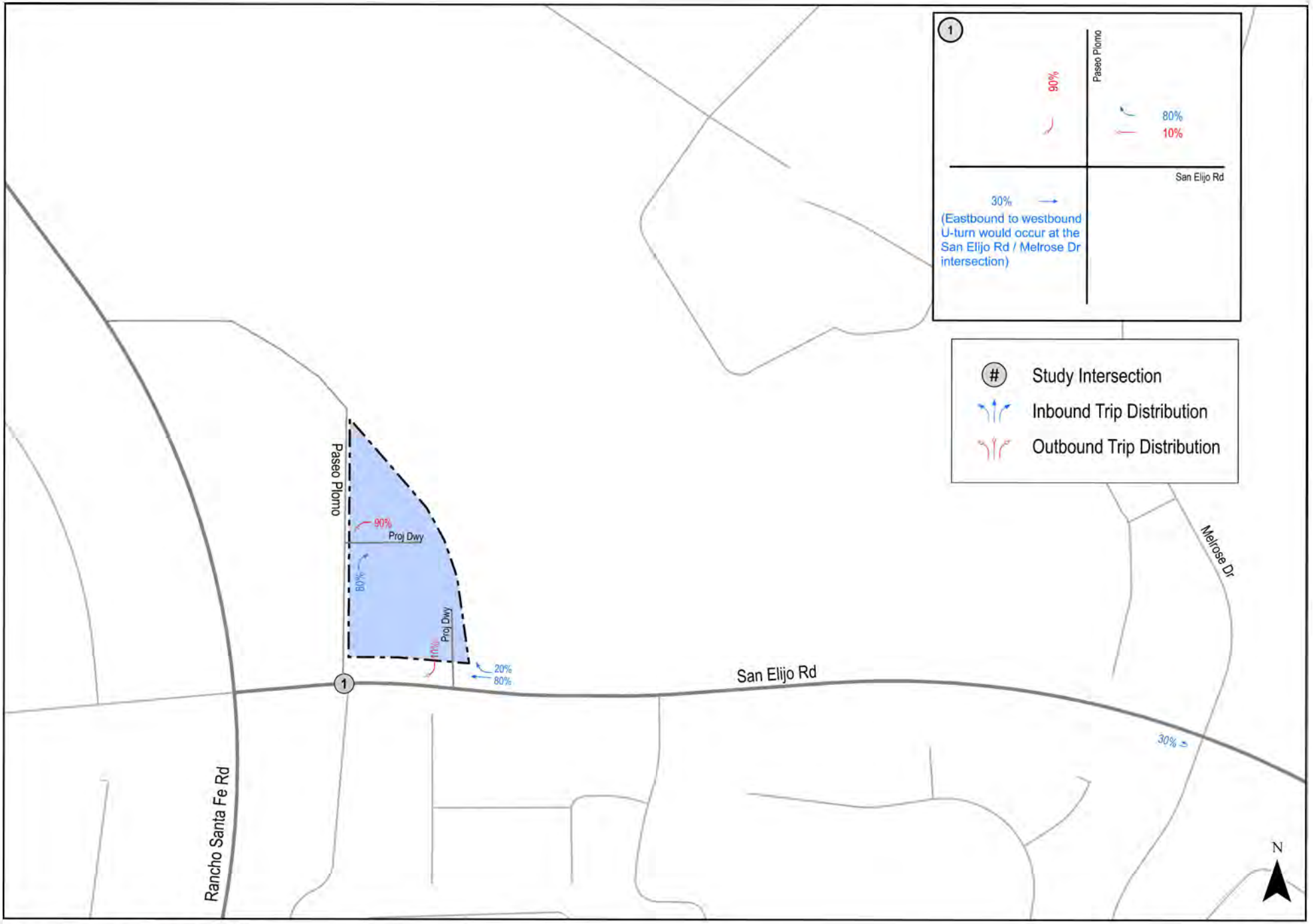

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Figure 6
Project Traffic Distribution

SUNRISE ASSISTED LIVING

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Date: 4/10/2025

Figure 7
Project Traffic Volumes

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Date: 4/10/2025

Figure 8
Near-Term (Year 2027) without Project Traffic Volumes

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Date: 4/10/2025

Figure 9
Near-Term (Year 2027) + Project Traffic Volumes

ATTACHMENT A

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of San Marcos
N/S: Paseo Plomo
E/W: San Elijo Road
Weather: Clear

File Name : SNM_PP_SE AM
Site Code : 05725116
Start Date : 2/26/2025
Page No : 1

Groups Printed- Total Volume

	Paseo Plomo Southbound				San Elijo Road Westbound				Paseo Plomo Northbound				San Elijo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	2	2	0	235	3	238	0	0	3	3	0	91	0	91	334
07:15 AM	0	0	1	1	0	286	4	290	0	0	5	5	0	147	0	147	443
07:30 AM	0	0	2	2	0	297	2	299	0	0	7	7	0	140	1	141	449
07:45 AM	0	0	2	2	0	293	4	297	0	0	6	6	0	104	1	105	410
Total	0	0	7	7	0	1111	13	1124	0	0	21	21	0	482	2	484	1636
08:00 AM	0	0	1	1	0	234	1	235	0	0	4	4	0	109	2	111	351
08:15 AM	0	0	1	1	0	286	5	291	0	0	5	5	0	145	3	148	445
08:30 AM	0	0	1	1	0	250	2	252	0	0	1	1	0	153	2	155	409
08:45 AM	0	0	2	2	0	267	0	267	0	0	0	0	0	144	1	145	414
Total	0	0	5	5	0	1037	8	1045	0	0	10	10	0	551	8	559	1619
Grand Total	0	0	12	12	0	2148	21	2169	0	0	31	31	0	1033	10	1043	3255
Apprch %	0	0	100		0	99	1		0	0	100		0	99	1		
Total %	0	0	0.4	0.4	0	66	0.6	66.6	0	0	1	1	0	31.7	0.3	32	

	Paseo Plomo Southbound				San Elijo Road Westbound				Paseo Plomo Northbound				San Elijo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	**2**	**2**	0	**297**	2	**299**	0	0	**7**	**7**	0	140	1	141	**449**
07:45 AM	0	0	2	2	0	293	4	297	0	0	6	6	0	104	1	105	410
08:00 AM	0	0	1	1	0	234	1	235	0	0	4	4	0	109	2	111	351
08:15 AM	0	0	1	1	0	286	**5**	291	0	0	5	5	0	**145**	**3**	**148**	445
Total Volume	0	0	6	6	0	1110	12	1122	0	0	22	22	0	498	7	505	1655
% App. Total	0	0	100		0	98.9	1.1		0	0	100		0	98.6	1.4		
PHF	.000	.000	.750	.750	.000	.934	.600	.938	.000	.000	.786	.786	.000	.859	.583	.853	.921

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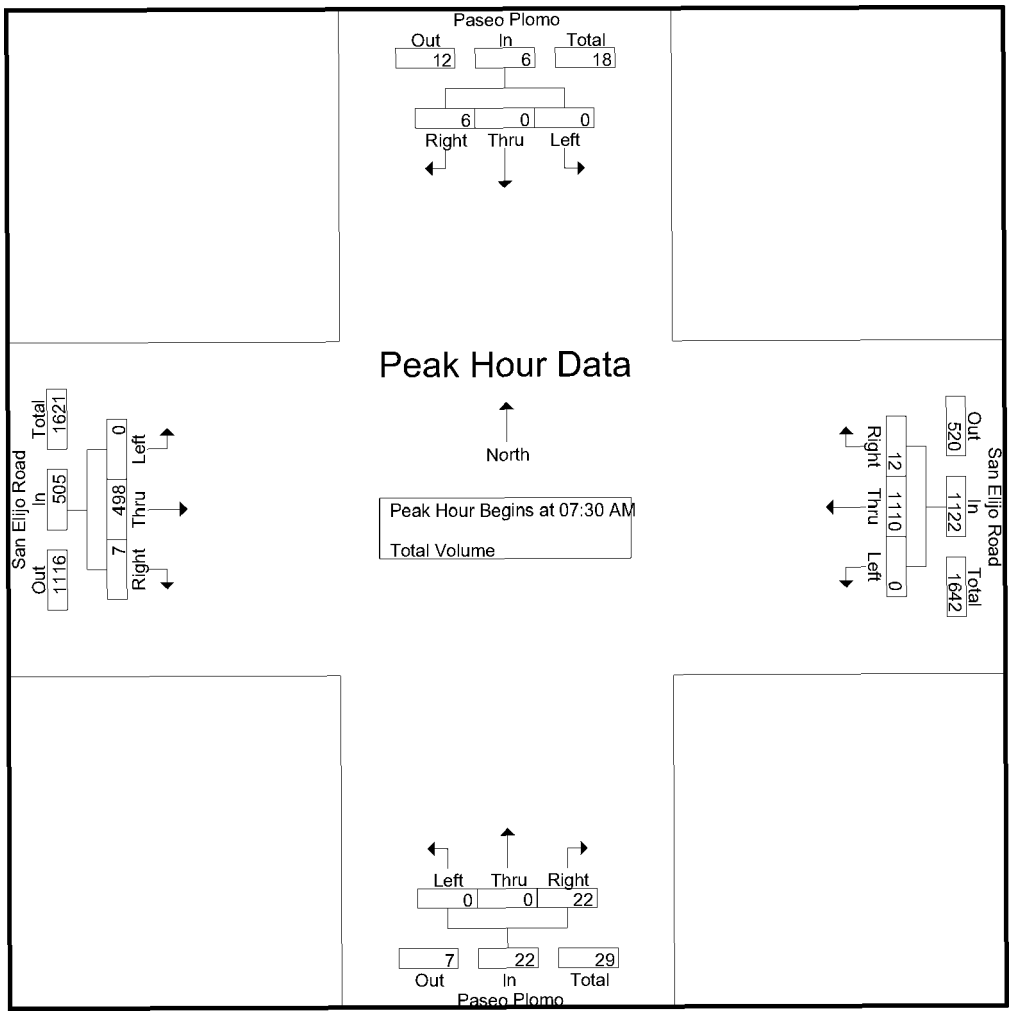

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:15 AM				08:00 AM			
+0 mins.	0	0	**2**	**2**	0	235	3	238	0	0	5	5	0	109	2	111
+15 mins.	0	0	1	1	0	286	**4**	290	0	0	**7**	**7**	0	145	**3**	148
+30 mins.	0	0	2	2	0	**297**	2	**299**	0	0	6	6	0	**153**	2	**155**
+45 mins.	0	0	2	2	0	293	4	297	0	0	4	4	0	144	1	145
Total Volume	0	0	7	7	0	1111	13	1124	0	0	22	22	0	551	8	559
% App. Total	0	0	100		0	98.8	1.2		0	0	100		0	98.6	1.4	
PHF	.000	.000	.875	.875	.000	.935	.813	.940	.000	.000	.786	.786	.000	.900	.667	.902

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City of San Marcos
N/S: Paseo Plomo
E/W: San Elijo Road
Weather: Clear

File Name : SNM_PP_SE PM
Site Code : 05725116
Start Date : 2/26/2025
Page No : 1

Groups Printed- Total Volume

	Paseo Plomo Southbound				San Elijo Road Westbound				Paseo Plomo Northbound				San Elijo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	1	1	0	143	0	143	0	0	4	4	0	346	6	352	500
04:15 PM	0	0	0	0	0	154	0	154	0	0	4	4	0	292	4	296	454
04:30 PM	0	0	2	2	0	139	2	141	0	0	4	4	0	280	7	287	434
04:45 PM	0	0	2	2	0	169	0	169	0	0	4	4	0	342	4	346	521
Total	0	0	5	5	0	605	2	607	0	0	16	16	0	1260	21	1281	1909
05:00 PM	0	0	0	0	0	137	0	137	0	0	3	3	0	345	6	351	491
05:15 PM	0	0	5	5	0	179	2	181	0	0	3	3	0	326	5	331	520
05:30 PM	0	0	2	2	0	171	4	175	0	0	2	2	0	273	5	278	457
05:45 PM	0	0	0	0	0	140	0	140	0	0	2	2	0	260	1	261	403
Total	0	0	7	7	0	627	6	633	0	0	10	10	0	1204	17	1221	1871
Grand Total	0	0	12	12	0	1232	8	1240	0	0	26	26	0	2464	38	2502	3780
Apprch %	0	0	100		0	99.4	0.6		0	0	100		0	98.5	1.5		
Total %	0	0	0.3	0.3	0	32.6	0.2	32.8	0	0	0.7	0.7	0	65.2	1	66.2	

	Paseo Plomo Southbound				San Elijo Road Westbound				Paseo Plomo Northbound				San Elijo Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	2	2	0	169	0	169	0	0	**4**	**4**	0	342	4	346	**521**
05:00 PM	0	0	0	0	0	137	0	137	0	0	3	3	0	**345**	**6**	**351**	491
05:15 PM	0	0	**5**	**5**	0	**179**	2	**181**	0	0	3	3	0	326	5	331	520
05:30 PM	0	0	2	2	0	171	**4**	175	0	0	2	2	0	273	5	278	457
Total Volume	0	0	9	9	0	656	6	662	0	0	12	12	0	1286	20	1306	1989
% App. Total	0	0	100		0	99.1	0.9		0	0	100		0	98.5	1.5		
PHF	.000	.000	.450	.450	.000	.916	.375	.914	.000	.000	.750	.750	.000	.932	.833	.930	.954

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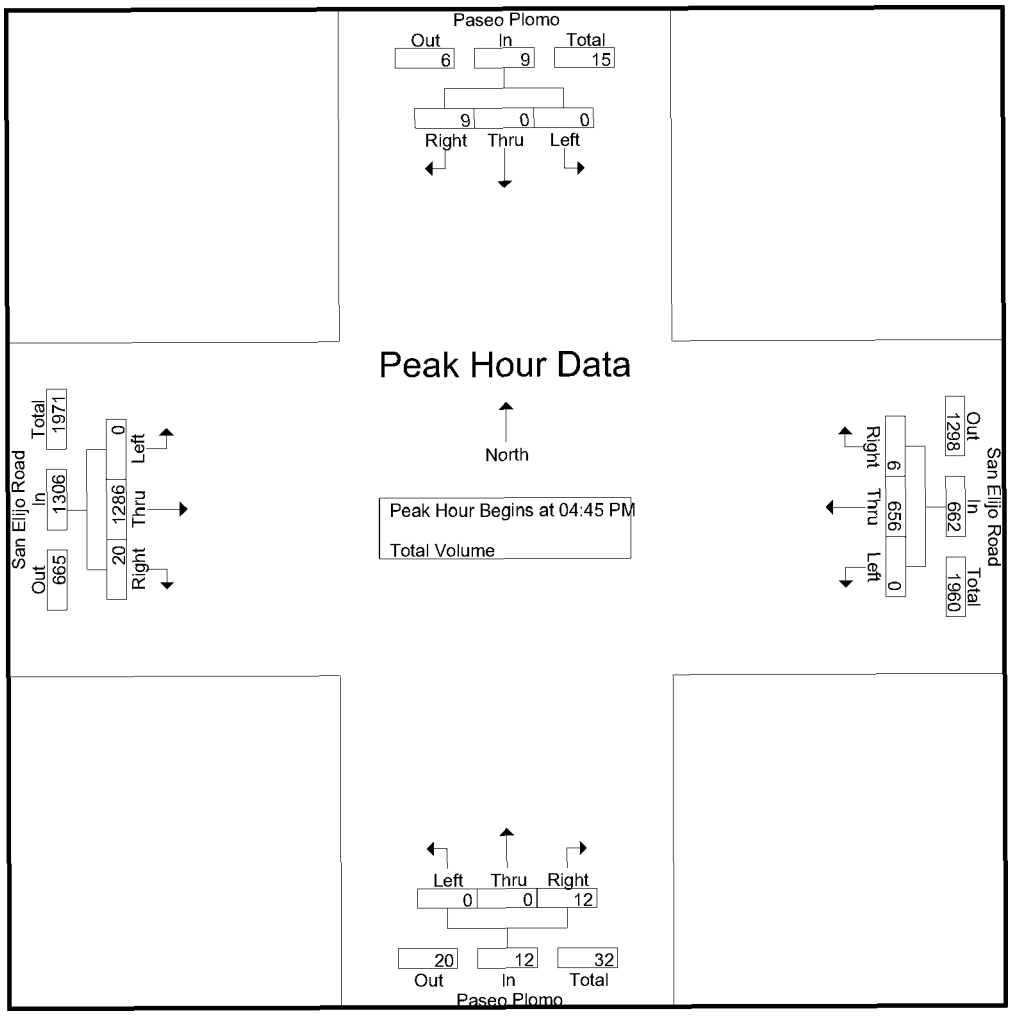

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:45 PM				04:00 PM				04:30 PM			
+0 mins.	0	0	2	2	0	169	0	169	0	0	**4**	**4**	0	280	**7**	287
+15 mins.	0	0	2	2	0	137	0	137	0	0	4	4	0	342	4	346
+30 mins.	0	0	0	0	0	**179**	2	**181**	0	0	4	4	0	**345**	6	**351**
+45 mins.	0	0	**5**	**5**	0	171	**4**	175	0	0	4	4	0	326	5	331
Total Volume	0	0	9	9	0	656	6	662	0	0	16	16	0	1293	22	1315
% App. Total	0	0	100		0	99.1	0.9		0	0	100		0	98.3	1.7	
PHF	.000	.000	.450	.450	.000	.916	.375	.914	.000	.000	1.000	1.000	.000	.937	.786	.937

ATTACHMENT B

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↱			↑↑↱				↱			↱
Traffic Vol, veh/h	0	498	7	0	1110	12	0	0	22	0	0	6
Future Vol, veh/h	0	498	7	0	1110	12	0	0	22	0	0	6
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	94	94	94	79	79	79	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	586	8	0	1181	13	0	0	28	0	0	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	317	-	-	617
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	679	0	0	433
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	666	-	-	425
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	10.6	13.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	666	-	-	-	-	425
HCM Lane V/C Ratio	0.042	-	-	-	-	0.019
HCM Control Delay (s/veh)	10.6	-	-	-	-	13.6
HCM Lane LOS	B	-	-	-	-	B
HCM 95th %tile Q (veh)	0.1	-	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↱			↑↑↱				↱			↱
Traffic Vol, veh/h	0	1286	20	0	656	6	0	0	12	0	0	9
Future Vol, veh/h	0	1286	20	0	656	6	0	0	12	0	0	9
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	91	91	91	75	75	75	45	45	45
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1383	22	0	721	7	0	0	16	0	0	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	723	-	-	384
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	369	0	0	614
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	362	-	-	602
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	15.4	11.2
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	362	-	-	-	-	602
HCM Lane V/C Ratio	0.044	-	-	-	-	0.033
HCM Control Delay (s/veh)	15.4	-	-	-	-	11.2
HCM Lane LOS	C	-	-	-	-	B
HCM 95th %tile Q (veh)	0.1	-	-	-	-	0.1

ATTACHMENT C

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↱			↑↑↱				↱			↱
Traffic Vol, veh/h	0	518	7	0	1155	12	0	0	23	0	0	6
Future Vol, veh/h	0	518	7	0	1155	12	0	0	23	0	0	6
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	94	94	94	79	79	79	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	609	8	0	1229	13	0	0	29	0	0	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	329	-	-	641
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	667	0	0	417
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	654	-	-	409
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	10.8	14
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	654	-	-	-	-	409
HCM Lane V/C Ratio	0.045	-	-	-	-	0.02
HCM Control Delay (s/veh)	10.8	-	-	-	-	14
HCM Lane LOS	B	-	-	-	-	B
HCM 95th %tile Q (veh)	0.1	-	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↳			↑↑↳				↱			↱
Traffic Vol, veh/h	0	1338	21	0	683	6	0	0	12	0	0	9
Future Vol, veh/h	0	1338	21	0	683	6	0	0	12	0	0	9
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	91	91	91	75	75	75	45	45	45
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1439	23	0	751	7	0	0	16	0	0	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	751	-	-	399
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	353	0	0	601
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	346	-	-	590
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	15.9	11.3
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	346	-	-	-	-	590
HCM Lane V/C Ratio	0.046	-	-	-	-	0.034
HCM Control Delay (s/veh)	15.9	-	-	-	-	11.3
HCM Lane LOS	C	-	-	-	-	B
HCM 95th %tile Q (veh)	0.1	-	-	-	-	0.1

ATTACHMENT D

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↱			↑↑↱				↱			↱
Traffic Vol, veh/h	0	520	7	0	1155	17	0	0	23	0	0	10
Future Vol, veh/h	0	520	7	0	1155	17	0	0	23	0	0	10
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	94	94	94	79	79	79	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	612	8	0	1229	18	0	0	29	0	0	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	330	-	-	644
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	666	0	0	416
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	653	-	-	408
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	10.8	14.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	653	-	-	-	-	408
HCM Lane V/C Ratio	0.045	-	-	-	-	0.033
HCM Control Delay (s/veh)	10.8	-	-	-	-	14.1
HCM Lane LOS	B	-	-	-	-	B
HCM 95th %tile Q (veh)	0.1	-	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↳			↑↑↳				↱			↱
Traffic Vol, veh/h	0	1341	21	0	684	14	0	0	12	0	0	17
Future Vol, veh/h	0	1341	21	0	684	14	0	0	12	0	0	17
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	91	91	91	75	75	75	45	45	45
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1442	23	0	752	15	0	0	16	0	0	38

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	753	-	-	404
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	352	0	0	596
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	345	-	-	585
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	15.9	11.6
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	345	-	-	-	-	585
HCM Lane V/C Ratio	0.046	-	-	-	-	0.065
HCM Control Delay (s/veh)	15.9	-	-	-	-	11.6
HCM Lane LOS	C	-	-	-	-	B
HCM 95th %tile Q (veh)	0.1	-	-	-	-	0.2