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TRAFFIC IMPACT ANALYSIS REPORT

RAMONA EXPRESSWAY AND STATE STREET SHOPPING CENTER

San Jacinto, California
January 25, 2024
(Revision of March 30, 2023 Report)

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RAMONA EXPRESSWAY AND STATE STREET SHOPPING CENTER

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1.0 INTRODUCTION

This traffic impact analysis addresses the potential traffic impacts and circulation needs associated with the proposed Ramona Expressway and State Street Shopping Center Project (hereinafter referred to as Project). The proposed Project site is located on the southeast corner of the intersection of State Street and Ramona Expressway in the City of San Jacinto, California. The proposed Project will consist of a maximum of 114,135 square foot (SF) shopping center with 105,348 SF of retail/grocery/food uses, a gas station with 16 vehicle fueling positions and a 5,198 SF convenience market, and a 3,589 SF express car wash with a 110-foot wash tunnel.

This traffic report documents the findings and recommendations of a traffic impact analysis conducted by Linscott, Law & Greenspan Engineers (LLG) to determine the potential impacts associated with the proposed Project. The traffic analysis evaluates the operating conditions at seven (7) key study intersections within the Project vicinity, estimates the trip generation potential of the proposed project, and forecasts future operating conditions without and with the proposed Project. Where necessary, intersection improvements are identified.

This traffic report satisfies the *City of San Jacinto Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment*, dated June 2020. The Scope of Work for this traffic study, which is included in ***Appendix A***, was developed in conjunction with City of San Jacinto staff.

The Project site has been visited and an inventory of adjacent area roadways and intersections was performed. Existing weekday traffic count information has been collected at seven (7) key study intersections for use in the preparation of intersection level of service calculations. Information concerning cumulative projects (planned and/or approved) in the vicinity of the proposed Project has been researched at the City of San Jacinto. Based on our research, there are thirty-one (31) cumulative projects in the City of San Jacinto within the vicinity of the subject site. These thirty-one (31) planned and/or approved cumulative projects were considered in the cumulative traffic analysis for this project.

This traffic report analyzes existing and future weekday AM peak hour and PM peak hour traffic conditions for a near-term (Year 2026) traffic setting upon completion of the proposed Project. Peak hour traffic forecasts for the Year 2026 horizon year have been projected by increasing existing traffic volumes by an annual growth rate of 2.0% per year and adding traffic volumes generated by thirty-one (31) cumulative projects, which provides a conservative forecast.

1.1 Study Area

Seven (7) key study intersections were selected for evaluation based on discussions with City of San Jacinto staff. The intersections listed below provide local access to the study area and define the extent of the boundaries for this traffic impact investigation.

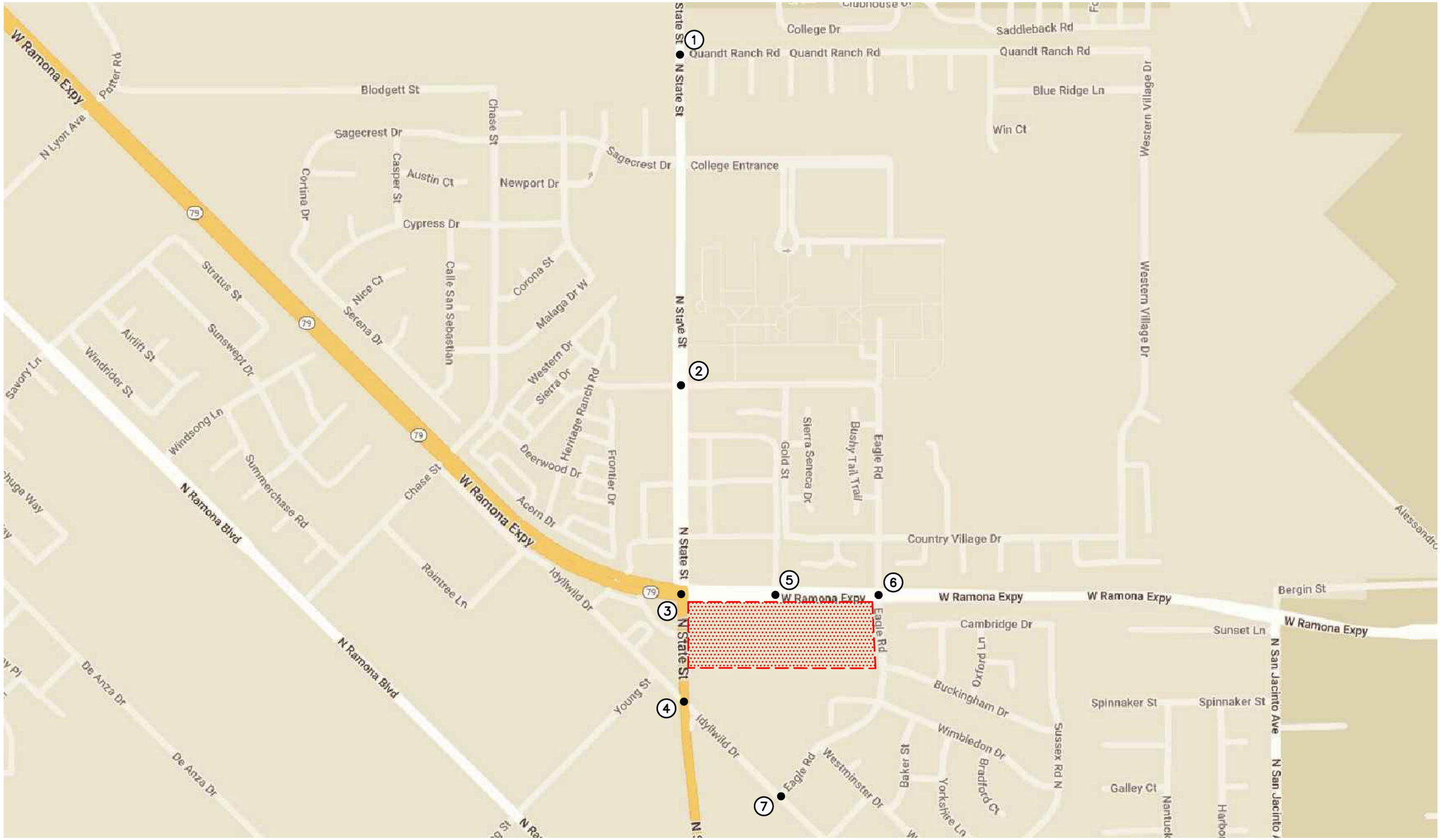
Key Study Intersections

1. State Street at Quandt Ranch Road
2. State Street at Community College Drive
3. State Street at Ramona Expressway
4. State Street at Idyllwild Drive
5. Village at San Jacinto/Project Driveway No. 3 at Ramona Expressway
6. Eagle Road at Ramona Expressway
7. Eagle Road at Idyllwild Drive

Figure 1-1 presents a Vicinity Map, which illustrates the general location of the project and depicts the study locations and surrounding street system. The Level of Service (LOS) investigations at these key locations were used to evaluate the potential traffic-related impacts associated with area growth, cumulative projects and the proposed Project. When necessary, this report recommends intersection and/or roadway improvements that may be required to accommodate future traffic volumes and restore/maintain an acceptable Level of Service and/or improve the impact of the project.

Included in this Traffic Impact Analysis are:

- Existing traffic counts,
- Estimated Project traffic generation/distribution/assignment,
- Estimated cumulative project traffic generation/distribution/assignment,
- AM and PM peak hour capacity analyses for existing conditions,
- AM and PM peak hour capacity analyses for existing plus ambient growth to the Year 2026 plus Project plus cumulative projects traffic conditions (i.e. cumulative traffic conditions),
- Traffic Signal Warrant Analysis,
- Site Access and Internal Circulation Evaluation,
- Area-Wide Traffic Improvements,
- Project-Related Fair-Share Contributions,
- Multimodal Circulation, and
- Vehicle Miles Traveled (VMT) Analysis.



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SOURCE: GOOGLE

KEY

(#) = STUDY INTERSECTION

= PROJECT SITE

FIGURE 1-1

VICINITY MAP

RAMONA EXPRESSWAY AND STATE STREET SHOPPING CENTER, SAN JACINTO

2.0 PROJECT DESCRIPTION AND LOCATION

The proposed Project site is located on the southeast corner of the intersection of State Street and Ramona Expressway in the City of San Jacinto, California. ***Figure 2-1*** presents an aerial depiction of the existing site, which is currently vacant.

Figure 2-2 presents the proposed site plan for the proposed Project, prepared by MCG Architecture. Review of the proposed site plan indicates that the proposed Project will consist of a maximum of 114,135 square foot (SF) shopping center with 105,348 SF of retail/grocery/food uses, a gas station with 16 vehicle fueling positions and a 5,198 SF convenience market, and a 3,589 SF express car wash with a 110-foot wash tunnel. The proposed Project is anticipated to be completed by the Year 2026.

2.1 Site Access

Access to the proposed Project will be provided via one (1) right-turn in/right-turn out only unsignalized driveway located along State Street (i.e. Project Driveway No. 1), two (2) right-turn in/right-turn out only unsignalized driveways located along Ramona Expressway (i.e. Project Driveway No. 2 and Project Driveway No. 4), one (1) full access signalized driveway located along Ramona Expressway, located directly opposite Village at San Jacinto (i.e. Project Driveway No. 3) and two (2) full-access unsignalized driveways located along Eagle Road (i.e. Project Driveway No. 5 and Project Driveway No. 6). It should be noted that there is one additional driveway located at the southeast corner of the project site along Eagle Road that will provide truck access to Major 3, Major 4 and Major 5.

2.2 Project-Specific Access Improvements

The following Project features will be constructed by the proposed Project to ensure that adequate ingress and egress to the Project site is provided along Ramona Expressway and State Street:

- Intersection No. 3 – State Street at Ramona Expressway: Restripe the south leg of the intersection to provide the northbound approach with a second northbound left-turn lane and convert the northbound right-turn lane to a shared northbound through/right-turn lane. Modify the existing traffic signal, as necessary. The installation of this improvement is subject to the approval of the City of San Jacinto.

- Intersection No. 5 – Village at San Jacinto/Project Driveway No. 3 at Ramona Expressway: Construct the project driveway, located directly opposite Village at San Jacinto and provide one inbound lane and three outbound lanes (i.e. dual northbound left-turn lanes and one northbound shared through/right-turn lane). Stripe crosswalks on the south, west, and east legs. Modify the existing traffic signal, as necessary. The installation of this improvement is subject to the approval of the City of San Jacinto.

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SOURCE: GOOGLE

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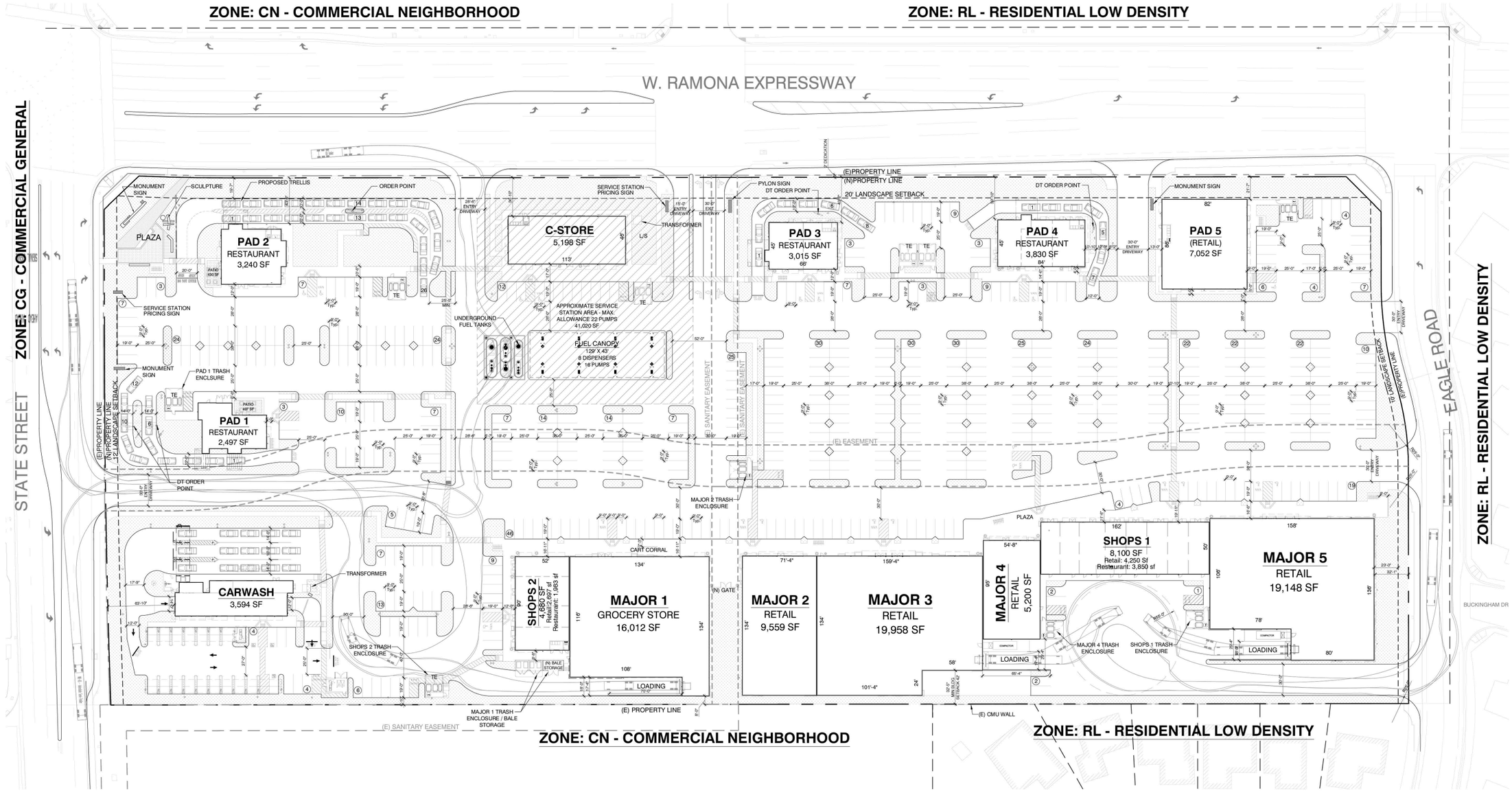
= PROJECT SITE

FIGURE 2-1

EXISTING SITE AERIAL

RAMONA EXPRESSWAY AND STATE STREET SHOPPING CENTER, SAN JACINTO



SOURCE: MCG ARCHITECTURE

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FIGURE 2–2

PROPOSED SITE PLAN

RAMONA EXPRESSWAY AND STATE STREET SHOPPING CENTER, SAN JACINTO

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3.0 EXISTING CONDITIONS

3.1 Existing Street System

The principal local network of streets serving the proposed project site is State Street, Ramona Expressway and Eagle Road. The following discussion provides a brief synopsis of these key area streets. The descriptions are based on an inventory of existing roadway conditions.

State Street is generally a four-lane, divided roadway north of Ramona Expressway and generally a four-lane, undivided roadway south of Ramona Expressway, oriented in the north-south direction. State Street borders the Project site to the west and will provide access to the project site via one (1) right-turn in/right-turn out only unsignalized driveway. On-street parking is generally not permitted along State Street in the vicinity of the Project site. The posted speed limit on State Street is 45 miles per hour (mph). Traffic signals control the study intersections of State Street at Ramona Expressway and Idyllwild Drive. The study intersections of State Street at Quandt Ranch Road and Community College Drive are stop controlled.

Ramona Expressway is generally a six-lane, divided roadway west of Eagle Road and generally a four-lane, divided roadway east of Eagle Road, oriented in the east-west direction. Ramona Expressway borders the Project site to the north and will provide access to the project site via two (2) right-turn in /right run out only unsignalized driveways and one (1) signalized driveway, located directly opposite Village at San Jacinto. On-street parking is generally not permitted along Ramona Expressway in the vicinity of the Project site. The posted speed limit on Ramona Expressway is 55 mph. Traffic signals control the study intersections of Ramona Expressway at State Street, Village at San Jacinto/Project Driveway No. 3 and Eagle Road.

Eagle Road is a two-lane, undivided roadway, oriented in the north-south direction. Eagle Road borders the Project site to the east and will provide access to the project site via two (2) full access unsignalized driveways. On-street parking is generally not permitted along Eagle Road in the vicinity of the Project site. The posted speed limit on Eagle Road is 30 mph. A traffic signal controls the study intersection of Eagle Road at Ramona Expressway. The study intersection of Eagle Road at Idyllwild Drive is stop controlled.

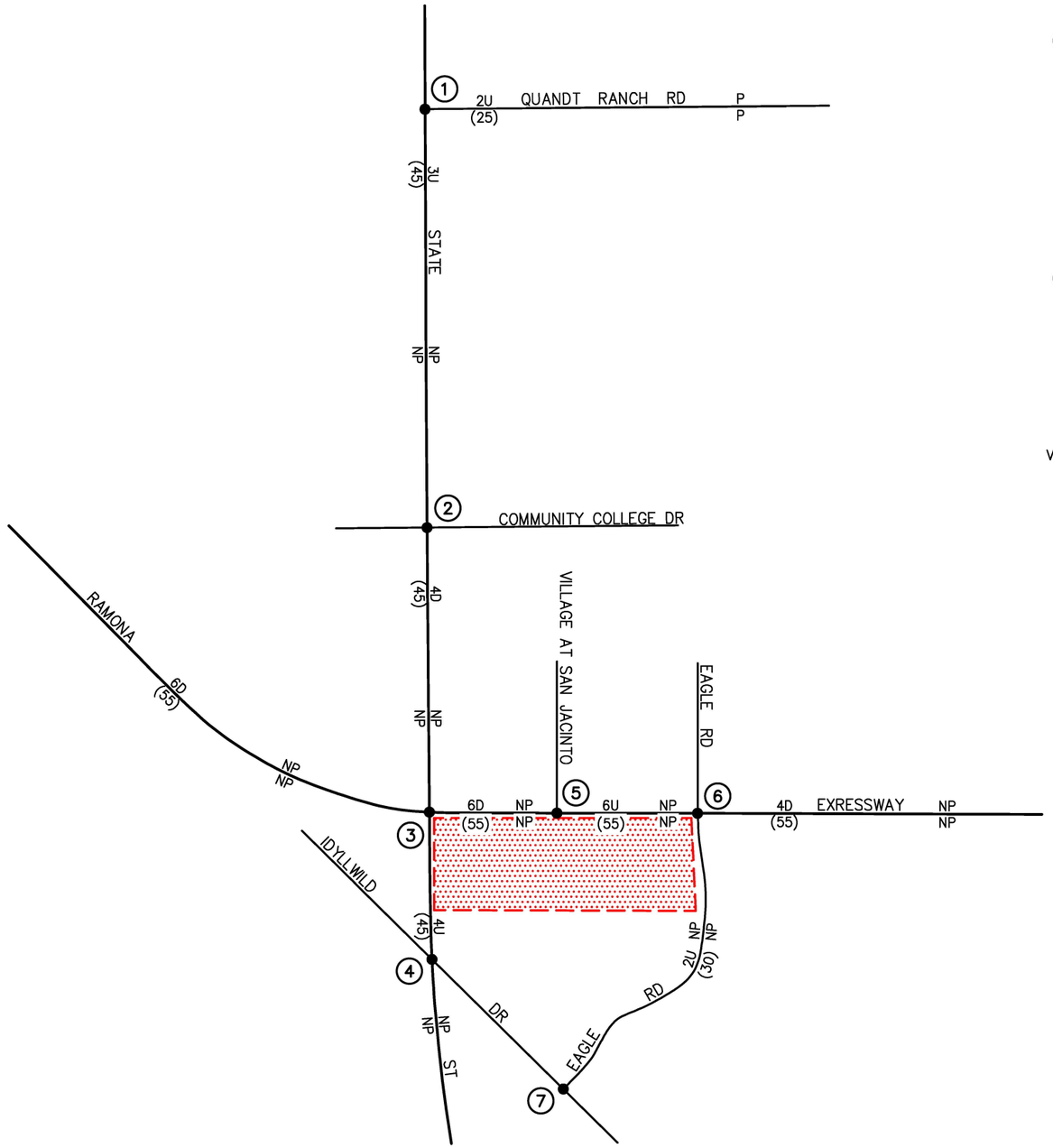
Figure 3-1 presents an inventory of the existing roadway conditions for the arterials and intersections evaluated in this report. This figure identifies the number of travel lanes for key arterials, as well as intersection configurations and controls for the key area study intersections.

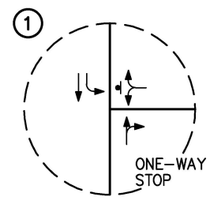
3.2 Existing Public Transit

The Riverside Transit Agency (RTA) operates within the study area. A description of the transit services within the Project vicinity are described on the following page:

City Route 31:

- Route 31 provides service from San Jacinto to Hemet; via Hemet Valley Mall, State & Acacia (Post Office), State & Fruitvale, Mt. San Jacinto College, Beaumont Walmart,





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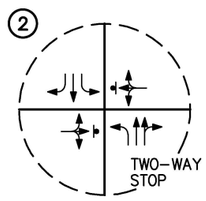

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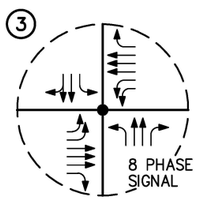

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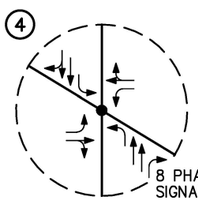

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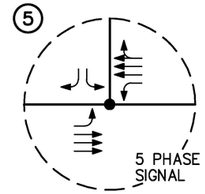

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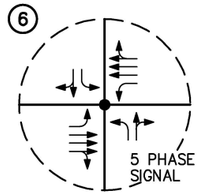

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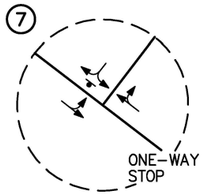

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KEY

- ← = APPROACH LANE ASSIGNMENT
- ● = TRAFFIC SIGNAL, ▾ = STOP SIGN
- P = PARKING, NP = NO PARKING
- U = UNDIVIDED, D = DIVIDED
- 2 = NUMBER OF TRAVEL LANES
- (XX)= POSTED SPEED LIMIT (MPH)
- ▨ = PROJECT SITE

FIGURE 3–1

EXISTING ROADWAY CONDITIONS AND INTERSECTION CONTROLS

RAMONA EXPRESSWAY AND STATE STREET SHOPPING CENTER, SAN JACINTO

Sun Lakes at Village, Super Walmart at Moreno Beach Drive, Riverside University Medical Center, San Jacinto Senior Center and San Jacinto Mall.

- The route traverses the cities of San Jacinto, Beaumont, Banning, San Jacinto, and Hemet.
- During the weekday and weekend AM and PM peak hours, Route 31 has approximate headways between 60 and 70 minutes in the northbound and southbound directions.

City Route 32:

- Route 32 provides service from Hemet to San Jacinto; via Hemet Valley Mall, State & Stetson, San Jacinto & Mayberry, Esplanade & San Jacinto, Main & Mistletoe, Idyllwild Dr & Attenborough, and Mt. San Jacinto College San Jacinto.
- The route traverses the cities of Hemet and San Jacinto
- During the weekday and weekend AM and PM peak hours, Route 32 has approximate headways between 60 and 70 minutes in the northbound and southbound directions.

City Route 44:

- Route 44 provides service from Hemet to San Jacinto; via Hemet Valley Mall, State & Esplanade, Mt. San Jacinto College San Jacinto, San Jacinto & Sixth, and Hemet Valley Mall
- The route traverses the cities of Hemet and San Jacinto
- During the weekday and weekend AM and PM peak hours, Route 44 has approximate headways between 60 and 70 minutes in the northbound and southbound directions.

City Route 74:

- Route 74 provides service from Perris to San Jacinto, via Perris Station Transit Center, Cherry Hills & Bradley, Mt. San Jacinto College Menifee, Simpson & Winchester, Hemet Valley Mall, and Mt. San Jacinto College San Jacinto.
- The route traverses the cities of Perris, Menifee, Hemet, and San Jacinto
- During the weekday AM and PM peak hours, Route 74 has approximate headways between 80 and 100 minutes in the eastbound and westbound directions. During the weekends Route 74 has headways between 70 and 90 minutes.

City Route 79:

- Route 79 provides service from Temecula to San Jacinto, via Pujol & Main, County Center Drive, Promenade Mall, Winchester & Nicolas, Southwest Justice Center, Winchester & Pourroy, Simpson & Winchester, Hemet Valley Mall, Mt. San Jacinto College San Jacinto
- The route traverses the cities of Temecula, Murrieta, Hemet, and San Jacinto
- During the weekday and weekend AM and PM peak hours, Route 79 has approximate headways between 80 and 90 minutes in the northbound and southbound directions.

3.3 Bicycle and Pedestrian Facilities

The Federal and State transportation system recognizes three primary bikeway facilities: Bicycle Paths (Class I), Bicycle Lanes (Class II), and Bicycle Routes (Class III). Bicycle Paths (Class I) are exclusive car free facilities that are typically not located within a roadway area. Bicycle Lanes (Class II) are part of the street design that is dedicated only for bicycles and identified by a striped lane separating vehicle lanes from bicycle lanes. Bicycle Routes (Class III) are preferably located on collector and lower volume arterial streets. The following bicycle facilities are located within the vicinity of the project site.

- A Class II Bike Lane currently exists along Ramona Expressway (i.e. on both sides of the street), west and east of State Street. A Class II Bike Lane also currently exists along Eagle Road (i.e. on both sides of the street), north and south of Ramona Expressway.

Pedestrian connection to the surrounding residential, commercial, college developments, as well as nearby public transit stops, is provided via existing sidewalks along the Project frontage on State Street. Sidewalks are also existing along most streets within the Project vicinity and the project will construct sidewalk along the Project frontage on Ramona Expressway and Eagle Road.

3.4 Existing Traffic Volumes

Seven (7) key study intersections have been identified as the locations at which to evaluate existing and future traffic operating conditions. Some portion of project-related traffic will pass through these intersections and their analysis will reveal the expected relative impacts of the project. These key study intersections were selected for evaluation based on discussions with City of San Jacinto staff.

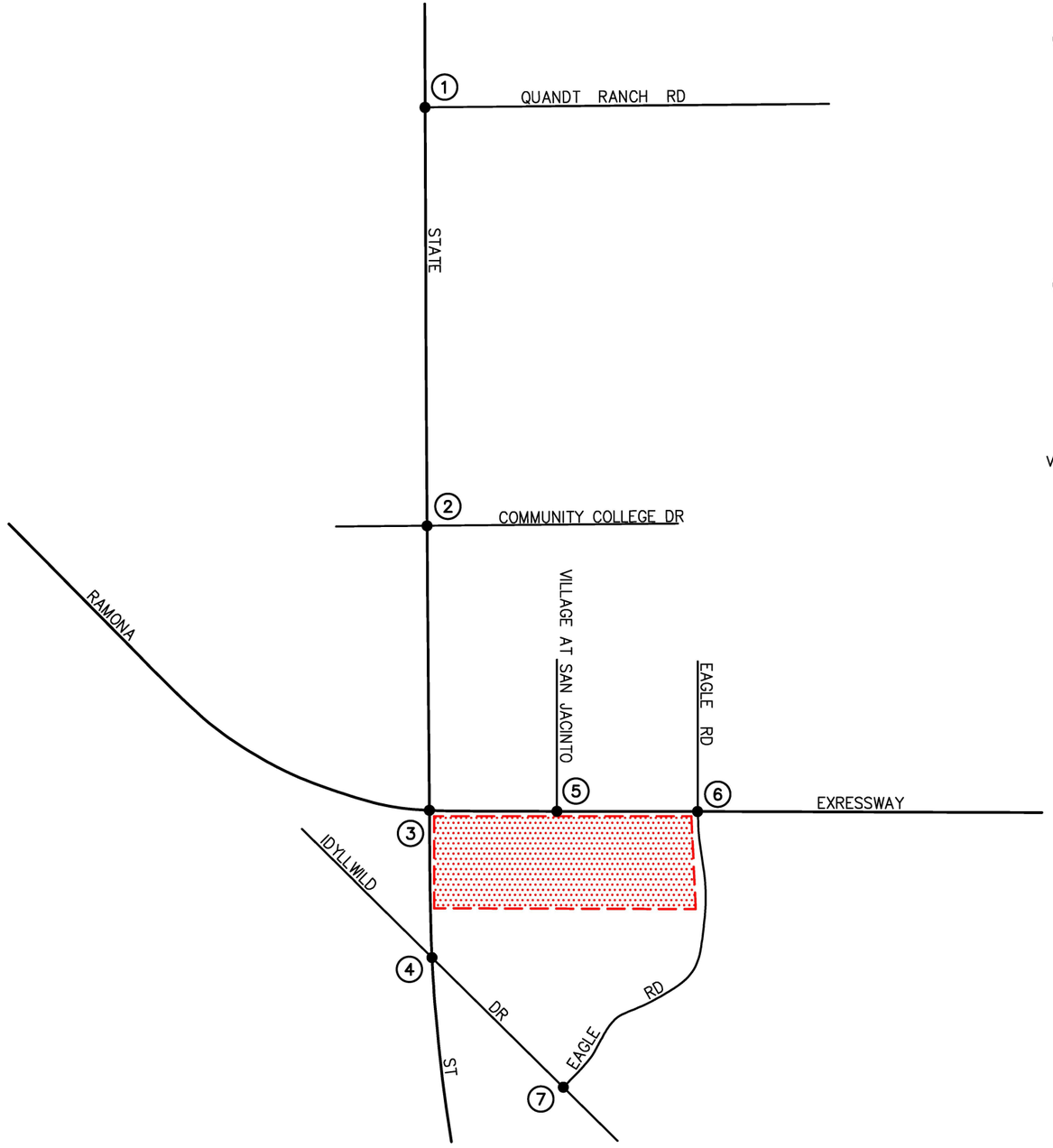
Existing AM and PM peak hour traffic volumes for the seven (7) key study intersections evaluated in this report were obtained from manual peak hour turning movement counts conducted by *Counts Unlimited, Inc.* in August 2022. It should be noted that the traffic counts were conducted when local area schools, including Mt. San Jacinto College were back in session. ***Figures 3-2*** and ***3-3*** illustrate the existing AM and PM peak hour traffic volumes at the seven (7) key study intersections evaluated in this report, respectively. ***Appendix B*** contains the detailed peak hour count sheets for the key intersections evaluated in this report.

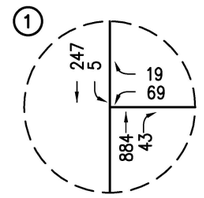
3.5 Existing Intersection Conditions

In conformance with City of San Jacinto requirements, existing AM and PM peak hour operating conditions for the signalized and unsignalized intersections were evaluated using the *Highway Capacity Manual 7th Edition* (HCM 7) methodology.

3.5.1 Highway Capacity Manual (HCM) Method of Analysis (Signalized Intersections)

Based on the HCM operations method of analysis, level of service for signalized intersections is defined in terms of control delay, which is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometries, traffic, and incidents. Total delay is the difference between





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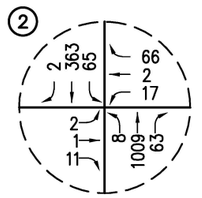

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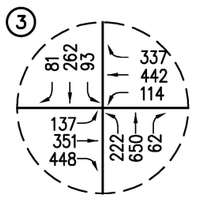

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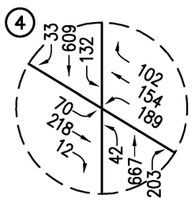

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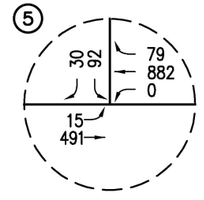

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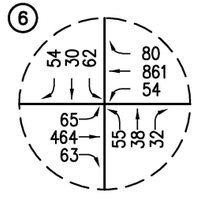

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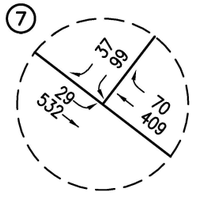

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KEY

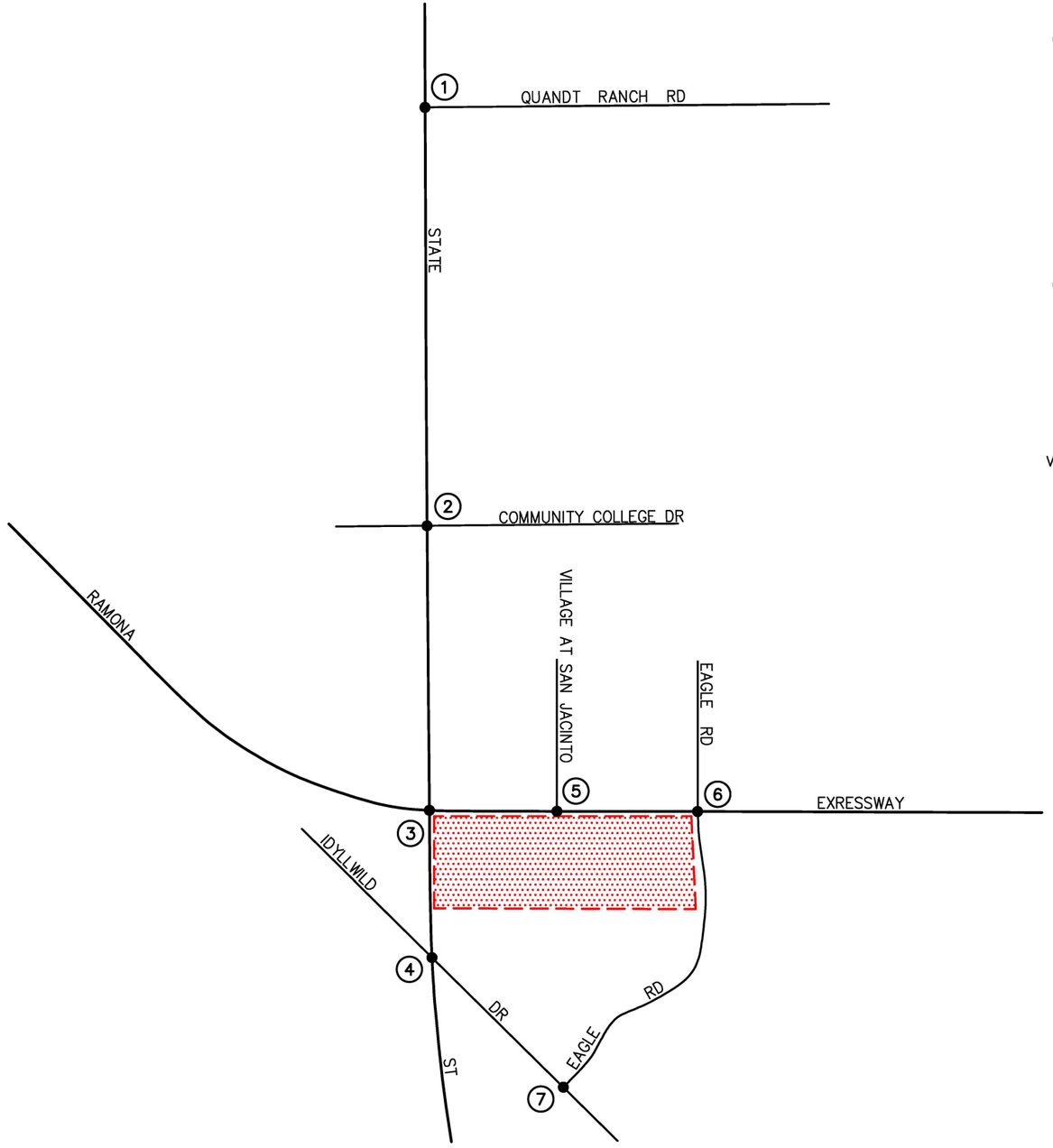
(#) = STUDY INTERSECTION

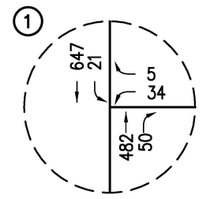
= PROJECT SITE

FIGURE 3-2

EXISTING AM PEAK HOUR TRAFFIC VOLUMES

RAMONA EXPRESSWAY AND STATE STREET SHOPPING CENTER, SAN JACINTO





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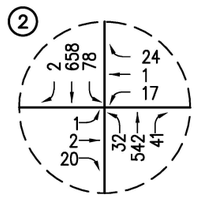

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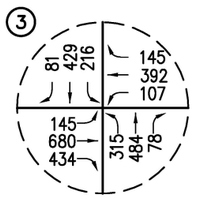

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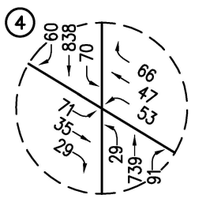

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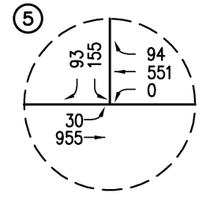

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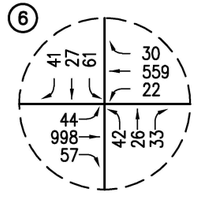

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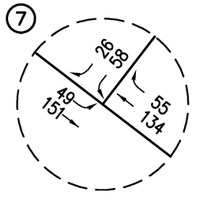

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KEY
(#) = STUDY INTERSECTION
= PROJECT SITE

FIGURE 3-3

EXISTING PM PEAK HOUR TRAFFIC VOLUMES
RAMONA EXPRESSWAY AND STATE STREET SHOPPING CENTER, SAN JACINTO

the travel time actually experienced and the reference travel time that would result during ideal conditions: in the absence of traffic control, in the absence of geometric delay, in the absence of any incidents, and when there are no other vehicles on the road.

In Chapter 19 of the HCM, only the portion of total delay attributed to the control facility is quantified. This delay is called *control delay.* Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. In contrast, in previous versions of the HCM (1994 and earlier), delay included only stopped delay. Specifically, LOS criteria for traffic signals are stated in terms of the average control delay per vehicle. The six qualitative categories of Level of Service that have been defined along with the corresponding HCM control delay value range for signalized intersections are shown in ***Table 3-1***.

3.5.2 Highway Capacity Manual (HCM) Method of Analysis (Unsignalized Intersections)

The HCM unsignalized methodology for stop-controlled intersections was utilized for the analysis of the unsignalized intersections. LOS criteria for unsignalized intersections differ from LOS criteria for signalized intersections as signalized intersections are designed for heavier traffic and therefore a greater delay.

Two-way stop-controlled intersections are comprised of a major street, which is uncontrolled, and a minor street, which is controlled by stop signs. Level of service for a two-way stop-controlled intersection is determined by the computed or measured control delay. The control delay by movement, by approach, and for the intersection as a whole is estimated by the computed capacity for each movement. LOS is determined for each minor-street movement (or shared movement) as well as major-street left turns. The worst side street approach delay is reported. LOS is not defined for the intersection as a whole or for major-street approaches, as it is assumed that major-street through vehicles experience zero delay. The HCM control delay value range for two-way stop-controlled intersections is shown in ***Table 3-2.***

3.6 Level of Service Standards

According to the *City of San Jacinto Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment*, dated June 2020, LOS D is the minimum acceptable condition that should be maintained during the peak commute hours.

3.7 Existing Level of Service Results

Table 3-3 summarizes the existing peak hour service level calculations for the seven (7) key study intersections based on existing traffic volumes and current street geometry. Review of *Table 3-3* indicates that the intersections of State Street at Community College Drive and Eagle Road at Idyllwild Drive currently operate at unacceptable LOS E during the AM peak hour. The remaining five (5) key study intersections currently operate at an acceptable level of service during the AM and PM peak hours.

Appendix C presents the Existing peak hour HCM/LOS calculation worksheets for the seven (7) key study intersections.

TABLE 3-1

LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS (HCM 7 METHODOLOGY)[1]

Level of Service (LOS)	Control Delay Per Vehicle (seconds/vehicle)	Level of Service Description
A	$\leq$ 10.0	This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
B	> 10.0 and $\leq$ 20.0	This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of average delay.
C	> 20.0 and $\leq$ 35.0	Average traffic delays. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.
D	> 35.0 and $\leq$ 55.0	Long traffic delays At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high *v/c* ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	> 55.0 and $\leq$ 80.0	Very long traffic delays This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high *v/c* ratios. Individual cycle failures are frequent occurrences.
F	$\geq$ 80.0	Severe congestion This level, considered to be unacceptable to most drivers, often occurs with over saturation, that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high *v/c* ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors to such delay levels.

[1] Source: *Highway Capacity Manual 7*, Chapter 19: Signalized Intersections.

TABLE 3-2

LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS (HCM 7 METHODOLOGY)[2]

Level of Service (LOS)	Highway Capacity Manual Delay Value (sec/veh)	Level of Service Description
A	≤ 10.0	Little or no delay
B	> 10.0 and ≤ 15.0	Short traffic delays
C	> 15.0 and ≤ 25.0	Average traffic delays
D	> 25.0 and ≤ 35.0	Long traffic delays
E	> 35.0 and ≤ 50.0	Very long traffic delays
F	> 50.0	Severe congestion

[2] Source: *Highway Capacity Manual 7*, Chapter 20: Two-Way Stop-Controlled Intersections. The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection as a whole.

TABLE 3-3
EXISTING PEAK HOUR LEVELS OF SERVICE

	Key Intersection	Time Period	Minimum Acceptable LOS	Control Type	HCM	LOS
1.	State Street at Quandt Ranch Road	AM PM	D	One-Way Stop	24.9 s/v 19.1 s/v	C C
2.	State Street at Community College Drive	AM PM	D	Two-Way Stop	**39.0 s/v** 31.6 s/v	**E** D
3.	State Street at Ramona Expressway	AM PM	D	8Ø Traffic Signal	35.2 s/v 40.6 s/v	D D
4.	State Street at Idyllwild Drive	AM PM	D	8Ø Traffic Signal	27.7 s/v 17.1 s/v	C B
5.	Village at San Jacinto/Project Dwy No. 3 at Ramona Expressway	AM PM	D	5Ø Traffic Signal	6.5 s/v 10.0 s/v	A A
6.	Eagle Road at Ramona Expressway	AM PM	D	5Ø Traffic Signal	30.8 s/v 30.1 s/v	C C
7.	Eagle Road at Idyllwild Drive	AM PM	D	One-Way Stop	**41.3 s/v** 12.2 s/v	**E** B

Notes:

- LOS = Level of Service, please refer to *Table 3-1* and *Table 3-2* for the LOS definitions
- **Bold Delay/LOS** values indicate adverse service levels
- s/v = seconds per vehicle

4.0 TRAFFIC FORECASTING METHODOLOGY

In order to estimate the traffic impact characteristics of the proposed Project, a multi-step process has been utilized. The first step is traffic generation, which estimates the total arriving and departing traffic on a peak hour and daily basis. The traffic generation potential is forecast by applying the appropriate vehicle trip generation equations and/or rates to the Project development tabulation.

The second step of the forecasting process is traffic distribution, which identifies the origins and destinations of inbound and outbound Project traffic. These origins and destinations are typically based on demographics and existing/expected future travel patterns in the study area.

The third step is traffic assignment, which involves the allocation of Project traffic to study area streets and intersections. Traffic assignment is typically based on minimization of travel time, which may or may not involve the shortest route, depending on prevailing operating conditions and travel speeds. Traffic distribution patterns are indicated by general percentage orientation, while traffic assignment allocates specific volume forecasts to individual roadway segments and intersection turning movements throughout the study area.

With the forecasting process complete and project traffic assignments developed, the impact of the Project is isolated by comparing operational (LOS) conditions at the selected key intersection using expected future traffic volumes with and without forecast project traffic. If necessary, the need for site-specific and/or cumulative local area traffic improvements can then be evaluated, and the significance of the project's impacts identified.

5.0 PROJECT TRAFFIC CHARACTERISTICS

5.1 Project Traffic Generation

Traffic generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Generation equations and/or rates used in the traffic forecasting procedure are found in the 11th Edition of *Trip Generation*, published by the Institute of Transportation Engineers (ITE) [Washington D.C., 2021].

Table 5-1 summarizes the trip generation rates used in forecasting the vehicular trips generated by the proposed Project and also presents the forecast daily and peak hour project traffic volumes for a "typical" weekday. As shown in this table, the trip generation potential for the proposed Project was forecast using ITE Land Use Code 821: Shopping Plaza (40k – 150k With Supermarket) trip rates and ITE Land Use Code 945: Gasoline Service Station With Convenience Store (GFA 4 – 5.5k) trip rates. The express wash trip rates are based on driveway traffic counts conducted on Friday (2/7/2014) at Victorville Speedwash (12147 Industrial Boulevard, Victorville).

Review of the last row of *Table 5-1* indicates that the proposed Project is forecast to generate approximately 11,265 daily trips, with 479 trips (282 inbound, 197 outbound) forecast during the AM peak hour and 737 trips (356 inbound, 381 outbound) forecast during the PM peak hour. It should be noted that the aforementioned overall Project trip generation includes adjustments for pass-by per the *Trip Generation Manual, 11th Edition*, published by ITE, to account for trips that are already in the everyday traffic stream on the adjoining streets (i.e. State Street and Ramona Expressway) and will stop as they pass by the Project site as a matter of convenience on their path to another destination. The pass-by reduction factors for all land uses are summarized in the footnotes of *Table 5-1*. It should also be noted that the trip generation methodology and forecasts were approved by City of San Jacinto staff prior to proceeding with further analysis.

5.2 Project Traffic Distribution and Assignment

The Project directional trip distribution pattern is presented in ***Figure 5-1***. Project traffic volumes both entering and exiting the site have been distributed and assigned to the adjacent street system based on the following considerations:

- the site's proximity to major traffic carriers (i.e. State Street, Ramona Expressway, etc.),
- expected localized traffic flow patterns based on adjacent street channelization and presence of traffic signals,
- existing intersection traffic volumes, and
- ingress/egress availability at the Project site.

It should be noted that the Project trip distribution pattern was submitted to City staff for their review and approval prior to proceeding with further analyses. The anticipated AM and PM peak hour traffic volumes associated with the Project are presented in ***Figures 5-2*** and ***5-3***, respectively. The traffic volume assignments presented in *Figures 5-2* and *5-3* reflect the traffic distribution characteristics shown in *Figure 5-1* and the traffic generation forecast presented in *Table 5-1*.

TABLE 5-1

PROJECT TRIP GENERATION RATES AND FORECAST[3]

ITE Land Use Code / Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Generation Rates:							
▪ 821: Shopping Plaza [40k – 150k With Supermarket] (TE/TSF)	94.49	62%	38%	3.53	48%	52%	9.03
▪ 945: Gasoline Service Station With Convenience Store [GFA 4 – 5.5k] (TE/VFP) [4]	257.13	50%	50%	27.04	50%	50%	22.76
▪ Express Car Wash (TE/LFWT)[5]	8.663	0.275	0.204	0.479	0.450	0.463	0.913
Proposed Project Generation Forecast:							
▪ Retail (105,348 SF)	9,954	231	141	372	456	495	951
Pass-By (Daily: 25%, AM: 10%, PM: 40%)[6]	-2,489	-23	-14	-37	-182	-198	-380
Subtotal	*7,465*	*208*	*127*	*335*	*274*	*297*	*571*
▪ Gas Station with Convenience Store (16 VFP)	4,114	216	217	433	182	182	364
Pass-By (Daily: 25%, AM: 76%, PM: 75%)[6]	-1,029	-164	-165	-329	-137	-136	-273
Subtotal	*3,085*	*52*	*52*	*104*	*45*	*46*	*91*
▪ Express Wash (110 Feet)	953	30	23	53	50	50	100
Pass-By (Daily: 25%, AM: 25%, PM: 25%)[6]	-238	-8	-5	-13	-13	-12	-25
Subtotal	*715*	*22*	*18*	*40*	*37*	*38*	*75*
Total Net Proposed Project Trip Generation Forecast	**11,265**	**282**	**197**	**479**	**356**	**381**	**737**

Note:

- TE/TSF = Trip End per Thousand Square Feet
- TE/VFP = Trip End per Vehicle Fueling Position
- TE/LFWT = Trip End per Linear Feet Wash Tunnel

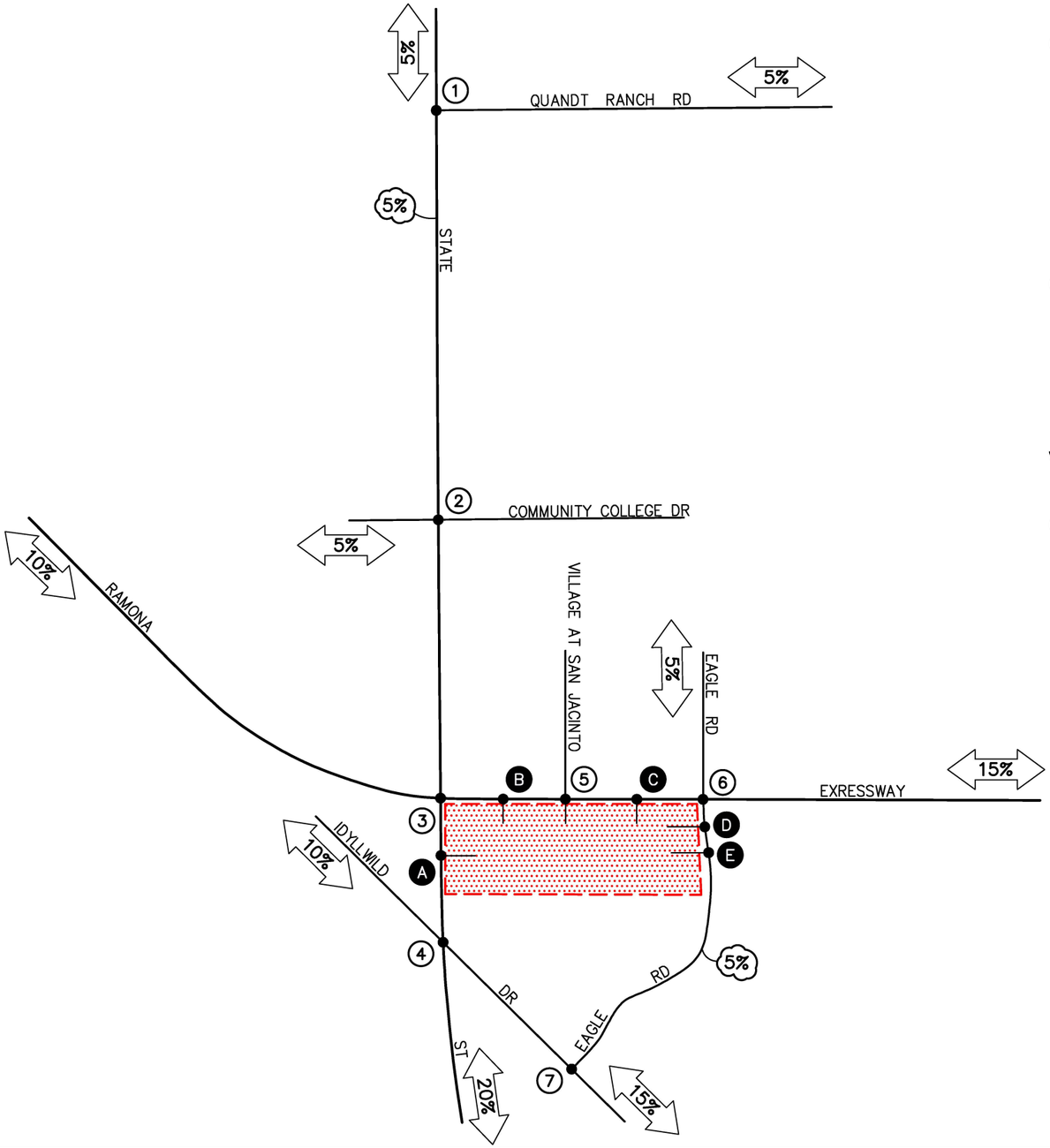
3 Source*: Trip Generation, 11th Edition*, Institute of Transportation Engineers, (ITE) [Washington, D.C. (2021)].

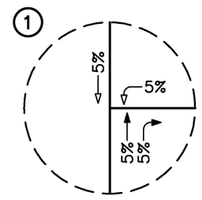
4 The proposed convenience store is 5,198 SF.

5 *Trip Generation Manual, 11th Edition* does not include trip generation rates for the express car wash land use. The trip rates are derived from traffic counts conducted on Friday, February 7, 2014 at the Victorville Speedwash located at 12147 Industrial Boulevard, Victorville.

6 Pass-By Trips are trips made as intermediate stops on the way from an origin to a primary trip destination. Pass-by trips are attracted from traffic passing the site on adjacent streets, which contain direct access to the generator. For this analysis, the following pass-by reduction factors were used (Source: *Trip Generation Manual, 11th Edition*, ITE 2021):

- 821: Shopping Plaza: Daily/AM peak hour/PM peak hour = 25% (assumed)/10% (assumed)/40%
- 945: Gas Station with Convenience Store: Daily/AM peak hour/PM peak hour = 25% (assumed)/76%/75%
- Express Wash: Daily/AM peak hour/PM peak hour = 25% (assumed)/25% (assumed)/25% (assumed)





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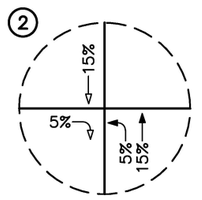

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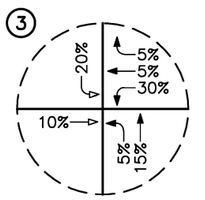

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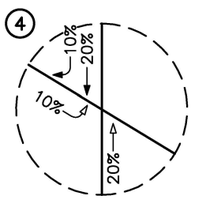

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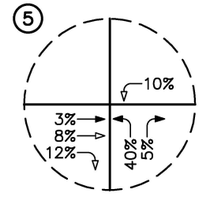

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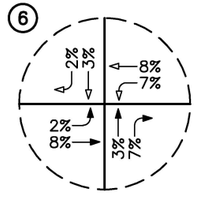
PROJECT DWY NO. 3 @
RAMONA EXPRESSWAY



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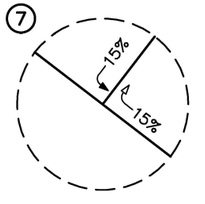

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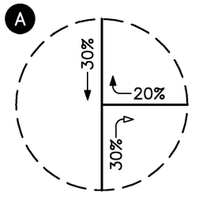

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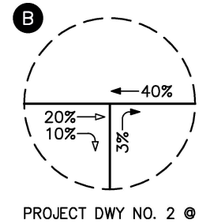

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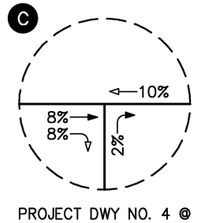

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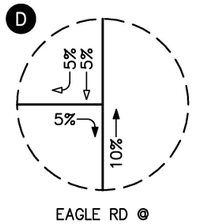

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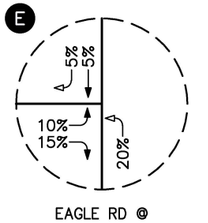

EAGLE RD @
PROJECT DWY NO. 6

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engineers

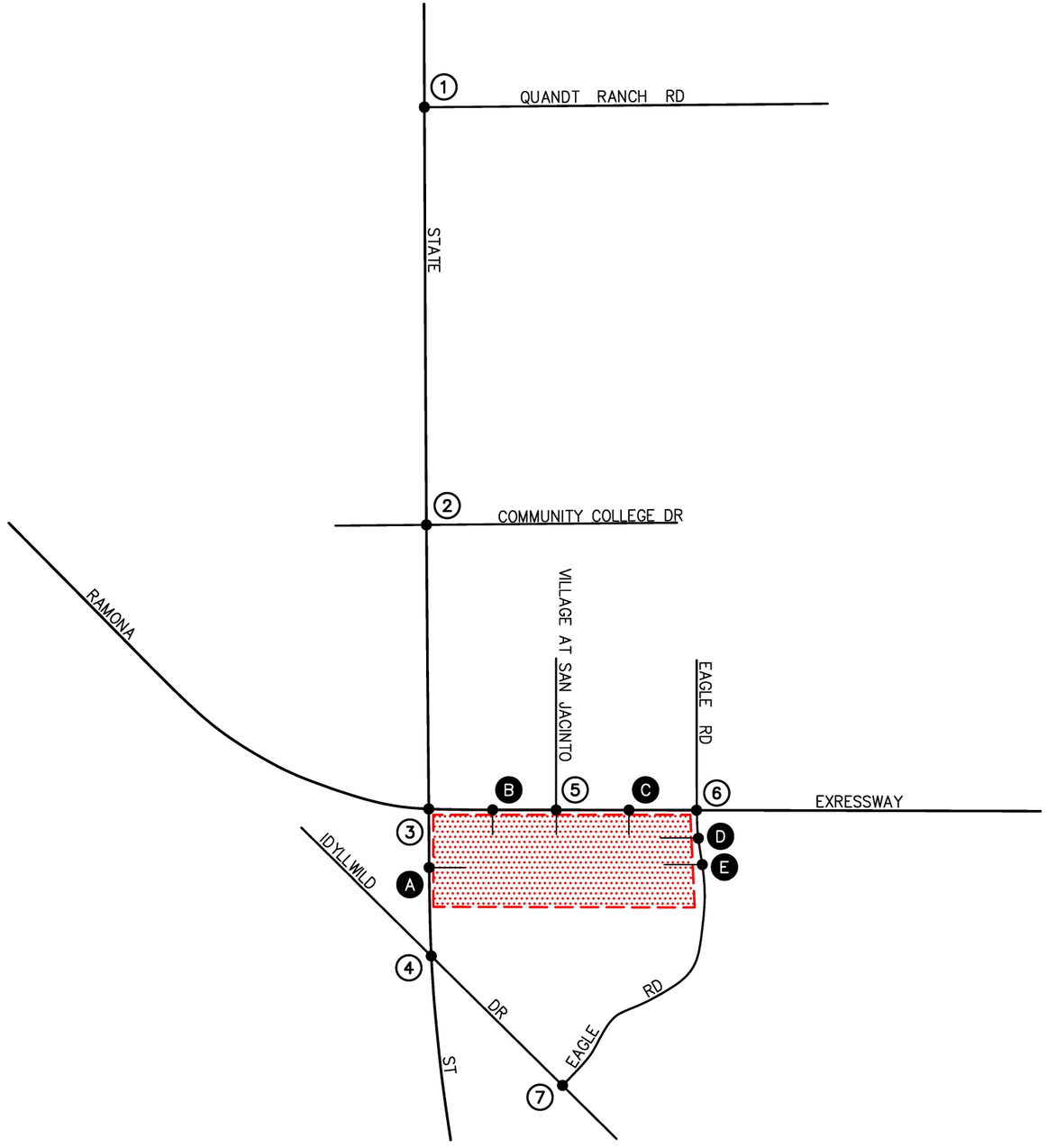
N
NO SCALE

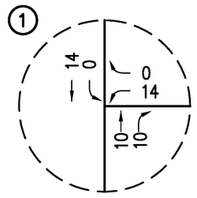
KEY
(#) = STUDY INTERSECTION
⟵ = INBOUND PERCENTAGE
⟵ = OUTBOUND PERCENTAGE
▭ = PROJECT SITE

FIGURE 5-1

PROJECT TRAFFIC DISTRIBUTION PATTERN

RAMONA EXPRESSWAY AND STATE STREET SHOPPING CENTER, SAN JACINTO





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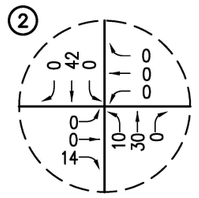

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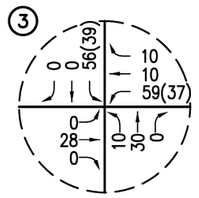

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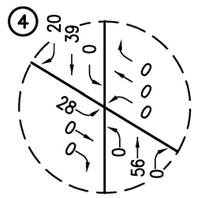

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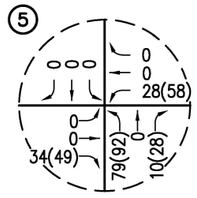

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PROJECT DWY NO. 3
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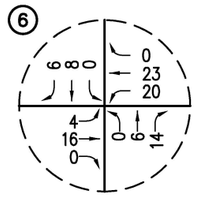

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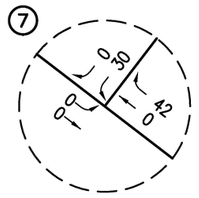

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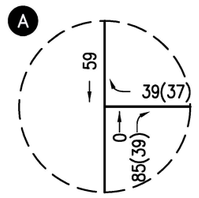

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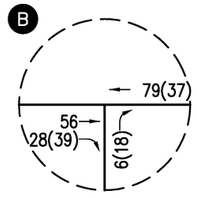

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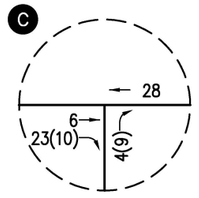

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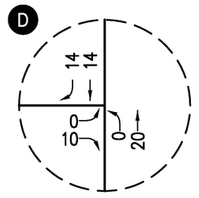

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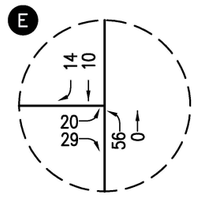

EAGLE RD @
PROJECT DWY NO. 6

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engineers

N
NO SCALE

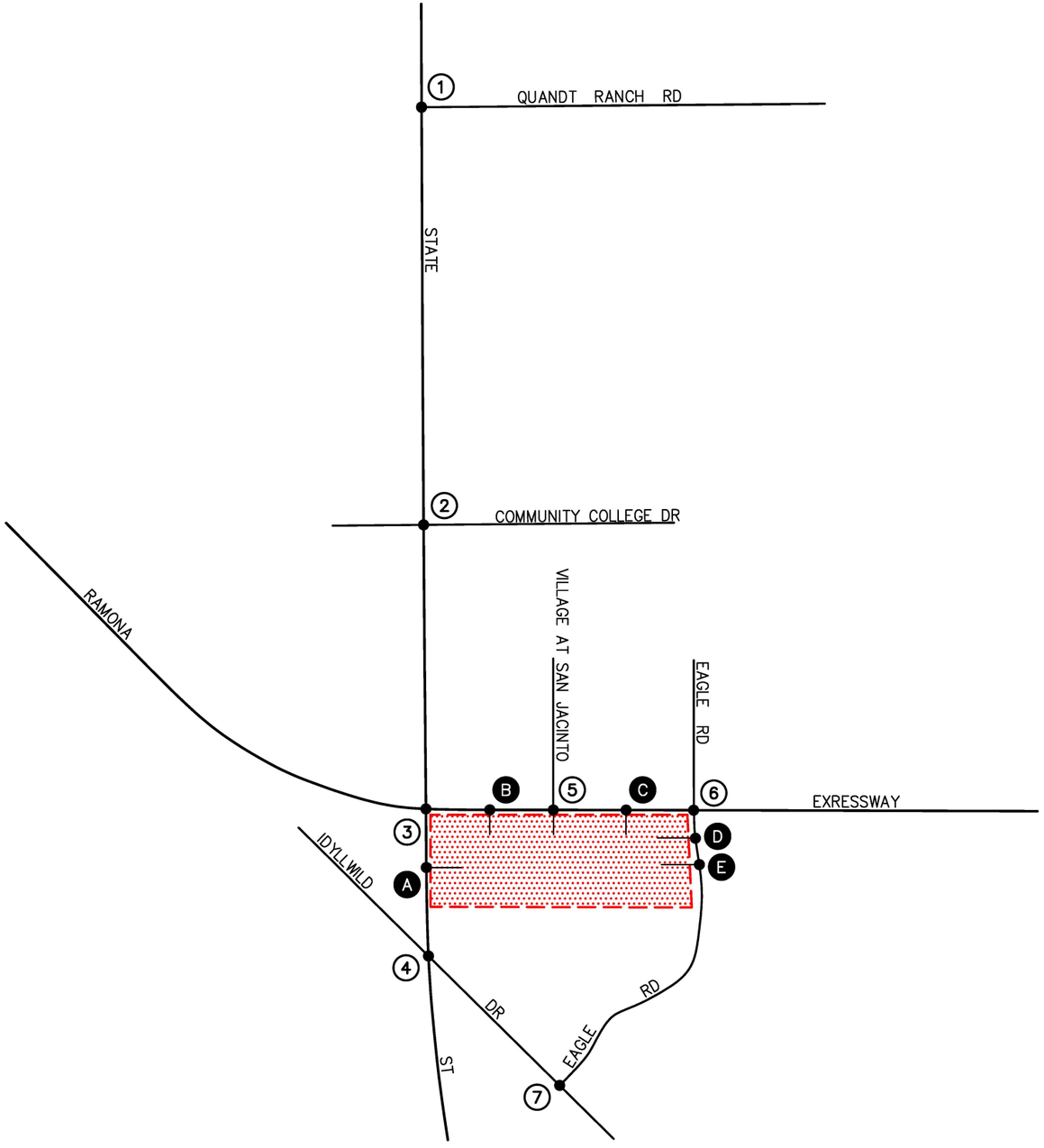
KEY

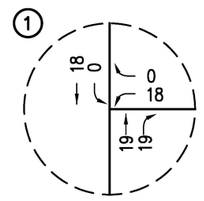
(#) = STUDY INTERSECTION
= PROJECT SITE
(XX) = PASSBY TRIPS

FIGURE 5-2

AM PEAK HOUR PROJECT TRAFFIC VOLUMES

RAMONA EXPRESSWAY AND STATE STREET SHOPPING CENTER, SAN JACINTO





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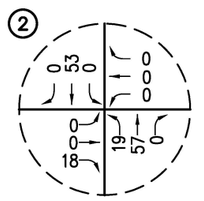

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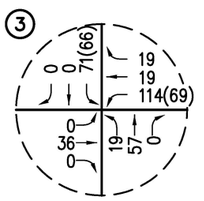

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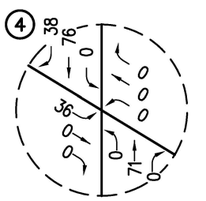

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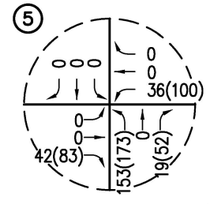

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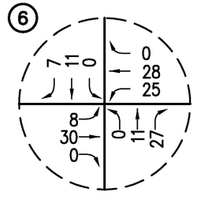
RAMONA EXPRESSWAY



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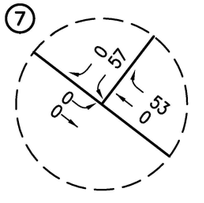
RAMONA EXPRESSWAY



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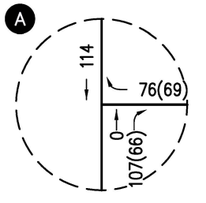

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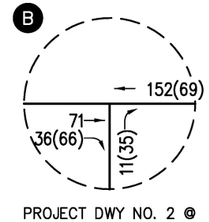

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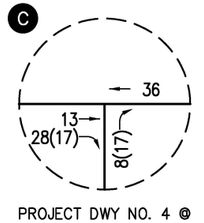

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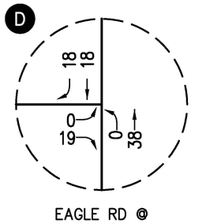

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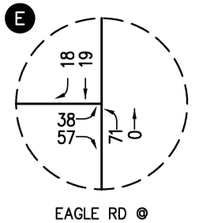

EAGLE RD @
PROJECT DWY NO. 6

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engineers

N
NO SCALE

KEY

(#) = STUDY INTERSECTION
= PROJECT SITE
(XX) = PASSBY TRIPS

FIGURE 5-3

PM PEAK HOUR PROJECT TRAFFIC VOLUMES
RAMONA EXPRESSWAY AND STATE STREET SHOPPING CENTER, SAN JACINTO

6.0 FUTURE TRAFFIC CONDITIONS

6.1 Ambient Traffic Growth

Horizon year, background traffic growth estimates have been calculated using an ambient growth factor. The ambient traffic growth factor is intended to include unknown and future cumulative projects in the study area, as well as account for regular growth in traffic volumes due to the development of projects outside the study area. The future growth in traffic volumes has been calculated at two percent (2.0%) per year. Applied to existing Year 2022 traffic volumes results in an eight percent (8.0%) growth in existing volumes to horizon Year 2026.

6.2 Cumulative Projects Traffic Characteristics

In order to make a realistic estimate of future on-street conditions prior to implementation of the proposed Project, the status of other known development projects (cumulative projects) has been researched at the City of San Jacinto. With this information, the potential impact of the proposed Project can be evaluated within the context of the cumulative impact of all ongoing development. Based on our research, there are thirty-one (31) cumulative projects in the City of San Jacinto within the vicinity of the Project site. These thirty-one (31) planned and/or approved cumulative projects have been included as part of the cumulative background setting.

Table 6-1 provides the location and a brief description for each of the thirty-one (31) cumulative projects. ***Figure 6-1*** graphically illustrates the location of the cumulative projects. These cumulative projects are expected to generate vehicular traffic, which may affect the operating conditions of the key study intersections.

Table 6-2 presents the development totals and resultant trip generation for the thirty-one (31) cumulative projects. As shown in *Table 6-2*, the cumulative projects are forecast to generate a total of 49,369 daily trips, with 3,225 trips (1,390 inbound and 1,835 outbound) forecast during the AM peak hour and 3,897 trips (2,171 inbound and 1,726 outbound) forecast during the PM peak hour.

The AM and PM peak hour traffic volumes associated with thirty-one (31) cumulative projects are presented in ***Figures 6-2*** and ***6-3***, respectively.

6.3 Year 2026 Traffic Volumes

Figures 6-4 and ***6-5*** illustrate the Year 2026 forecast AM and PM peak hour cumulative traffic volumes, respectively. ***Figures 6-6*** and ***6-7*** illustrate the Year 2026 cumulative forecast AM and PM peak hour traffic volumes, with the inclusion of the trips generated by the proposed Project, respectively.

TABLE 6-1
LOCATION AND DESCRIPTION OF CUMULATIVE PROJECTS[7]

No.	Cumulative Project	Location/Address	Description
City of San Jacinto			
1.	Luiseno Village Shopping Center	East of San Jacinto Avenue and south of E. Commonwealth Avenue	16 VFP Gas Station with 4,650 SF Convenience Store 23,943 SF Retail 2,800 SF and 3,200 Fast Food Restaurant with Drive Through
2.	Tommy's Car Wash	West side of San Jacinto Ave, approximately 300 feet south of Esplanade Avenue	8 VFP Gas Station with 3,000 SF Convenience Store 145 LFWT Car Wash
3.	Dollar Tree	Northwest corner of Sanderson Ave and Esplanade Ave	10,050 SF Variety Store
4.	Walmart Supercenter Fueling Station	East of San Jacinto Avenue and south of E. Commonwealth Avenue	16 VFP Gas Station
5.	ServPro	Shaver Street	2,880 SF Maintenance and Repair Building
6.	Rancho De Alamo	Cottonwood and Cawston Ave	241 DU Single Family Detached
7.	Silver Beach Grand San Jacinto	Southwest of Ramona Blvd	187 DU Single Family Detached
8.	TS Farms LLC	West of Sanderson Avenue, approximately 2,500 feet north of Cottonwood Avenue	60.53 Acres Marijuana Cultivation and Processing Facility
9.	TTM 38019	Northwest corner of Ramona Expressway and Potter Road	149 DU Single Family Detached 6.32 Acres Commercial Lot
10.	SJ Warehouse LLC	220 N. Greco Court	12,600 SF Marijuana Cultivation and Processing Facility
11.	SipKoi Cannabis	1612 S. Santa Fe	10,000 SF Marijuana Cultivation and Processing Facility
12.	TTM 38202	291 N. Lyon Avenue	135 DU Single Family Lots
13.	Renaissance Valley Academy Expansion	1091 Esplanade Avenue	250 Student Charter School Expansion
14.	Sunterra	Southwest Corner of Sanderson Avenue and Ramona Blvd	215 DU Single Family Lots

Notes:
- SF = Square-feet
- DU = Dwelling units
- VFP = Vehicle Fueling Positions
- LFWT = Linear Feet Wash Tunnel

[7] Source: City of San Jacinto Planning Department.

TABLE 6-1 (CONTINUED)
LOCATION AND DESCRIPTION OF CUMULATIVE PROJECTS[8]

No.	Cumulative Project	Location/Address	Description
City of San Jacinto (continued)			
15.	Richland Communities	Esplanade Avenue and Hewitt Street	154 DU Single Family Detached
16.	Ramona Land Development	North of Cottonwood Avenue, South of Ramona Expressway, East of N. Warren, and West of N. Sanderson	17.1 Acres Marijuana Cultivation and Procession Facility
17.	Dutch Bros	South side of Ramona Expressway, approximately 350 feet west of State Street	950 SF Coffee/Donut Shop with Drive Through Window
18.	Green Acres	North of Cottonwood, east of Warren Rd	25.34 Acres Marijuana Cultivation and Procession Facility
19.	Popeyes	South side of Ramona Expressway, approximately 350 feet west of State Street	2,539 SF Fast Food Restaurant with Drive Through Window
20.	Tract 34271	South of Ramona Expressway, extending between Alessandro Avenue and Vernon Street	152 DU Single Family Detached
21.	Rancho Estudillo Plaza Phase 2	Northeast corner of Sanderson Avenue and Seventh Street	101 LFWT Car Wash 35,00 SF Retail 4,456 SF Fast Food Restaurant with Drive Through
22.	TTM 38339	393 Kirby Street	76 DU Single Family Detached
23.	Trifecta Investment LLC	West of Sanderson Avenue, approximately 1,800 feet	65.61 Acres Marijuana Cultivation and Procession Facility
24.	Esplanade Specific Plan	West of Warren Road and north of Esplanade Avenue	851 DU Removal of Multifamily Housing 194 DU Single Family Housing
25.	Space Boyz	2191 W. Esplanade Avenue	2,781 SF Marijuana Dispensary
26.	Rahman & Associates	2177 S. San Jacinto Avenue	2,526 SF Marijuana Dispensary

Notes:

- SF = Square-feet
- DU = Dwelling units
- VFP = Vehicle Fueling Positions
- LFWT = Linear Feet Wash Tunnel

[8] Source: City of San Jacinto Planning Department.

TABLE 6-1 (CONTINUED)
LOCATION AND DESCRIPTION OF CUMULATIVE PROJECTS[9]

No.	Cumulative Project	Location/Address	Description
City of San Jacinto (continued)			
27.	Corman Leigh	West of Lyon Avenue and north of Cottonwood Avenue	153 DU Single Family Detached
28.	Mystical Origins	790 S. State Street	1,515 SF Retail Dispensary
29.	710 Farms	680 S. State Street	4,564 SF Marijuana Cultivation and Procession Facility
30.	Right Space Storage	Esplanade East of State Street	18,247 SF Self Storage
31.	Kirby Villas	1436 S. Kirby Street	27 DU Single Family Detached

Notes:
- SF = Square-feet
- DU = Dwelling units
- VFP = Vehicle Fueling Positions
- LFWT = Linear Feet Wash Tunnel

[9] Source: City of San Jacinto Planning Department.

TABLE 6-2
CUMULATIVE PROJECTS TRAFFIC GENERATION FORECAST[10]

Cumulative Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
1. Luiseno Village Shopping Center	6,363	151	137	288	139	136	275
2. Tommy's Car Wash	2,533	45	38	83	67	69	136
3. Dollar Tree	576	15	13	28	22	22	44
4. Walmart Supercenter Fueling Station	2,064	30	31	61	48	48	96
5. ServPro	28	4	1	5	2	4	6
6. Rancho De Alamo	2,273	44	125	169	143	84	227
7. Silver Beach Grand San Jacinto	1,763	34	97	131	111	65	176
8. TS Farms LLC	870	87	7	94	24	63	87
9. TTM 38019	5,587	94	117	211	193	161	354
10. SJ Warehouse LLC	80	8	1	9	2	6	8
11. SipKoi Cannabis	60	7	0	7	2	4	6
12. TTM 38202	1,273	25	70	95	80	47	127
13. Renaissance Valley Academy Expansion	370	106	102	208	11	22	33
14. Sunterra	2,027	39	112	151	127	75	202
15. Richland Communities	1,452	28	80	108	91	54	145
16. Ramona Land Development	490	49	4	53	14	35	49
17. Dutch Bros	380	21	20	41	14	14	28
18. Green Acres	730	73	6	79	20	53	73
19. Popeyes	890	29	27	56	20	18	38
20. Tract 34271	1,433	28	78	106	90	53	143
21. Rancho Estudillo Plaza Phase 2	3,933	116	94	210	138	136	274
22. TTM 38339	717	14	39	53	45	26	71
23. Trifecta Investment LLC	950	95	7	102	27	68	95

[10] Unless otherwise noted, Source: *Trip Generation*, 11th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2021).

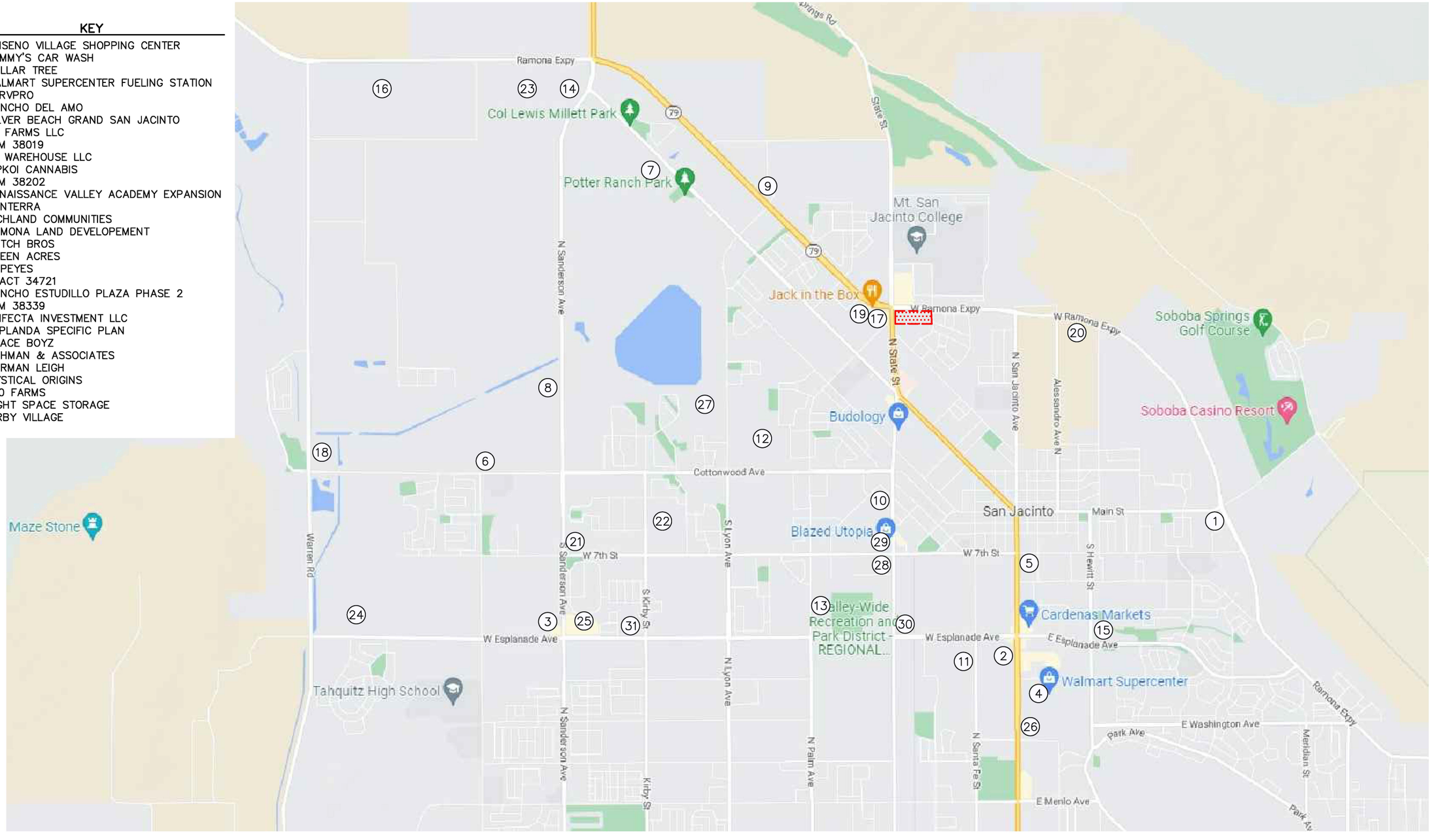
TABLE 6-2 (CONTINUED)
CUMULATIVE PROJECTS TRAFFIC GENERATION FORECAST[11]

Cumulative Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
24. Esplanade Specific Plan	9,333	174	500	674	566	333	899
25. Space Boyz	587	15	14	29	27	26	53
26. Rahman & Associates	533	14	13	27	24	24	48
27. Corman Leigh	1,443	28	79	107	91	53	144
28. Mystical Origins	320	8	8	16	15	14	29
29. 710 Farms	30	3	0	3	1	2	3
30. Right Space Storage	26	1	1	2	1	2	3
31. Kirby Villas	255	5	14	19	16	9	25
Cumulative Projects Total Trip Generation Potential	**49,369**	**1,390**	**1,835**	**3,225**	**2,171**	**1,726**	**3,897**

[11] Unless otherwise noted, Source: *Trip Generation*, 11th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2021).

KEY

1. LUISENO VILLAGE SHOPPING CENTER
2. TOMMY'S CAR WASH
3. DOLLAR TREE
4. WALMART SUPERCENTER FUELING STATION
5. SERVPRO
6. RANCHO DEL AMO
7. SILVER BEACH GRAND SAN JACINTO
8. TS FARMS LLC
9. TTM 38019
10. SJ WAREHOUSE LLC
11. SIPKOI CANNABIS
12. TTM 38202
13. RENAISSANCE VALLEY ACADEMY EXPANSION
14. SUNTERRA
15. RICHLAND COMMUNITIES
16. RAMONA LAND DEVELOPEMENT
17. DUTCH BROS
18. GREEN ACRES
19. POPEYES
20. TRACT 34721
21. RANCHO ESTUDILLO PLAZA PHASE 2
22. TTM 38339
23. TRIFECTA INVESTMENT LLC
24. ESPLANDA SPECIFIC PLAN
25. SPACE BOYZ
26. RAHMAN & ASSOCIATES
27. CORMAN LEIGH
28. MYSTICAL ORIGINS
29. 710 FARMS
30. RIGHT SPACE STORAGE
31. KIRBY VILLAGE



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LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

SOURCE: GOOGLE

KEY

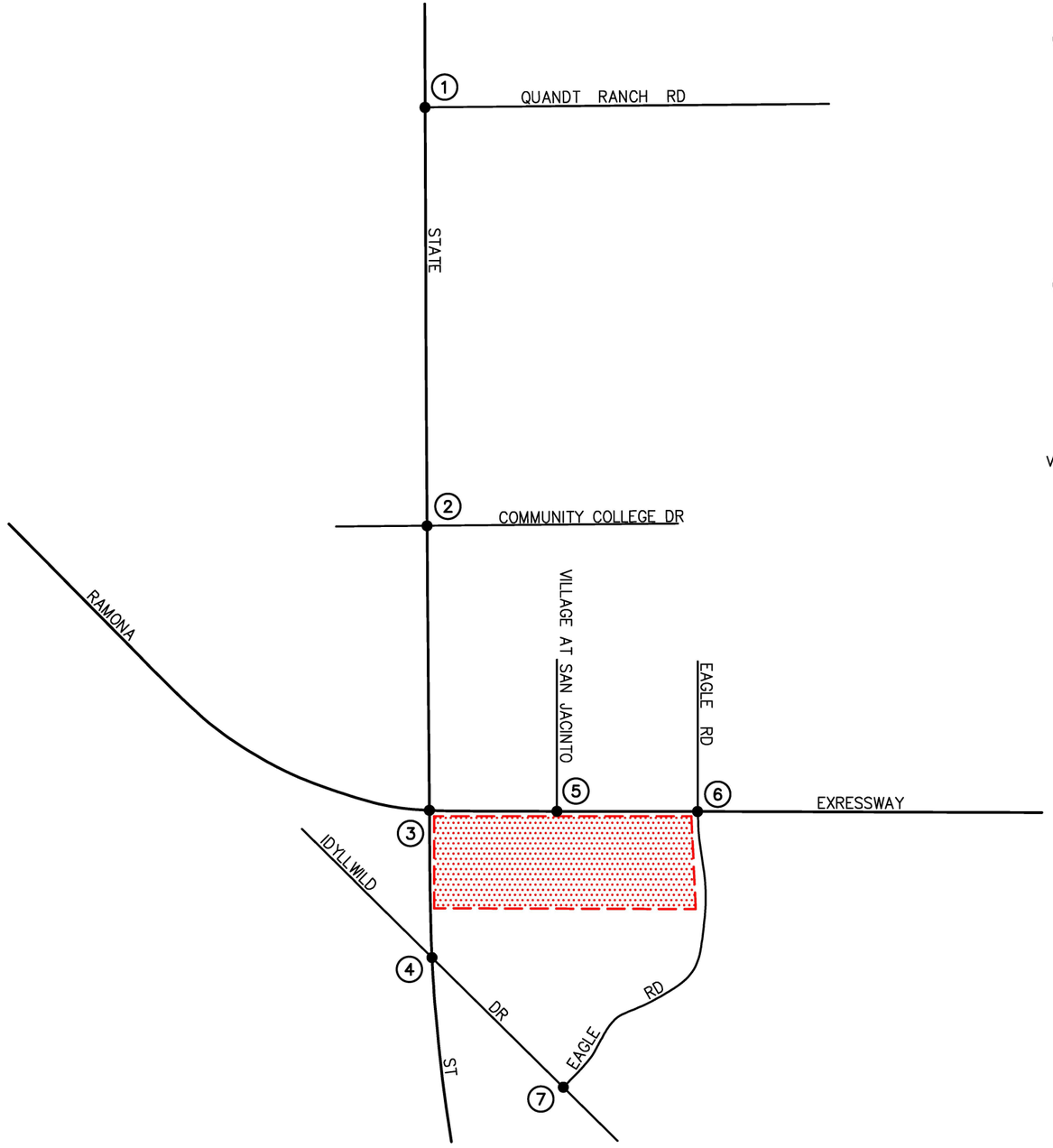
(#) = CUMULATIVE PROJECTS

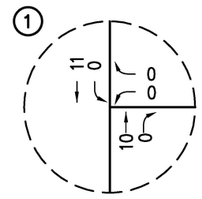
= PROJECT SITE

FIGURE 6-1

CUMULATIVE PROJECTS LOCATION MAP

RAMONA EXPRESSWAY AND STATE STREET SHOPPING CENTER, SAN JACINTO





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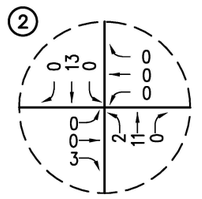

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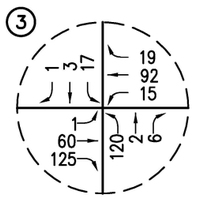

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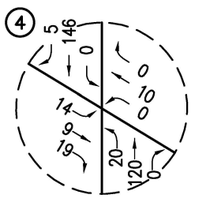

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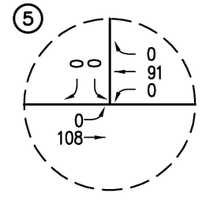

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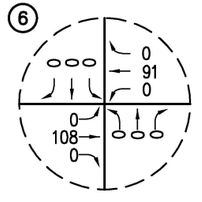

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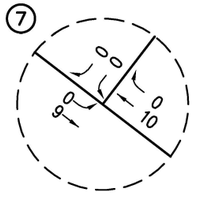

EAGLE RD @
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engineers

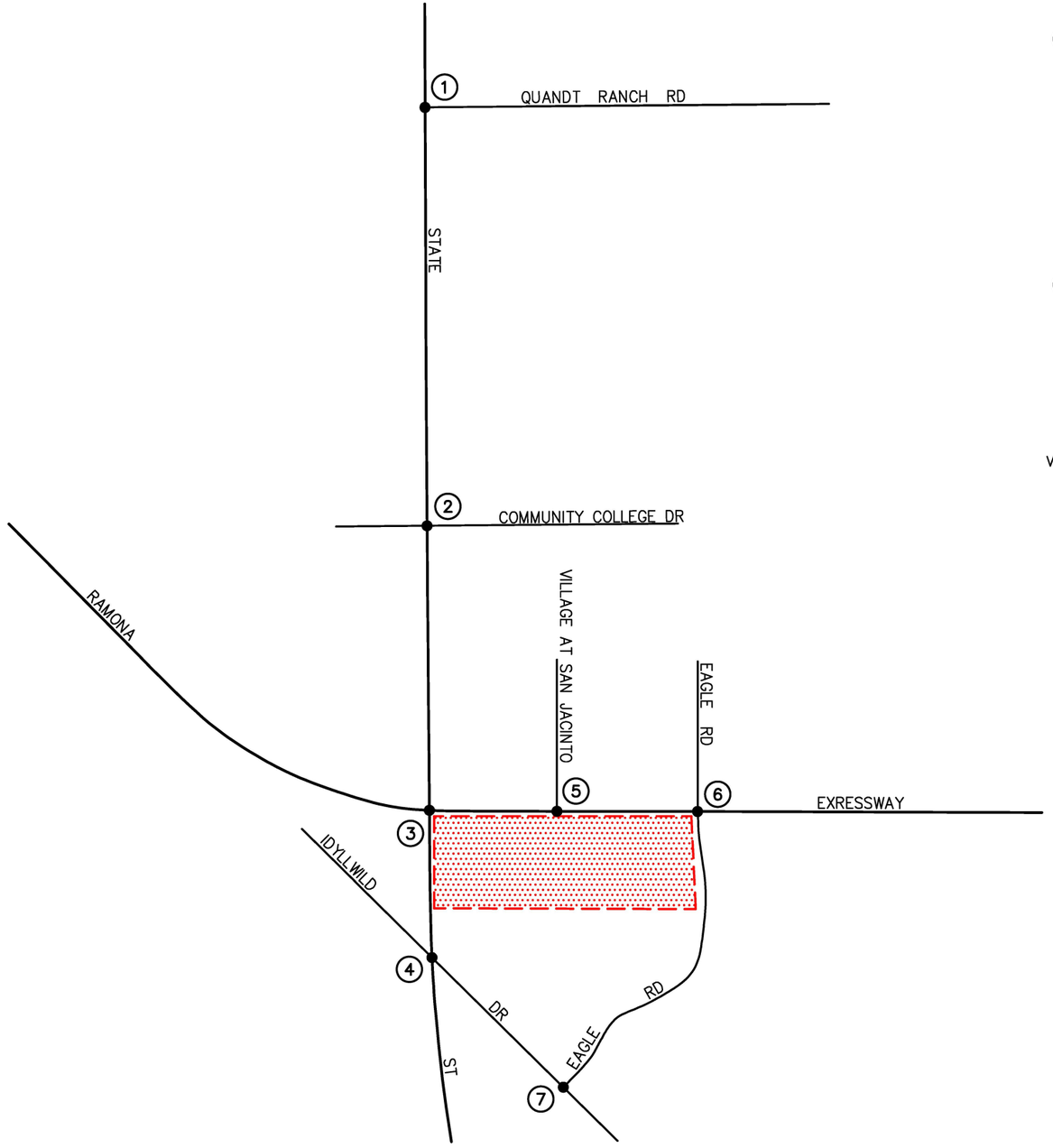
N
NO SCALE

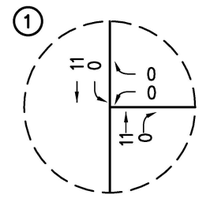
KEY
(#) = STUDY INTERSECTION
= PROJECT SITE

FIGURE 6-2

AM PEAK HOUR CUMULATIVE PROJECTS TRAFFIC VOLUMES

RAMONA EXPRESSWAY AND STATE STREET SHOPPING CENTER, SAN JACINTO





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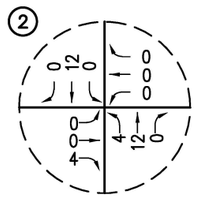

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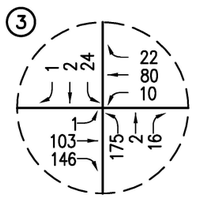

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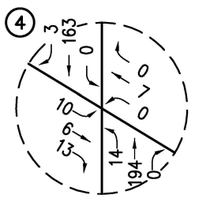

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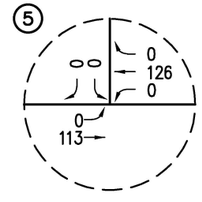

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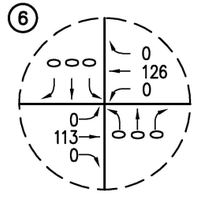
RAMONA EXPRESSWAY



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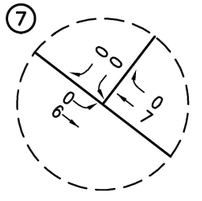


EAGLE RD @
IDYLLWILD DR

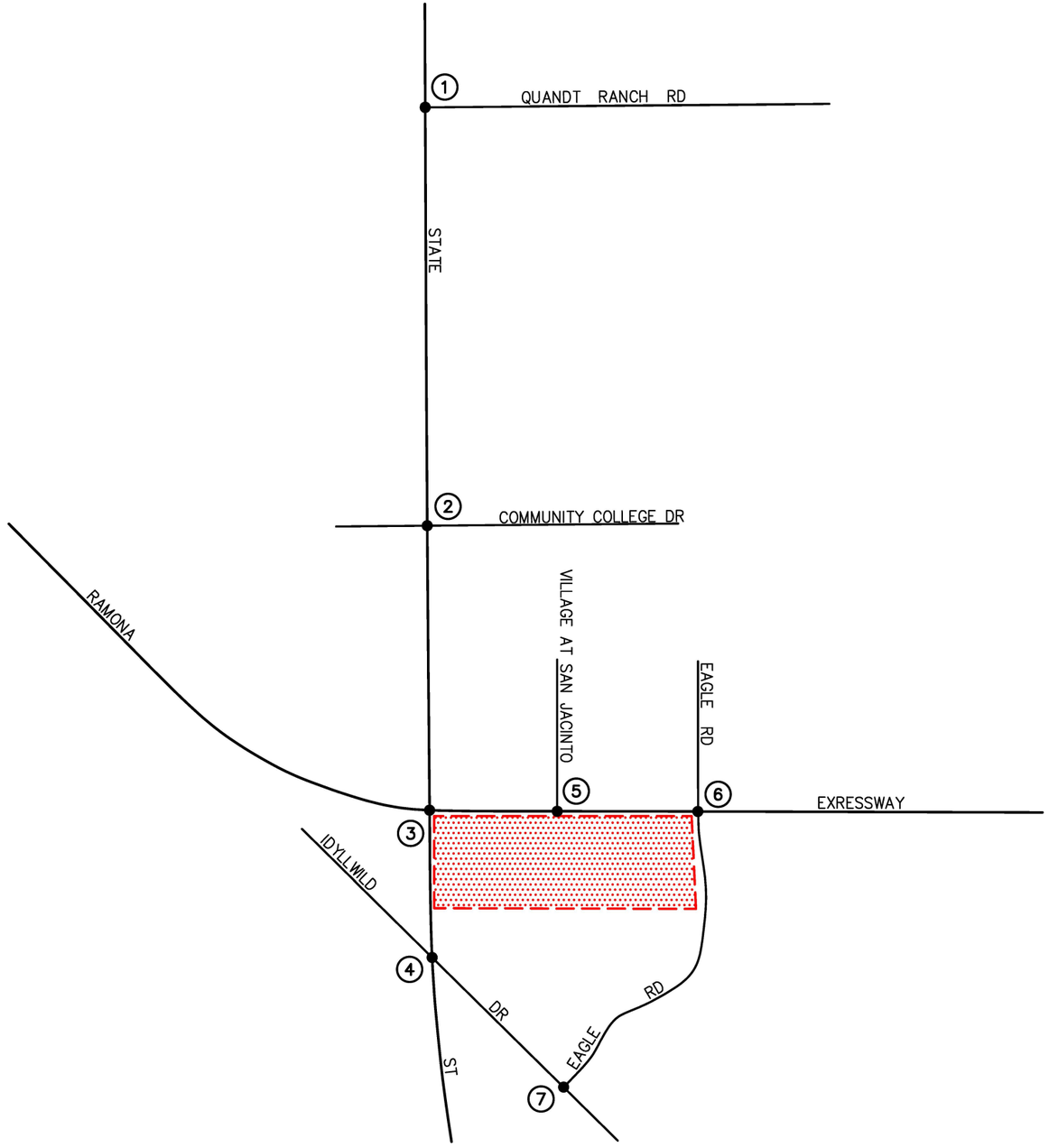
LINSCOTT LAW & GREENSPAN
engineers

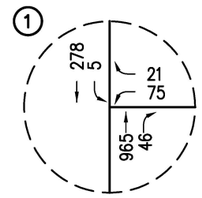
N
NO SCALE

KEY
(#) = STUDY INTERSECTION
= PROJECT SITE

FIGURE 6-3

PM PEAK HOUR CUMULATIVE PROJECTS TRAFFIC VOLUMES
RAMONA EXPRESSWAY AND STATE STREET SHOPPING CENTER, SAN JACINTO





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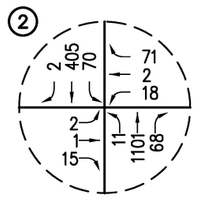

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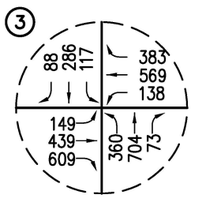

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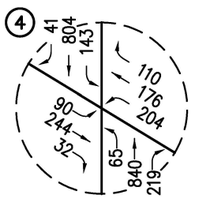

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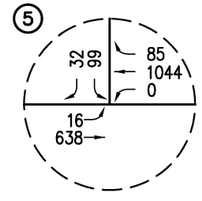
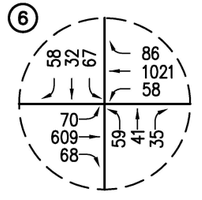


VILLAGE AT SAN JACINTO/
PROJECT DWY NO. 3
RAMONA EXPRESSWAY



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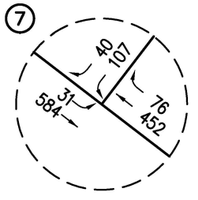

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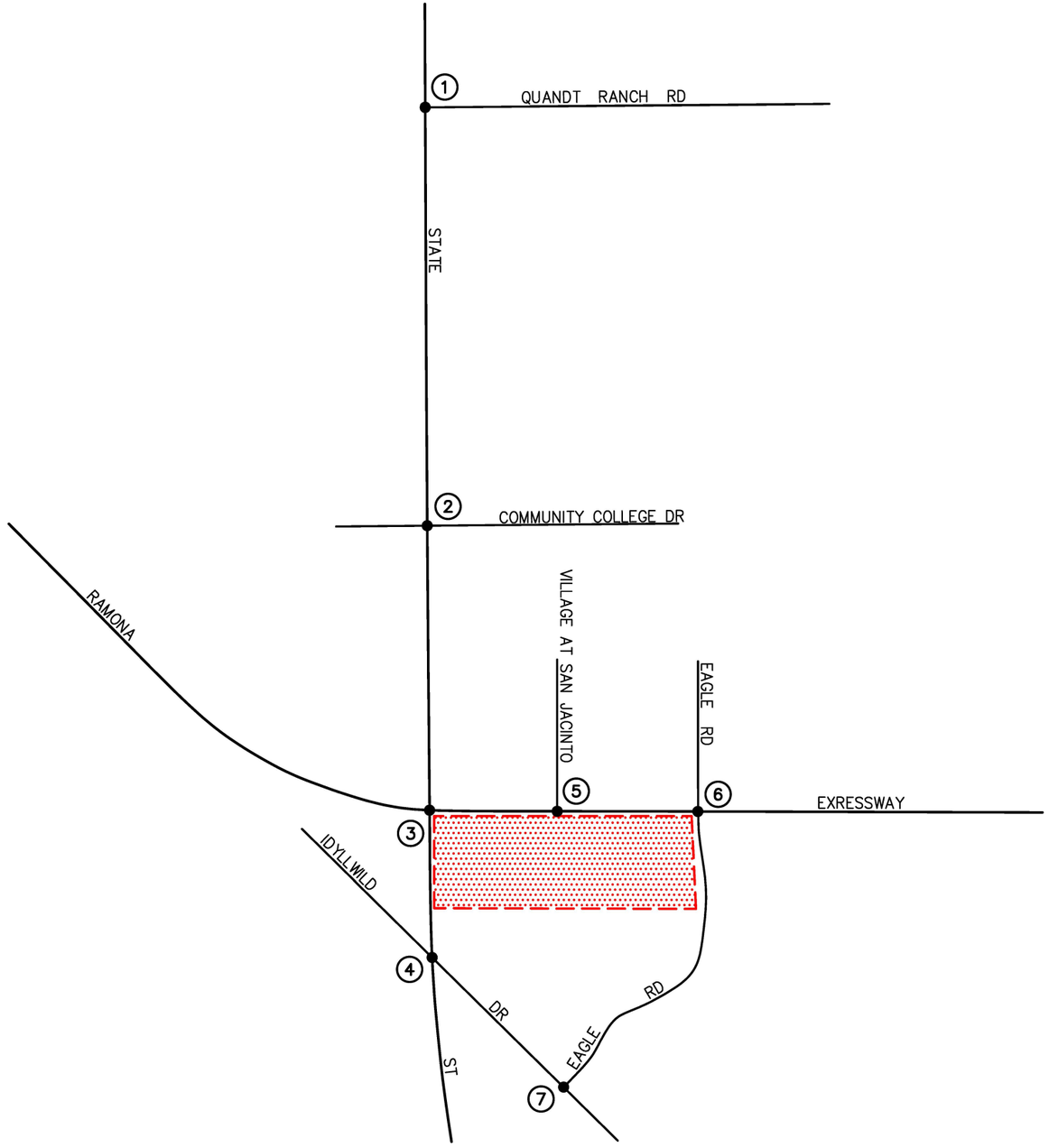
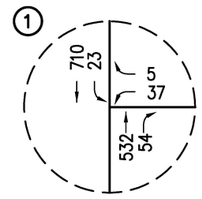
FIGURE 6-4

YEAR 2026 CUMULAT1VE AM PEAK HOUR TRAFFIC VOLUMES

RAMONA EXPRESSWAY AND STATE STREET SHOPPING CENTER, SAN JACINTO





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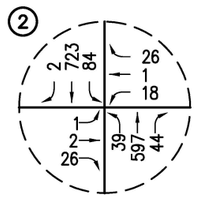

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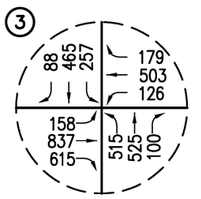

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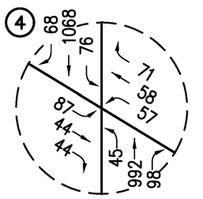

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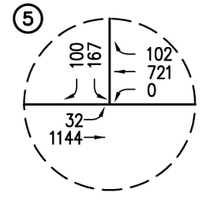
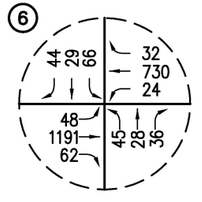


VILLAGE AT SAN JACINTO/
PROJECT DWY NO. 3
RAMONA EXPRESSWAY



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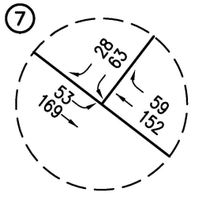

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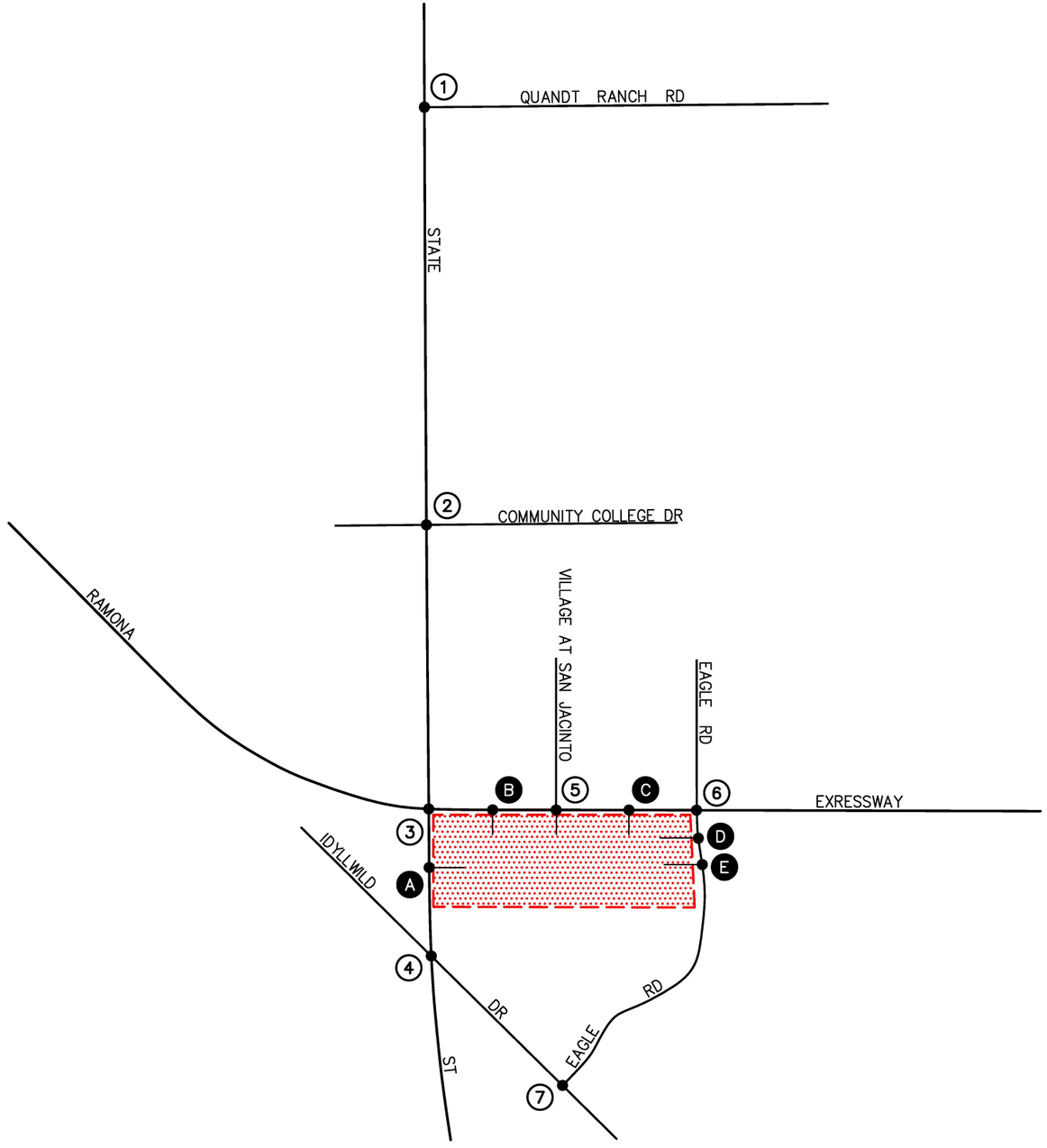
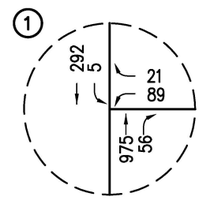
= PROJECT SITE

FIGURE 6-5

YEAR 2026 CUMULAT1VE PM PEAK HOUR TRAFFIC VOLUMES

RAMONA EXPRESSWAY AND STATE STREET SHOPPING CENTER, SAN JACINTO





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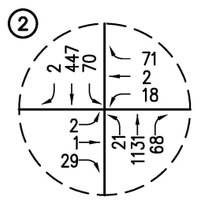

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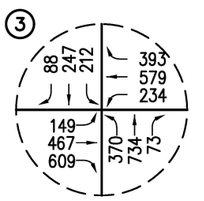

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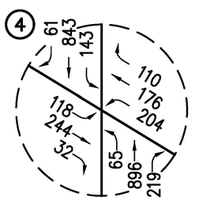

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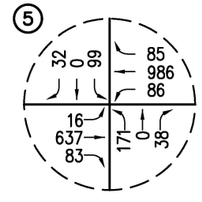
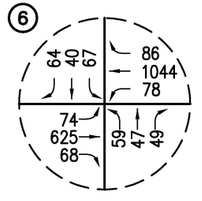


VILLAGE AT SAN JACINTO/
PROJECT DWY NO. 3
RAMONA EXPRESSWAY



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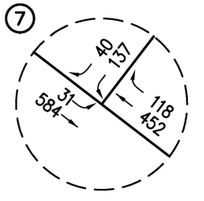

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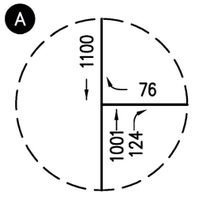

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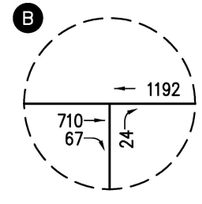

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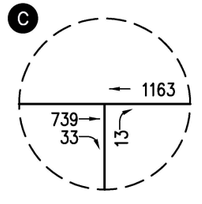

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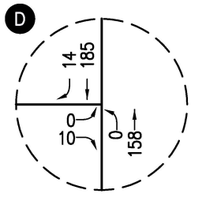

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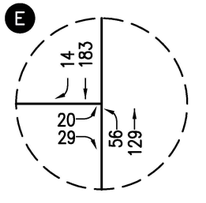

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KEY
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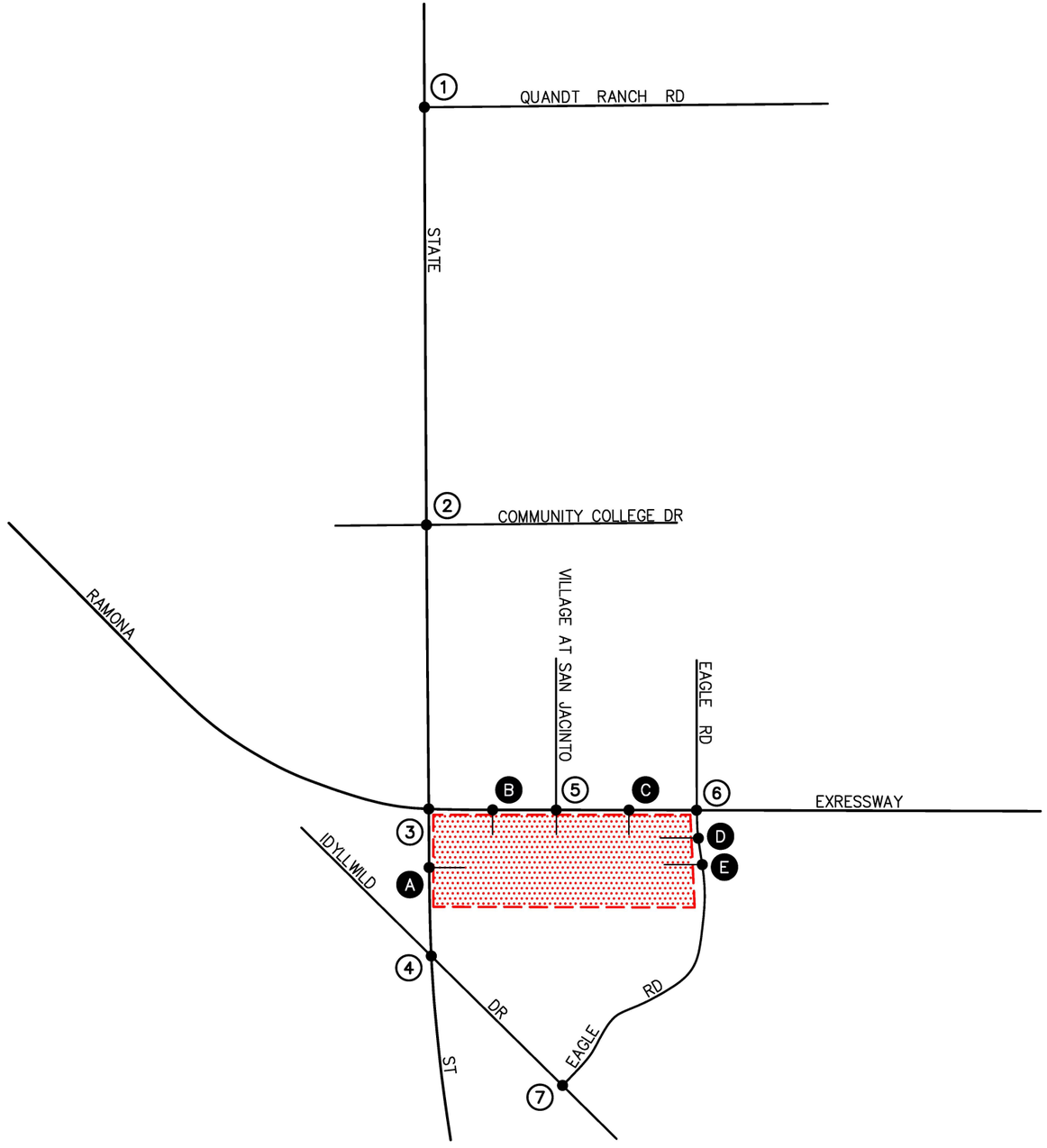
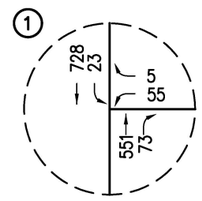
= PROJECT SITE

FIGURE 6-6

YEAR 2026 CUMULATIVE PLUS PROJECT
AM PEAK HOUR TRAFFIC VOLUMES
RAMONA EXPRESSWAY AND STATE STREET SHOPPING CENTER, SAN JACINTO





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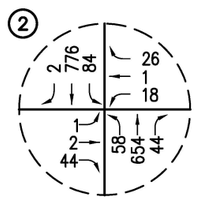

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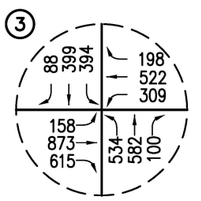

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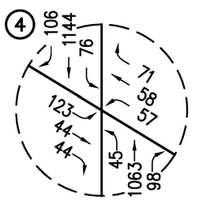

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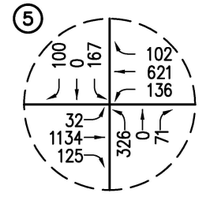
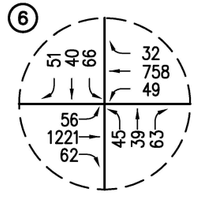


VILLAGE AT SAN JACINTO/
PROJECT DWY NO. 3
RAMONA EXPRESSWAY



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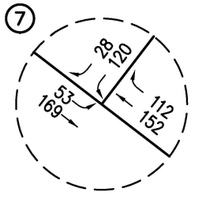

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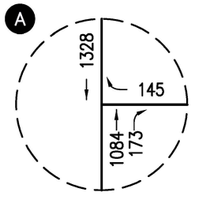

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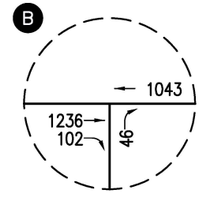

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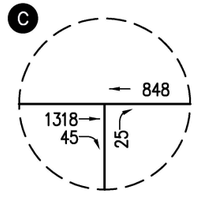

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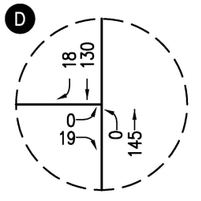
RAMONA EXPRESSWAY



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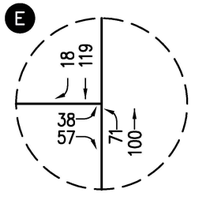

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PROJECT DWY NO. 6

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FIGURE 6-7

YEAR 2026 CUMULATIVE PLUS PROJECT
PM PEAK HOUR TRAFFIC VOLUMES

RAMONA EXPRESSWAY AND STATE STREET SHOPPING CENTER, SAN JACINTO

7.0 TRAFFIC IMPACT ANALYSIS METHODOLOGY

The relative impact of the proposed Project during the AM peak hour and PM peak hour was evaluated based on analysis of future operating conditions at the seven (7) key study intersections, without, then with the proposed Project. The previously discussed capacity analysis procedures were utilized to investigate the future volume-to-capacity relationships and service level characteristics at each study intersection. The significance of the potential impacts of the Project at each key intersection was then evaluated using the following traffic impact criteria.

7.1 Impact Criteria and Thresholds

According to the *City of San Jacinto Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment*, dated June 2020, LOS D is the minimum acceptable condition that should be maintained during the peak commute hours. Improvements at a signalized intersection shall be identified if either of the following are met:

- Any signalized study intersection operating at an acceptable LOS D or better without project traffic in which the addition of project traffic causes the intersection to degrade to a LOS E or F shall identify improvements to improve operations to LOS D or better; OR

- Any signalized study intersection that is operating at LOS E or F without project traffic where the project increases delay by 5.0 or more seconds shall identify improvements to offset the increase in delay.

An operational improvement would be required at an unsignalized intersection if the study determines that either section A or both sections B and C occur:

A. The addition of project related traffic causes the intersection to degrade from an acceptable LOS D or better to LOS E or F; OR

B. The project adds 5.0 seconds or more of delay to an intersection that is already projected to operate without project traffic at a LOS E or F, AND

C. The intersection meets the peak hour traffic signal warrant after the addition of project traffic.

7.2 Traffic Impact Analysis Scenarios

The following scenarios are those for which volume/capacity calculations have been performed at the seven (7) key study intersections for Existing and near-term (Year 2026) traffic conditions:

A. Existing Traffic Conditions;

B. Year 2026 Cumulative Traffic Conditions;

C. Year 2026 Cumulative Plus Project Traffic Conditions; and

D. Scenario (D) with Improvements, if necessary.

8.0 YEAR 2026 CUMULATIVE PLUS PROJECT ANALYSIS

Table 8-1 summarizes the peak hour Level of Service results at the seven (7) key study intersections for Year 2026 Cumulative Plus Project traffic conditions. The first column (1) of HCM/LOS values in *Table 8-1* presents a summary of existing AM and PM peak hour traffic conditions (which were also presented in *Table 3-3)*. The second column (2) presents forecast Year 2026 Cumulative traffic conditions (existing plus ambient growth plus cumulative projects). The third column (3) presents forecast Year 2026 Cumulative traffic conditions with the addition of Project traffic. The fourth column (4) indicates whether the traffic associated with the Project will cause an operational deficiency based on the LOS criteria defined in this report. The fifth column (5) indicates the anticipated operating conditions with implementation of recommended improvements.

8.1 Year 2026 Cumulative Traffic Conditions

A review of column (2) indicates that for Year 2026 Cumulative traffic conditions, two (2) of the seven (7) key study intersections are forecast to operate at an adverse level of service during the AM and/or PM peak hour when compared to the target LOS criteria mentioned in this report. The remaining five (5) key study intersections are forecast to continue to operate at acceptable levels of service during the AM and PM peak hours with the addition of ambient traffic growth and cumulative project traffic. The locations projected to operate at an adverse LOS are as follows:

	AM Peak Hour		PM Peak Hour	
Key Intersection	HCM	LOS	HCM	LOS
2. State Street at Community College Drive	43.7 s/v	E	--	--
3. State Street at Ramona Expressway	--	--	62.6 s/v	E

8.2 Year 2026 Cumulative Plus Project Traffic Conditions

Review of columns (3) and (4) of *Table 8-1* indicates that traffic associated with the proposed Project will adversely impact two (2) of the seven (7) key study intersections when compared to the LOS criteria defined in this report. The remaining five (5) key study intersections are forecast to continue to operate at an acceptable LOS during the AM and PM peak hours with the addition of Project generated traffic in the horizon Year 2026. The locations that will be adversely impacted are as follows:

	AM Peak Hour		PM Peak Hour	
Key Intersection	HCM	LOS	HCM	LOS
2. State Street at Community College Drive	54.7 s/v	F	42.7 s/v	E
3. State Street at Ramona Expressway	--	--	69.8 s/v	E

As shown in column (5) of *Table 8-1*, the implementation of recommended improvements at the deficient locations improves these intersections to acceptable service levels. ***Appendix D*** presents the Year 2026 Cumulative and Year 2026 Cumulative Plus Project HCM/LOS calculations for the seven (7) key study intersections.

TABLE 8-1

YEAR 2026 CUMULATIVE PLUS PROJECT PEAK HOUR INTERSECTION CAPACITY ANALYSIS SUMMARY

Key Intersection		Time Period	Control Type	Minimum Acceptable LOS	(1) Existing Traffic Conditions		(2) Year 2026 Cumulative Traffic Conditions		(3) Year 2026 Cumulative Plus Project Traffic Conditions		(4) Operational Deficiency		(5) Year 2026 Cumulative Plus Project With Improvements	
					HCM (s/v)	LOS	HCM (s/v)	LOS	HCM (s/v)	LOS	Increase (s/v)	Yes/No	HCM (s/v)	LOS
1.	State Street at	AM	One-Way	D	24.9 s/v	C	25.5 s/v	D	28.1 s/v	D	2.6 s/v	No	--	--
	Quandt Ranch Road	PM	Stop		19.1 s/v	C	18.7 s/v	C	20.8 s/v	C	2.1 s/v	No	--	--
2.	State Street at	AM	Two-Way	D	**39.0 s/v**	**E**	**43.7** s/v	**E**	**54.7 s/v**	**F**	**11.0 s/v**	**Yes**	10.1 s/v	B
	Community College Drive	PM	Stop		31.6 s/v	D	30.9 s/v	D	**42.7 s/v**	**E**	**11.8 s/v**	**Yes**	11.0 s/v	B
3.	State Street at	AM	8Ø Traffic	D	35.2 s/v	D	41.6 s/v	D	45.6 s/v	D	4.0 s/v	No	34.9 s/v	C
	Ramona Expressway	PM	Signal		40.6 s/v	D	**62.6 s/v**	**E**	**69.8 s/v**	**E**	**7.2 s/v**	**Yes**	45.3 s/v	D
4.	State Street at	AM	8Ø Traffic	D	27.7 s/v	C	29.6 s/v	C	30.2 s/v	C	0.6 s/v	No	--	--
	Idyllwild Drive	PM	Signal		17.1 s/v	B	18.2 s/v	B	20.2 s/v	C	2.0 s/v	No	--	--
5.	Village at San Jacinto/Project	AM	5Ø Traffic	D	6.5 s/v	A	6.5 s/v	A	14.9 s/v	B	8.4 s/v	No	--	--
	Dwy No. 3 at Ramona Expressway	PM	Signal		10.0 s/v	A	9.7 s/v	A	22.8 s/v	C	13.1 s/v	No	--	--
6.	Eagle Road at	AM	5Ø Traffic	D	30.8 s/v	C	30.0 s/v	C	29.9 s/v	C	0.0 s/v	No	--	--
	Ramona Expressway	PM	Signal		30.1 s/v	C	29.2 s/v	C	28.7 s/v	C	0.0 s/v	No	--	--
7.	Eagle Road at	AM	One-Way	D	**41.3 s/v**	**E**	21.5 s/v	C	25.5 s/v	D	4.0 s/v	No	--	--
	Idyllwild Drive	PM	Stop		12.2 s/v	B	11.5 s/v	B	12.9 s/v	B	1.4 s/v	No	--	--

Notes:

- s/v = seconds per vehicle (delay)
- LOS = Level of Service
- **Bold HCM/LOS values** indicate adverse service levels based on the LOS standards defined in this report

9.0 TRAFFIC SIGNAL WARRANT ANALYSIS

The level of service analyses at the key unsignalized impacted study intersections that are recommended to be signalized are supplemented with an assessment of the need for signalization of those intersections. This assessment is made on the basis of signal warrant criteria adopted by Caltrans. For this study, the need for signalization is assessed on the basis of the peak-hour traffic signal warrant, Warrant #3 described in the *California Manual on Uniform Traffic Control Devices (MUTCD)*. Warrant #3 has two parts: 1) Part A evaluates peak hour vehicle delay for traffic on the minor street approach with the highest delay and 2) Part B evaluates peak-hour traffic volumes on the major and minor streets. This method provides an indication of whether peak-hour traffic conditions or peak-hour traffic volume levels are, or would be, sufficient to justify installation of a traffic signal. Other traffic signal warrants are available; however, they cannot be checked under future conditions because they rely on data for which forecasts are not available (such as accidents, pedestrian volume, and four- or eight-hour vehicle volumes).

The decision to install a traffic signal should not be based purely on the warrants alone. Instead, the installation of a signal should be considered, and further analysis performed when one or more of the warrants are satisfied. Additionally, engineering judgment is exercised on a case-by-case basis to evaluate the effect a traffic signal will have on certain types of accidents and traffic conditions at the subject intersection as well as at adjacent intersections.

9.1 Existing Traffic Conditions

The results of the peak-hour traffic signal warrant analysis for Existing traffic conditions are summarized in column (1) of ***Table 9-1***. The results indicate that the intersection of State Street at Community College Drive has existing traffic conditions that would exceed the volume thresholds of Warrant #3, Part B for the AM peak hour.

9.2 Year 2026 Cumulative Traffic Conditions

The results of the peak-hour traffic signal warrant analysis for Year 2026 Cumulative traffic conditions are summarized in column (2) of *Table 9-1*. The results indicate that the intersection of State Street at Community College Drive has future traffic conditions that would exceed the volume thresholds of Warrant #3, Part B for the AM peak hour.

9.3 Year 2026 Cumulative Plus Project Traffic Conditions

The results of the peak-hour traffic signal warrant analysis for Year 2026 Cumulative Plus Project traffic conditions are summarized in column (3) of *Table 9-1*. The results indicate that the intersection of State Street at Community College Drive has future traffic conditions that would exceed the volume thresholds of Warrant #3, Part B for the AM peak hour.

The analysis and the recommended improvements show that the above-mentioned intersection under Year 2026 Cumulative Plus Project traffic conditions is recommended to be signalized. With signalization of this intersection, which is warranted under existing traffic conditions, this intersection is forecast to operate at acceptable service levels during the AM and PM peak hours.

Thus, it is concluded from *Table 9-1* that a traffic signal is justified at the above mentioned unsignalized intersection.

The Traffic Signal Warrant Analysis worksheets for the intersection of State Street at Community College Drive are contained in ***Appendix E***.

TABLE 9-1

INTERSECTION TRAFFIC SIGNAL WARRANT ANALYSIS SUMMARY[12]

Key Intersection	Time Period	(1) Existing Traffic Conditions		(2) Year 2026 Cumulative Traffic Conditions		(3) Year 2026 Cumulative Plus Project Traffic Conditions	
		Part A of Warrant 3 Satisfied?	Part B of Warrant 3 Satisfied?	Part A of Warrant 3 Satisfied?	Part B of Warrant 3 Satisfied?	Part A of Warrant 3 Satisfied?	Part B of Warrant 3 Satisfied?
2. State Street at Community College Drive	AM	No	**Yes**	No	**Yes**	No	**Yes**
	PM	No	No	No	No	No	No

Notes:

- Signal Warrant checks based on Warrant 3, Part A - Peak-Hour Delay Warrant and Part B - Peak-Hour Volume Warrant contained in the *California MUTCD.*

[12] *Appendix G* contains the Traffic Signal Warrant Analysis worksheets for the key unsignalized impacted study intersections.

10.0 SITE ACCESS AND INTERNAL CIRCULATION EVALUATION

10.1 Level of Service Analysis For Project Access Locations

As shown previously in *Figure 2-2,* vehicular access to the proposed Project will be provided via one (1) right-turn in/right-turn out only unsignalized driveway located along State Street (i.e. Project Driveway No. 1), two (2) right-turn in/right-turn out only unsignalized driveways located along Ramona Expressway (i.e. Project Driveway No. 2 and Project Driveway No. 4), one (1) full access signalized driveway located along Ramona Expressway, located directly opposite Village at San Jacinto (i.e. Project Driveway No. 3) and two (2) full-access unsignalized driveways located along Eagle Road (i.e. Project Driveway No. 5 and Project Driveway No. 6). It should be noted that there is one additional driveway located at the southeast corner of the project site along Eagle Road that will provide truck access to Major 3, Major 4 and Major 5.

Table 10-1 summarizes the intersection operations at the proposed project driveways under Year 2026 Cumulative Plus Project traffic conditions. It should be noted that the values for the intersection of Village at San Jacinto/Project Driveway No. 3 at Ramona Expressway are the same as the values previously reported in *Table 8-1.* Review of *Table 10-1* shows that all six (6) Project Driveways are forecast to operate at an acceptable LOS C or better during the AM and PM peak hours for Year 2026 Cumulative Plus Project traffic conditions. As such, project access will be adequate.

Appendix F presents the Year 2026 Cumulative Plus Project level of service calculation worksheets for the six (6) proposed Project driveways.

10.2 Project Driveway Queuing Analysis

Table 10-2 presents the project driveway queuing analysis results for the six (6) Project driveways as well as for the proposed dual northbound left-turn lanes at the intersection of State Street at Ramona Expressway for Year 2026 Cumulative Plus Project traffic conditions. Review of *Table 10-2* indicates that adequate storage will be provided to accommodate the forecast 95th percentile queues under Year 2026 Cumulative Plus Project traffic conditions for all outbound movements at the six (6) Project driveways. Although the 95th percentile queue for the dual northbound left-turn lanes at the intersection of State Street at Ramona Expressway is not accommodated during the AM and PM peak hours, it should be noted that the average queue is accommodated during both the AM and PM peak hours. It should also be noted that Project Driveway No. 5 and No. 6 along Eagle Road are adequately spaced and that queuing into the Project site at these driveways is not anticipated to affect vehicles entering/exiting Buckingham Drive.

As requested by City staff, the need for an eastbound right-turn deceleration lane and an eastbound departure acceleration lane at Project Driveway No. 2, Village at San Jacinto/Project Driveway No. 3, and Project Driveway No. 4 along Ramona Expressway was evaluated. Per the *Highway Capacity Manual 2000,* "an exclusive right-turn lane should be considered if the right-turn volume exceeds 300 veh/h and the adjacent mainline volume exceeds 300 veh/h/ln." Based on review of the forecast peak hour right-turning volumes (i.e. less than 300 right-turns) and the peak hour level of service

calculations, an eastbound deceleration lane is not needed at Project Driveways No. 2, No. 3 and No. 4. Furthermore, due to the close project driveway spacing along the Ramona Expressway project frontage, an acceleration lane is not feasible, due to the required transition length and potential conflicting weaving movements between the driveways.

10.3 Internal Circulation Evaluation

The on-site circulation layout of the proposed Project as illustrated in *Figure 2-2* on an overall basis is adequate. Curb return radii have been confirmed and are generally adequate for small service/delivery (FedEx, UPS) trucks, trash trucks and fueling trucks.

TABLE 10-1
PROJECT DRIVEWAY PEAK HOUR LEVELS OF SERVICE SUMMARY

Project Driveway		Time Period	Intersection Control	Year 2026 Cumulative Plus Project Traffic Conditions	
				HCM (s/v)	LOS
A.	State Street at	AM	One–Way	14.7 s/v	B
	Project Driveway No. 1	PM	Stop	19.2 s/v	C
B.	Project Driveway No. 2 at	AM	One–Way	12.5 s/v	B
	Ramona Expressway	PM	Stop	18.0 s/v	C
5.	Village at San Jacinto/Project Dwy No. 3 at	AM	5Ø Traffic	14.9 s/v	B
	Ramona Expressway	PM	Signal	22.8 s/v	C
C.	Project Driveway No. 4 at	AM	One–Way	12.3 s/v	B
	Ramona Expressway	PM	Stop	17.3 s/v	C
D.	Eagle Road at	AM	One–Way	9.4 s/v	A
	Project Driveway No. 5	PM	Stop	9.1 s/v	A
E.	Eagle Road at	AM	One–Way	10.7 s/v	B
	Project Driveway No. 6	PM	Stop	10.6 s/v	B

Note:

- s/v = seconds per vehicle

TABLE 10-2
PROJECT DRIVEWAY PEAK HOUR QUEUING ANALYSIS[13]

Key Intersection	Provided/ Proposed Storage (feet)	Year 2026 Cumulative Plus Project Traffic Conditions			
		AM Peak Hour		PM Peak Hour	
		Max. Queue (feet)	Adequate Storage (Yes / No)	Max. Queue (feet)	Adequate Storage (Yes / No)
3. State Street at Ramona Expressway					
Dual Northbound Left-Turn Lanes	165’	232’	No [a]	312’	No [a]
A. State Street at Project Driveway No. 1					
Westbound Right-Turn Lane	190’	25’	Yes	43’	Yes
B. Project Driveway No. 2 at Ramona Expressway					
Northbound Right-Turn Lane	120’	25’	Yes	25’	Yes
5. Village at San Jacinto/Project Driveway No. 3 at Ramona Expressway					
Dual Northbound Left-Turn Lanes	120’	91’	Yes	170’	Yes [b]
Northbound Shared Through/Right-Turn Lane	120’	43’	Yes	75’	Yes
Westbound Left-Turn Lane	250’	100’	Yes	156’	Yes
C. Project Driveway No. 4 at Ramona Expressway					
Northbound Right-Turn Lane	135’	25’	Yes	25’	Yes
D. Eagle Road at Project Driveway No. 5					
Eastbound Shared Left-Turn/Right-Turn Lane	40’	25’	Yes	25’	Yes
E. Eagle Road at Project Driveway No. 6					
Eastbound Shared Left-Turn/Right-Turn Lane	65’	25’	Yes	25’	Yes

Note:

[a] Although the 95th percentile queue exceeds the proposed left-turn pocket storage, it should be noted that the average queue of 136’ in the AM peak hour and 198’ in the PM peak hour can be accommodated. It should be noted that a portion of the 198’ PM peak hour average queue will be accommodated within the turn pockets 120’ transition area.

[b] Although the queue exceeds the proposed left-turn pocket storage, additional throated storge is provided to accommodate the ±50 feet of additional left-turn queuing.

[13] Queue is based on the *95th Percentile Queue* and is reported in total queue length (feet) per lane.

11.0 AREA-WIDE TRAFFIC IMPROVEMENTS

For those intersections where projected traffic volumes are expected to result in operational deficiencies, this report recommends traffic improvements that change the intersection geometry to increase capacity. These capacity improvements involve roadway widening and/or re-striping to reconfigure (add lanes) roadways to specific approaches of a key intersection. The identified improvements are expected to:

1. Address the impact of existing traffic, Project traffic and future non-project (ambient traffic growth and related projects) traffic, and
2. Improve Levels of Service to an acceptable range and/or to pre-project conditions.

11.1 Project-Specific Access Improvements

The following Project features will be constructed by the proposed Project to ensure that adequate ingress and egress to the Project site is provided along Ramona Expressway and State Street:

- Intersection No. 3 – State Street at Ramona Expressway: Restripe the south leg of the intersection to provide the northbound approach with a second northbound left-turn lane and convert the northbound right-turn lane to a shared northbound through/right-turn lane. Modify the existing traffic signal, as necessary. The installation of this improvement is subject to the approval of the City of San Jacinto.

- Intersection No. 5 – Village at San Jacinto/Project Driveway No. 3 at Ramona Expressway: Construct the project driveway, located directly opposite Village at San Jacinto and provide one inbound lane and three outbound lanes (i.e. dual northbound left-turn lanes and one northbound shared through/right-turn lane). Stripe crosswalks on the south, west, and east legs. Modify the existing traffic signal, as necessary. The installation of this improvement is subject to the approval of the City of San Jacinto.

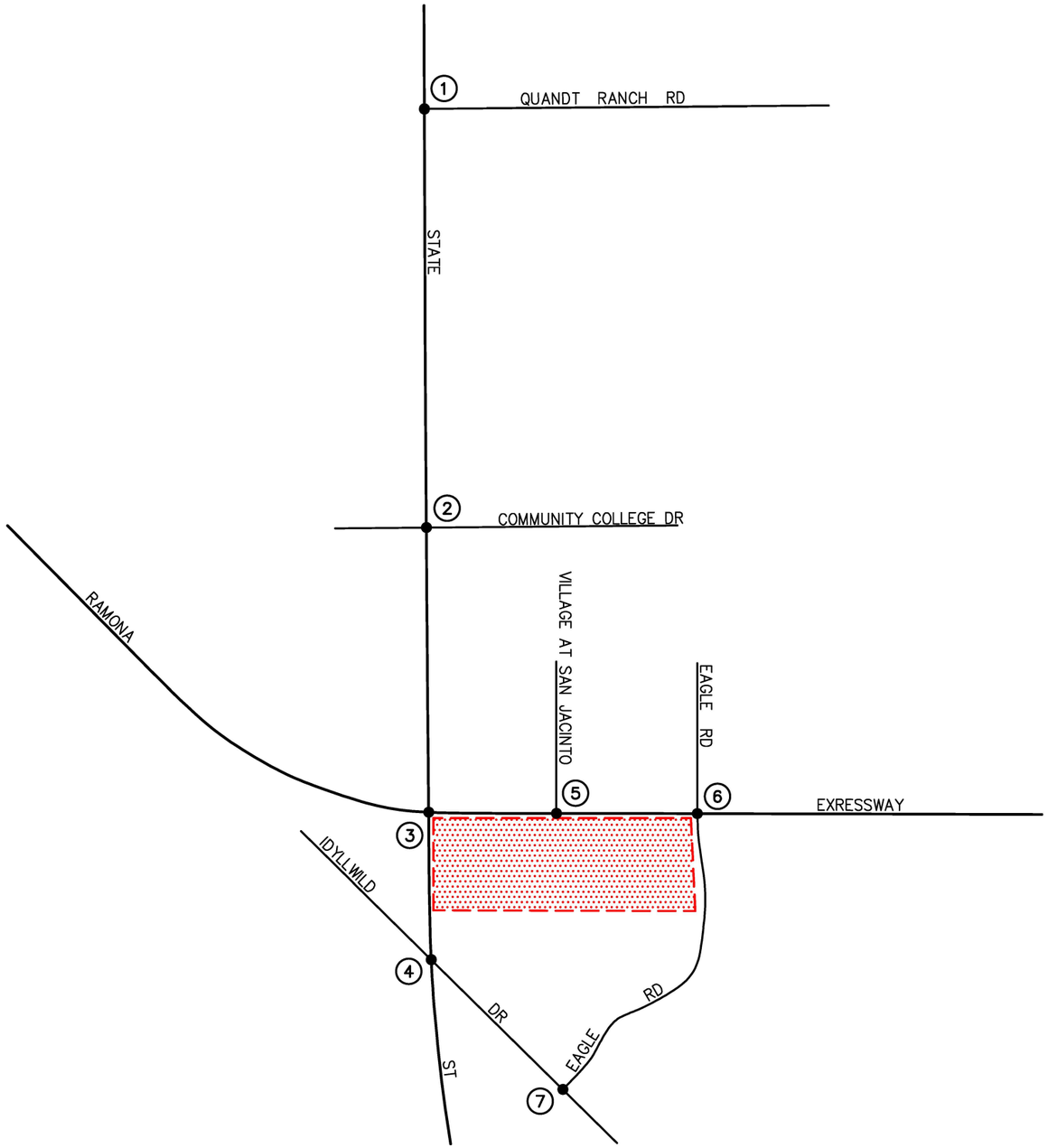
11.2 Year 2026 Recommended Improvements

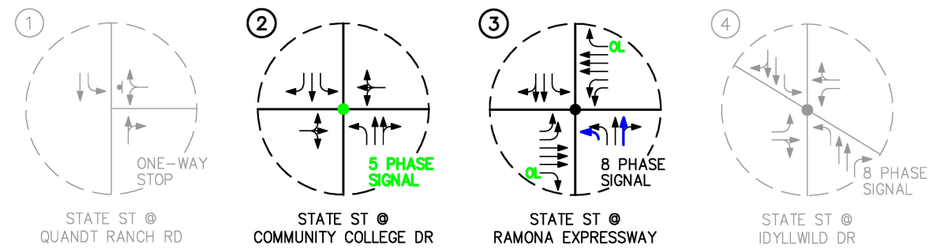
The results of Year 2026 Plus Project traffic conditions indicate that two (2) of the seven (7) key study intersections are forecast to operate at an adverse level of service during the AM and/or PM peak hour when compared to the LOS criteria defined in this report. The improvements listed below have been identified at the deficient locations to improve these intersections to either acceptable service levels or offsets the increase in delay due to the Project:

- Intersection No. 2 – State Street at Community College Drive: Install a traffic signal and design for five-phase operation with protected left-turn phasing on State Street. Stripe crosswalks on all legs. The installation of these improvements is subject to the approval of the City of San Jacinto.

- Intersection No. 3 – State Street at Ramona Expressway: Modify the existing traffic signal to provide an eastbound right-turn overlap and a westbound right-turn overlap. The installation of these improvements is subject to the approval of the City of San Jacinto.

Figure 11-1 graphically illustrates the recommended improvements for Year 2026 Cumulative Plus Project traffic conditions. This figure also shows the project-specific access improvements at the intersection of Village at San Jacinto/Project Driveway No. 3 at Ramona Expressway.





LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

= APPROACH LANE ASSIGNMENT
= PROJECT SPECIFIC IMPROVEMENTS
= YEAR 2025 RECOMMENDED IMPROVEMENT
= TRAFFIC SIGNAL, = STOP SIGN
= PROJECT SITE

FIGURE 11-1

RECOMMENDED IMPROVEMENTS

RAMONA EXPRESSWAY AND STATE STREET SHOPPING CENTER, SAN JACINTO

12.0 PROJECT FAIR SHARE ANALYSIS

The transportation impacts associated with the development of the proposed Project were determined based on the future conditions analysis with the proposed Project. The key study locations forecast to operate at adverse levels of service are discussed below. As such, the proposed Project's "fair share" of the recommended improvements has been calculated for the key study locations that are forecast to operate at adverse levels of service.

12.1 Year 2026 Cumulative Plus Project Traffic Conditions

Table 12-1 presents the AM and PM peak hours Project fair share percentages at the key study intersections that are forecast to operate at adverse levels of service in Year 2026 Cumulative Plus Project traffic conditions. As presented in *Table 12-1*, the first column (1) presents the Project only traffic volume. The second column (2) presents the existing traffic volume at the intersection. The third column (3) presents the Year 2026 Cumulative Plus Project traffic volumes. The fourth column (4) represents the Project fair share based on the following formula:

- Project Fair Share (4) = Column (1)/[Column (3) – Column (2)]*100

The Project fair share percentages (most adverse time period) for the two (2) adverse intersections for Year 2026 Cumulative Plus Project traffic conditions that require physical improvements are shown below:

- 2. State Street at Community College Drive 50.34%
- 3. State Street at Ramona Expressway 26.46%

TABLE 12-1
YEAR 2026 CUMULATIVE PLUS PROJECT TRAFFIC CONDITIONS
FAIR SHARE CONTRIBUTION

Key Intersection		Impacted Time Period	(1) Project Only Volume	(2) Existing Volume	(3) Year 2026 Cumulative Plus Project Volume	(4) Project Fair Share Responsibility
2.	State Street at	AM	96	1,609	1,862	37.94%
	Community College Drive	PM	147	1,418	1,710	**50.34%**
3.	State Street at	AM	--	--	--	--
	Ramona Expressway	PM	335	3,506	4,772	**26.46%**

Notes:

- Project Fair Share (4) = Column (1) / [Column (3) – Column (2)]
- **Bold Project Fair Share Responsibility** is based on worse case

13.0 MULTIMODAL CIRCULATION

The on-site circulation layout of the proposed Project as illustrated in *Figure 2-2* on an overall basis is adequate for drivers, pedestrians, bicycles, and public transit users.

Pedestrian Circulation

Pedestrian circulation would be provided via existing public sidewalks located along the State Street project frontage and proposed sidewalks located along the Ramona Expressway and Eagle Road project frontages, which will connect to the Project's internal walkways. The Project will protect the existing sidewalk along the State Street Project frontage and if necessary, repair or reconstruct sidewalks along the project frontage per the City's request. The intersection of Village at San Jacinto/Project Driveway No. 3 at Ramona Expressway will provide crosswalks along all legs with construction of the proposed Project, which will provide pedestrians convenient access from the Project site across Ramona Expressway. The existing sidewalk system within the Project vicinity provides direct connectivity to the surrounding residential communities, as well as public transit along State Street.

Bike Lanes

A Class II Bike Lane currently exists along Ramona Expressway (i.e. on both sides of the street), west and east of State Street. A Class II Bike Lane also currently exists along Eagle Road (i.e. on both sides of the street), north and south of Ramona Expressway.

Public Transit

Public transit bus service is provided in the Project area by the Riverside Transit Agency (RTA). ***Section 3.2*** contains descriptions for the following transit route:

- *City Route 44*

The bus stops nearest to the Project site are located along State Street on the west side just north of Idyllwild Drive, and on the east side just north of Ramona Expressway.

14.0 VEHICLE MILES TRAVELED (VMT) ANALYSIS

On December 28, 2018, the California Natural Resources Agency adopted revised CEQA Guidelines. Among the changes to the guidelines was the removal of vehicle delay and LOS from consideration for transportation impacts under CEQA. With the adopted guidelines, transportation impacts are to be evaluated based on a project's effect on vehicle miles traveled. Lead agencies are allowed to continue using their current impact criteria, or to opt into the revised transportation guidelines. However, the new guidelines must be used starting July 1, 2020, as required in CEQA section 15064.3. The City of San Jacinto recently adopted new traffic impact criteria in June 2020 to be consistent with the CEQA revisions. These new guidelines are contained within the *City of San Jacinto Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment*, dated June 2020 and provide screening criteria and methodology for VMT analysis.

Per the *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment*, there are three types of screening to screen projects from project-level VMT assessments. The three screening steps are described below. The results of each screening step applied to the proposed Project is also discussed. It should be noted that the project only needs to satisfy one of the three screening steps.

Step 1: Transit Priority Area (TPA) Screening

Projects located within a transit priority area (TPA) may be presumed to have a less than significant impact absent substantial evidence to the contrary. This presumption may ***NOT*** be appropriate if the project:

1. Has a Floor Area Ratio (FAR) of less than 0.75;
2. Includes 5% or more parking for use by residents, customers, or employees of the project than required by the City;
3. Is inconsistent with the applicable Sustainable Communities Strategy; or
4. Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

- *Based on the WRCOG screening tool, the project site is not located within a Transit Priority Area (TPA). Therefore, Project Screening Step 1: Transit Priority Area (TPA) Screening is not satisfied.*

Step 2: Low VMT Area Screening

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

- *Based on the WRCOG screening tool, the project site is located within Traffic Analysis Zone (TAZ) #2184. Per the WRCOG screening tool, the Project TAZ VMT/service population is 26.1 VMT per service population and the jurisdiction average VMT/service population is 34.7 VMT per service population. Comparison of the two VMT values indicates that the Project TAZ VMT is lower than the jurisdiction VMT average. Therefore, Project Screening Step 2: Low VMT Area Screening is satisfied.*

Appendix G contains the WRCOG VMT Screening Tool Data.

Step 3: Project Type Screening

Local serving retail projects less than 150,000 square feet may be presumed to have a less than significant impact absent substantial evidence to the contrary. Local serving retail generally improves the convenience of shopping close to home and has the effect of reducing vehicle travel.

- *As stated in Section 2.0, the proposed Project will consist of a maximum of 114,135 square foot (SF) shopping center with 105,348 SF of retail/grocery/food uses, a gas station with 16 vehicle fueling positions and a 5,198 SF convenience market, and a 3,589 SF express car wash with a 110-foot wash tunnel. Therefore, based on the Step 3: Project Type Screening criteria, this project could be screened from a VMT analysis, and could be presumed to have a less than significant impact on VMT per the City's guidelines.*

14.1 VMT Analysis Conclusion

Based on the City's guidelines, the proposed Project satisfies Step 2: Low VMT Area Screening and Step 3: Project Type Screening. Therefore, this project could be screened from a VMT analysis, and could be presumed to have a less than significant impact on VMT per the City's guidelines.

15.0 SUMMARY OF FINDINGS AND CONCLUSIONS

- ***Project Description*** – The proposed Project site, which is currently vacant, is located on the southeast corner of the intersection of State Street and Ramona Expressway in the City of San Jacinto, California. The proposed Project will consist of a maximum of 114,135 square foot (SF) shopping center with 105,348 SF of retail/grocery/food uses, a gas station with 16 vehicle fueling positions and a 5,198 SF convenience market, and a 3,589 SF express car wash with a 110-foot wash tunnel. The proposed Project is anticipated to be completed by the Year 2026.

  Vehicular access to the proposed Project will be provided via one (1) right-turn in/right-turn out only unsignalized driveway located along State Street (i.e. Project Driveway No. 1), two (2) right-turn in/right-turn out only unsignalized driveways located along Ramona Expressway (i.e. Project Driveway No. 2 and Project Driveway No. 4), one (1) full access signalized driveway located along Ramona Expressway, located directly opposite Village at San Jacinto (i.e. Project Driveway No. 3) and two (2) full-access unsignalized driveways located along Eagle Road (i.e. Project Driveway No. 5 and Project Driveway No. 6). It should be noted that there is one additional driveway located at the southeast corner of the project site along Eagle Road that will provide truck access to Major 3, Major 4 and Major 5.

- ***Study Scope*** – The following seven (7) key study intersections were selected for detailed peak hour level of service analyses under Existing Traffic Conditions, Year 2026 Cumulative Traffic Conditions, and Year 2026 Cumulative Plus Project Traffic Conditions.

  Key Study Intersections

  1. State Street at Quandt Ranch Road
  2. State Street at Community College Drive
  3. State Street at Ramona Expressway
  4. State Street at Idyllwild Drive
  5. Village at San Jacinto/Project Driveway No. 3 at Ramona Expressway
  6. Eagle Road at Ramona Expressway
  7. Eagle Road at Idyllwild Drive

- ***Existing Traffic Conditions*** – The intersections of State Street at Community College Drive and Eagle Road at Idyllwild Drive currently operate at unacceptable LOS E during the AM peak hour. The remaining five (5) key study intersections currently operate at an acceptable level of service during the AM and PM peak hours.

- ***Project Trip Generation*** – The proposed Project is forecast to generate approximately 11,265 daily trips, with 479 trips (282 inbound, 197 outbound) forecast during the AM peak hour and 737 trips (356 inbound, 381 outbound) forecast during the PM peak hour.

- ***Cumulative Projects Trip Generation*** – The thirty-one (31) cumulative projects are forecast to generate a total of 49,369 daily trips, with 3,225 trips (1,390 inbound and 1,835 outbound) forecast during the AM peak hour and 3,897 trips (2,171 inbound and 1,726 outbound) forecast during the PM peak hour.

- ***Year 2026 Cumulative Plus Project Traffic Conditions*** – The proposed Project will adversely impact two (2) of the seven (7) key study intersections when compared to the LOS criteria defined in this report. The remaining five (5) key study intersections are forecast to continue to operate at an acceptable LOS during the AM and PM peak hours with the addition of Project generated traffic in the horizon Year 2026. The locations that will be adversely impacted are as follows:

	AM Peak Hour		PM Peak Hour	
Key Intersection	HCM	LOS	HCM	LOS
2. State Street at Community College Drive	54.7 s/v	F	42.7 s/v	E
3. State Street at Ramona Expressway	--	--	69.8 s/v	E

  The implementation of recommended improvements at the deficient locations improves these intersections to acceptable service levels.

- ***Traffic Signal Warrant Analysis*** – The results of the peak-hour traffic signal warrant analysis indicate that the intersection of State Street at Community College Drive has existing traffic conditions that would exceed the volume thresholds of Warrant #3, Part B for the AM peak hour. The results of the peak-hour traffic signal warrant analysis for Year 2026 Cumulative Plus Project traffic conditions also indicate that the intersection of State Street at Community College Drive has future traffic conditions that would exceed the volume thresholds of Warrant #3, Part B for the AM peak hour. The analysis and the recommended improvements show that the above-mentioned intersection under Year 2026 Cumulative Plus Project traffic conditions is recommended to be signalized. With signalization of this intersection, which is warranted under existing traffic conditions, this intersection is forecast to operate at acceptable service levels during the AM and PM peak hours. Thus, it is concluded that a traffic signal is justified at the above mentioned unsignalized intersection.

- ***Site Access and Internal Circulation Evaluation*** – All six (6) Project Driveways are forecast to operate at an acceptable LOS C or better during the AM and PM peak hours for Year 2026 Cumulative Plus Project traffic conditions. As such, project access will be adequate.

  Adequate storage will be provided to accommodate the forecast 95th percentile queues under Year 2026 Cumulative Plus Project traffic conditions for all outbound movements at the six (6) Project driveways. Although the 95th percentile queue for the dual northbound left-turn lanes at the intersection of State Street at Ramona Expressway is not accommodated during the AM and PM peak hours, it should be noted that the average queue is accommodated during both the AM and PM peak hours. It should also be noted that Project Driveway No. 5 and No. 6 along Eagle

Road are adequately spaced and that queuing into the Project site at these driveways is not anticipated to affect vehicles entering/exiting Buckingham Drive.

As requested by City staff, the need for an eastbound right-turn deceleration lane and an eastbound departure acceleration lane at Project Driveway No. 2, Village at San Jacinto/Project Driveway No. 3, and Project Driveway No. 4 along Ramona Expressway was evaluated. Per the *Highway Capacity Manual 2000,* "an exclusive right-turn lane should be considered if the right-turn volume exceeds 300 veh/h and the adjacent mainline volume exceeds 300 veh/h/ln." Based on review of the forecast peak hour right-turning volumes (i.e. less than 300 right-turns) and the peak hour level of service calculations, an eastbound deceleration lane is not needed at Project Driveways No. 2, No. 3 and No. 4. Furthermore, due to the close project driveway spacing along the Ramona Expressway project frontage, an acceleration lane is not feasible, due to the required transition length and potential conflicting weaving movements between the driveways.

The on-site circulation layout of the proposed Project on an overall basis is adequate. Curb return radii have been confirmed and are generally adequate for small service/delivery (FedEx, UPS) trucks, trash trucks and fueling trucks.

- ***Project-Specific Access Improvements*** **–** The following Project features will be constructed by the proposed Project to ensure that adequate ingress and egress to the Project site is provided along Ramona Expressway:

  - Intersection No. 3 – State Street at Ramona Expressway: Restripe the south leg of the intersection to provide the northbound approach with a second northbound left-turn lane and convert the northbound right-turn lane to a shared northbound through/right-turn lane. Modify the existing traffic signal, as necessary. The installation of this improvement is subject to the approval of the City of San Jacinto.

  - Intersection No. 5 – Village at San Jacinto/Project Driveway No. 3 at Ramona Expressway: Construct the project driveway, located directly opposite Village at San Jacinto and provide one inbound lane and three outbound lanes (i.e. dual northbound left-turn lanes and one northbound shared through/right-turn lane). Stripe crosswalks on the south, west, and east legs. Modify the existing traffic signal, as necessary. The installation of this improvement is subject to the approval of the City of San Jacinto.

- ***Year 2026 Cumulative Plus Project Traffic Improvements*** **–** The results of Year 2026 Plus Project traffic conditions indicate that two (2) of the seven (7) key study intersections are forecast to operate at an adverse level of service during the AM and/or PM peak hour when compared to the LOS criteria defined in this report. The improvements listed below have been identified at the deficient locations to improve these intersections to either acceptable service levels or offsets the increase in delay due to the Project:

- Intersection No. 2 – State Street at Community College Drive: Install a traffic signal and design for five-phase operation with protected left-turn phasing on State Street. Stripe crosswalks on all legs. The installation of these improvements is subject to the approval of the City of San Jacinto.

- Intersection No. 3 – State Street at Ramona Expressway: Modify the existing traffic signal to provide an eastbound right-turn overlap and a westbound right-turn overlap. The installation of these improvements is subject to the approval of the City of San Jacinto.

- ***Year 2026 Cumulative Plus Project Fair Share Analysis –*** The Project fair share percentages (most adverse time period) for the two (2) adverse intersections for Year 2026 Cumulative Plus Project traffic conditions that require physical improvements are shown below:

  - 2. State Street at Community College Drive 50.34%
  - 3. State Street at Ramona Expressway 26.46%

- ***Vehicle Miles Traveled (VMT) Analysis*** – Based on the City's guidelines, the proposed Project satisfies Step 2: Low VMT Area Screening and Step 3: Project Type Screening. Therefore, this project could be screened from a VMT analysis, and could be presumed to have a less than significant impact on VMT per the City's guidelines.