

## 4.14 Transportation and Circulation

### Introduction

This section addresses existing transportation and circulation conditions in the affected area, identifies and analyzes potential impacts to these resources, and recommends mitigation measures to reduce or avoid impacts anticipated from implementation of the Proposed Project. In addition, existing laws and regulations relevant to transportation and circulation are described. Compliance with applicable jurisdictional roadway performance standards would serve to reduce or avoid certain impacts that might otherwise occur with the implementation of the Proposed Project.

The area of study for this analysis is defined as the regional and local roadway network system serving the Proposed Project site, which includes segments of U.S. Highway 101, State Route 58, El Camino Real and Santa Barbara Road. This analysis was conducted through review of the following resources:

- Traffic Impact Analysis: Santa Margarita Quarry Extension prepared by Rick Engineering Company and dated May 15, 2012;
- Traffic Impact Analysis Update: Santa Margarita Quarry Extension prepared by Pinnacle Traffic Engineering and dated November 11, 2013 (Appendix F);
- San Luis Obispo Council of Governments 2010 Regional Transportation Plan (SLOCOG, 2013);
- San Luis Obispo County General Plan Circulation Element (County of San Luis Obispo, 2014);
- California Department of Transportation (Caltrans) Transportation Concept Report for State Route 58 in Caltrans District 5 (Caltrans, 2013); and
- Caltrans Transportation Concept Report for U.S. Highway 101 in Caltrans District 5 (Caltrans, 2013).

### Scoping Issues Addressed

During the Proposed Project's scoping period the County's Department of Public Works submitted written comments regarding the Applicant's submitted materials in support of the CUP and the original Traffic Impact Analysis report prepared in 2012 (Rick Engineering Company, 2012). The following transportation and circulation issues were raised and are addressed both in this section and the updated Traffic Impact Analysis (Pinnacle Traffic Engineering, 2013):

- Update the impact analysis based on quarry operations between 2003 and 2012;
- Address potential impacts to the southbound shoulder of El Camino Real;
- Consider reconstruction of the Proposed Project's access road approach per County standards;
- Analyze the need for southbound left turn lane on El Camino Real (at the quarry's access road);
- Consider fair-share mitigation for safety on El Camino Real at Estrada Avenue;
- Consider fair-share mitigation for safety on El Camino Real, from Estrada Avenue to Murphy Avenue;
- Update the Proposed Project's cumulative analysis based on the current (June 2013) County list of pending projects, including the proposed Oster/Las Pilitas Quarry Project.

In addition to the above, two commenters addressed truck trip volumes and the quarry's existing access road. One commenter requested clarification as to the permitted number of truck trips per day and whether they are one-way or round-trip truck trips. The County verified that the existing quarry is permitted to allow for 294 round-trip truck trips per day and that no change to this number would occur

under the Proposed Project. Another commenter requested clarification on the location and length of the quarry's access road. Access to the quarry is from a private road that intersects with El Camino Real, approximately 1.8 miles north of the State Route 58/El Camino Real intersection. The access road runs east to west, and is approximately 1.5 miles in length.

### 4.14.1 Existing Conditions

#### Current Quarry Operations

Traffic volumes from existing quarry operations, under both normal and peak operating conditions, are part of the baseline traffic conditions discussed below for study area roadways. As discussed in EIR Section 2.0 (Project Description), the Project would not generate new traffic volumes over existing conditions, but instead extends baseline daily trip generations by continuing quarry operations. Because the Proposed Project would not alter existing quarry operations, existing trip distribution is provided later in this discussion within the analysis of Impact TR-1 (EIR Section 4.14.5).

#### Roadways

##### *Network Description*

The study area for roadways includes segments of U.S. Highway 101, El Camino Real, State Route 58, and Santa Barbara Road. The following describes the physical characteristics and posted signage of the study area roadways.

**U.S. Highway 101.** U.S. Highway 101, in the vicinity of Santa Margarita and Atascadero, is a four-lane divided freeway (two travel lanes in each direction), with a posted speed limit of 65 miles per hour (mph). This section of U.S. Highway 101 also has a 55 mph speed limit for trucks with 3 axles or more. There are "grade separated" interchanges for State Route 58 (El Camino Real) and Santa Barbara Road. The north and southbound on-off ramps for State Route 58 (El Camino Real) are free-flowing, with the northbound off-ramp posted with a 50 mph speed limit. The north and southbound off-ramps at Santa Barbara Road are currently stop sign controlled.

**State Route 58.** State Route 58 is an east-west State highway that extends between U.S. Highway 101 and State Route 99 in Bakersfield. East of U.S. Highway 101, State Route 58 follows El Camino Real through Santa Margarita with a single travel lane in each direction, and a posted speed limit of 45 mph between Wilhelmina Avenue and Maria Avenue. Between Maria Avenue and Estrada Avenue, State Route 58 (El Camino Real) has a posted speed limit of 35 mph. State Route 58 continues east of El Camino Real at Estrada Avenue and becomes Calf Canyon Highway east of Santa Margarita. East of El Camino Real, State Route 58 has a single travel lane in each direction with a signalized "at-grade" crossing of the Union Pacific Railroad (UPRR). There is a 25 mph "school zone" speed limit between the UPRR tracks and I Street (H Street provides access to Santa Margarita Elementary School). There is a sign posted for eastbound traffic (east of UPRR) stating, "State Route 58 Not Advisable for Trucks with Trailers use State Route 46 or State Route 166." State Route 58 (Calf Canyon Highway) continues east of Santa Margarita along a circuitous vertical and horizontal alignment towards the San Joaquin Valley.

**El Camino Real.** El Camino Real is a north-south two lane arterial that follows State Route 58 through Santa Margarita and continues north to the City of Atascadero. Through Santa Margarita El Camino Real has a posted speed limit of 35 mph between Maria Avenue and Estrada Avenue. There is a two-way left turn lane striped between Murphy Avenue and Pinal Avenue, and a pedestrian crosswalk on the north leg of the El Camino Real and Encina Avenue intersection. El Camino Real between Estrada Avenue and

Santa Barbara Road has a posted 55 mph speed limit. Passing is prohibited along various sections and near the horizontal curves. There are separate left turn lanes provided at Carmel Road. The El Camino Real and Santa Barbara Road is signalized, with north-south left turn phasing. There is a sign posted for southbound traffic approaching Santa Margarita stating: “State Route 58 Not Advisable for Trucks with Trailers use State Route 46 or State Route 166.” Also for northbound traffic approaching Estrada Avenue there is a sign indicating, “Tractor-Semi’s Over 30 Feet King Pin to Rear Axle Not Advised.”

**Santa Barbara Road.** Santa Barbara Road is a two lane arterial that extends east from Atascadero Avenue (west of U.S. Highway 101) to Los Palos Road (east of El Camino Real). The U.S. Highway 101 southbound ramps intersection is controlled with an “all way” stop sign and the U.S. Highway 101 northbound off ramp is stop sign controlled. The majority of Santa Barbara Road between U.S. Highway 101 and El Camino Real is striped with a three lane section (two-way left turn).

### ***Traffic Volumes***

Existing average daily traffic (ADT) volumes for the study area roadways is illustrated in Figure 4.14-1. As shown, traffic volumes on U.S. Highway 101 are highest within the roadway study area, as documented per:

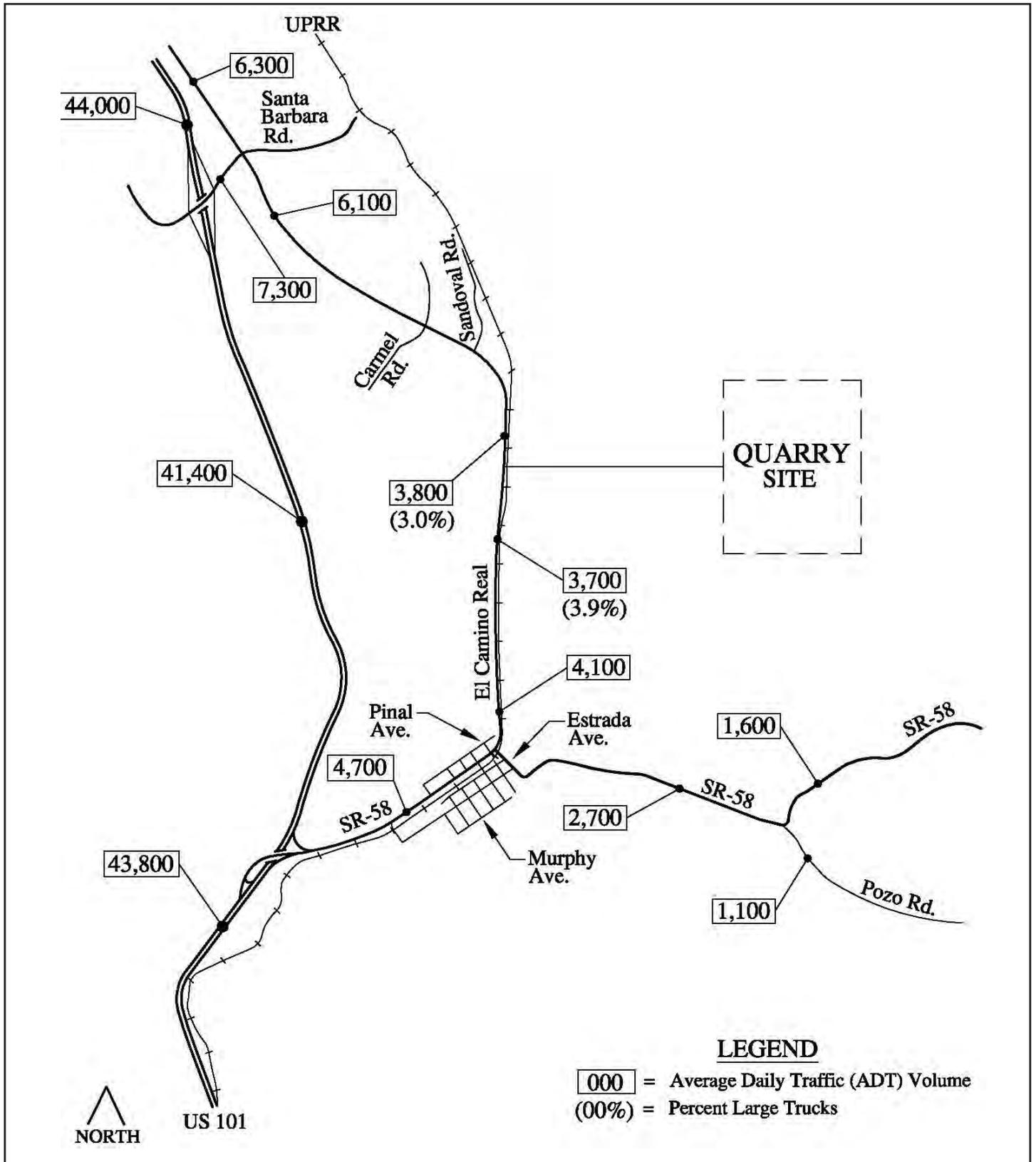
- A 24-hour traffic count data conducted along El Camino Real as collected for a seven-day period north and south of the existing quarry access road (November 1 through 7, 2011) (Pinnacle Traffic Engineering, 2013); and,
- Existing daily traffic volume data obtained from the County, Caltrans, and the city of Atascadero (Pinnacle Traffic Engineering, 2013).

It should be noted that existing daily traffic volumes include daily trips associated with the “average” operating conditions of the existing quarry, which are considered part of “baseline” conditions.

### ***Level of Service***

Utilizing the ADT volumes illustrated in Figure 4.14-1, the “Level of Service” (LOS) concept is used as an indicator of operating conditions on roadways and at intersections. The LOS concept categorizes traffic conditions according a range extending from A to F, where LOS A represents the best traffic flow conditions and LOS F represents poor conditions. In other words, LOS A indicates free-flowing traffic, and LOS F indicates substantial congestion with stop-and-go traffic and long delays at intersections. Table 4.14-1 provides the existing LOS designations for study area roadway segments, including average operational truck trips associated with the existing quarry.

As a frame of reference, the County has established LOS C as the lower limit threshold for acceptable traffic operations associated with rural areas and LOS D lower limit threshold acceptable traffic operations in urban areas. Additionally, the Caltrans Guide for the Preparation of Traffic Impact Studies states that: “Caltrans endeavors to maintain a target level of service at the transition between LOS C and D on State highway facilities” (Caltrans, 2002). This would pertain to roadway study area portions of U.S. Highway 101 and State Route 58. As shown in Table 4.14-1, all roadway segments operate at acceptable limits as defined by the County and Caltrans.



**Figure 4.14-1**

**Existing Traffic Volumes**



Source: Pinnacle Traffic Engineering, 2013

**Table 4.14-1. Existing Roadway Segments Levels of Service**

Roadway Segment	Configuration	ADT	LOS
U.S. Highway 101, north of Santa Barbara Road	4-lane freeway	44,000	C
U.S. Highway 101, Santa Barbara Road – State Route 58	4-lane freeway	41,400	B
U.S. Highway 101, south of State Route 58	4-lane freeway	43,800	C
Santa Barbara Road, U.S. Highway 101 northbound ramps – El Camino Real	2-lane arterial with left turn lanes	7,300	A
El Camino Real, south of Santa Barbara Road	2-lane arterial with no left turn lanes	6,100	B
El Camino Real, north of Project Access Road	2-lane arterial with no left turn lanes	3,800	A
El Camino Real, south of Project Access Road	2-lane arterial with no left turn lanes	3,700	A
El Camino Real, north of State Route 58	2-lane arterial with no left turn lanes	4,100	A
State Route 58, Murphy Avenue – Pinal Avenue	2-lane arterial with left turn lanes	4,700	A
State Route 58, El Camino Real – Pozo Road	2-lane arterial with no left turn lanes	2,700	A
State Route 58, east of Pozo Road	2-lane arterial with no left turn lanes	1,600	A
Pozo Road, south of State Route 58	2-lane arterial with no left turn lanes	1,100	A

Source: Pinnacle Traffic Engineering, 2013

### Traffic Accidents

Traffic accident records for El Camino Real and Santa Barbara Road were obtained from the California Highway Patrol (CHP) for a six-year period (January 2005 to December 2010). Traffic accident results are shown in Table 4.14-2. The data indicates that there were 96 reported accidents for the six-year period analyzed. Additional details for these accidents are provided in Appendix F. In summary, approximately 75 percent of the accidents occurred during daylight hours, 28 percent involved a single vehicle, 11 percent were Drinking Under Influence (DUI) related, and 22 percent were caused by a vehicle traveling at an unsafe speed. The nearest accident to the quarry was located approximately 350 feet north of the quarry access road (driveway entrance) on El Camino Real, and involved a single vehicle traveling northbound which lost control under wet and dark conditions. There were no reported accidents at the El Camino Real and quarry access road intersection. Only one of the reported accidents involved an injury and none of the accidents involved a pedestrian.

**Table 4.14-2. Traffic Accident and Accident Rate Data Summary**

Roadway Segment or Intersection	Configuration	Accidents	Existing Rate <sup>1</sup>	State Average Rate <sup>1</sup>
Santa Barbara Road	2-lane arterial with left turn lanes	8	1.11	1.3
El Camino Real / Santa Barbara Road	4-way signalized Intersection	11	0.46	0.55
El Camino Real between Santa Barbara Road and Quarry Access Road	2-lane arterial with no left turn lanes	51	1.62	0.82
El Camino Real between Quarry Access Road and Estrada Avenue	2-lane arterial with no left turn lanes	4	0.27	0.84
El Camino Real – State Route 58 between Estrada Avenue and Murphy Avenue	2-lane arterial with left turn lanes	9	1.59	1.30
El Camino Real – State Route 58 between Murphy Avenue and U.S. Highway 101	2-lane arterial with no left turn lanes	13	0.66	0.80

<sup>1</sup> - Accident rate based on "million vehicle miles traveled" for roadway segment or "million vehicles entering" an intersection.

Source: Pinnacle Traffic Engineering, 2013

## **Bicycle Facilities**

El Camino Real has Class II bike lanes through Santa Margarita and between Santa Margarita and the City of Atascadero. A Class II bike lane gives bicyclists striped lanes on streets, designated with specific signage and stencils. Santa Barbara Road also has Class II bike lanes between U.S. Highway 101 and El Camino Real. State Route 58 is considered a recreational bicycle route within the County and is popular with recreational bicycle riders due to the rural setting and relatively low traffic volumes (Caltrans, 2003). A popular annual one-day organized bicycle ride, called the “Wildflower Ride,” is attended by many riders each year, and uses portions of State Route 58 and Pozo Road, which can support quarry-related traffic (SLOB, 2013).

## **Transit and Rail Service**

San Luis Obispo County Regional Transit Authority (RTA) currently provides service to Santa Margarita and the rural residential areas along El Camino Real. There are RTA bus stops in both directions on El Camino Real at Pine Street (just south of the quarry access road).

UPRR train tracks are located on the east side of El Camino Real. The existing quarry access road crosses the tracks at a location that is signalized with an automated gate. North and south of the existing access road the UPRR tracks have a relatively straight horizontal alignment with good visibility looking in both directions from the access road. The centerline of the southbound tracks is located approximately 45 feet east of the northbound shoulder stripe on El Camino Real. The entry gate that serves Santa Margarita Ranch and the quarry property is located about 85 to 90 feet east of the northbound tracks centerline. This entry gate remains open at all time since it serves multiple users.

## **Air Transportation**

Due to the nature of the Proposed Project, no potential impacts to aviation resources could occur, as addressed in EIR Section 4.9.5 (Hazards and Hazardous Materials, Impacts and Mitigation Measures, Impacts, Impact HAZ-4). As such, no discussion of aviation-related resources or airspace use is discussed in this section.

### **4.14.2 San Luis Obispo County Plans and Policies**

#### **San Luis Obispo County**

As previously discussed, the County has established that LOS C is the lower limit for acceptable traffic operations in rural areas and LOS D as the lower limit for acceptable traffic operations in urban areas. All County maintained roads are subject to County LOS standards.

#### **San Luis Obispo Council of Governments**

The 2010 Regional Transportation Plan (RTP), prepared by the San Luis Obispo Council of Governments (SLOCOG), contains goals and objectives for State highways, major local routes of significance, alternative transportation modes, and strategies for transportation system and demand management (SLOCOG, 2013). However, no performance standards are identified in the 2010 RTP that are applicable to the Proposed Project. Furthermore, while the 2010 RTP includes a number of policies related to bicycles and other alternative transportation facilities, these policies are directed toward the development of new facilities and are not applicable to the Proposed Project as part of an existing quarry.

### 4.14.3 Regulatory Setting

#### State

- California Vehicle Code (CVC), Division 6, Chapter 7; Division 14.8; and, Division 15 all include regulations pertaining to the licensing, size, weight, and load of commercial vehicles operated on State highways and the safe operation of vehicles (DMV, 2014).
- California Streets and Highway Code, Divisions 1 and 2, Chapters 3 and 5 includes regulations for the care and protection of State and county highways as well as provisions for the issuance of written roadway permits (California, 2013).
- California Street and Highway Code Sections 670 through 695 set forth the provisions for Caltrans issuance of roadway permits including, but not limited to, permits for roadway encroachment during truck transportation and delivery and permits for any load that exceeds Caltrans weight, length, or width standards for public roadways (California, 2013).

#### Caltrans

As stated in the Caltrans Guide for the Preparation of Traffic Impact Studies: “Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D” (Caltrans, 2002). The 2003 Transportation Concept Report for State Route 58 indicates that a LOS E or better is considered acceptable for the segment of State Route 58 east of El Camino Real (Caltrans, 2003). The Transportation Concept Report for U.S. Highway 101 does not indicate any performance standards for Segment 6, which contains the roadway study area portion of U.S. Highway 101 (Caltrans, 2013). Therefore, the overall Caltrans performance standard applies to U.S. Highway 101.

### 4.14.4 Environmental Impact Methodology

#### Significance Criteria

The following significance criteria for transportation and circulation were derived from previous County environmental review documents and from the State CEQA Guidelines (Appendix G, Environmental Checklist Form, Sections IX and XIV). Impacts of the Proposed Project would be considered significant if:

- The addition of project traffic causes roadway operations to degrade from an acceptable LOS to an unacceptable LOS.
- The project substantially increases hazards due to design or incompatible uses, or results in unsafe conditions on public roads.
- The project demonstrably results in public roadway damage or necessitates the need for roadway improvements.
- The project results in inadequate parking capacity.
- The project results in inadequate emergency access.
- The project conflicts with an adopted policies, plans, or programs supporting alternative transportation.

Please refer to EIR Section 4.9 (Hazards and Hazardous Materials) for a discussion of potential project impacts to aviation. Impacts discussed below are categorized per the significance classification system provided in EIR Section 4.1 (Environmental Analysis, Introduction, Impact Significance Classification Scheme).

### Approach to Impact Analysis

Traffic volumes from existing quarry operations, under both normal and peak operating conditions, are part of the baseline traffic volumes presented above in Table 4.14-1 for the study area roadways. These existing trips are part of the baseline accident rates presented in Table 4.14-2. Therefore, the Proposed Project would not generate new traffic volumes over existing conditions, but instead extend baseline conditions by continuing quarry operations. Based on these considerations, the following scenarios are utilized in the evaluation of potential impacts to study area roadways for the Proposed Project:

- **Existing Plus Approved Projects Conditions.** This analysis includes adding traffic associated with approved projects to existing conditions within the roadway study area, as outlined in Table 4.14-1, which includes traffic associated with “average” existing quarry operations.
- **Existing Plus Approved Projects Plus Peak Quarry Operation Conditions.** This analysis includes peak permitted operation of the quarry under the Proposed Project. This represents “worst-case” traffic volumes associated with the Proposed Project.

#### *Existing Plus Approved Projects Conditions*

The analysis of traffic impacts evaluates the Proposed Project against existing plus approved project conditions. The “existing plus approved projects” scenario includes adding traffic trips from “approved” projects to the baseline conditions presented in Table 4.14-1 (Existing Roadway Segments Levels of Service). These projects have already received permits from the County, and therefore are assumed to be built and operational prior to approval of the Proposed Project.

Section III of Appendix F provides details of the approved projects and the trip generation calculated for each of them. In summary, the approved projects are estimated to generate an additional 9,702 daily trips, with 662 trips occurring during peak morning hours (between 7:00 a.m. and 9:00 a.m.) and 1,135 trips during peak afternoon/evening hours (between 4:00 p.m. and 6:00 p.m.). Table 4.14-3 shows an update to existing conditions LOS, as presented in Table 4.14-1 that accounts for the added traffic generated by the approved projects within the roadway study area. The existing plus approved project traffic volumes for roadway study area are shown in Figure 3 within Appendix F.

**Table 4.14-3. Existing Plus Approved Project Roadway Segment LOS**

Roadway Segment	Configuration	Existing (Includes Average Quarry Operations)		Existing Plus Approved Projects	
		ADT	LOS	ADT	LOS
U.S. Highway 101, north of Santa Barbara Road	4-lane freeway	44,000	C	46,000	C
U.S. Highway 101, Santa Barbara Road – State Route 58	4-lane freeway	41,400	B	44,100	C
U.S. Highway 101, south of State Route 58	4-lane freeway	43,800	C	46,800	C
Santa Barbara Road, U.S. Highway 101 northbound ramps – El Camino Real	2-lane arterial with left turn lanes	7,300	A	10,700	A
El Camino Real, south of Santa Barbara Road	2-lane arterial with no left turn lanes	6,100	B	6,800	C
El Camino Real, north of Project Access Road	2-lane arterial with no left turn lanes	3,800	A	4,300	A
El Camino Real, south of Project Access Road	2-lane arterial with no left turn lanes	3,700	A	4,200	A
El Camino Real, north of State Route 58	2-lane arterial with no left turn lanes	4,100	A	4,600	A
State Route 58, Murphy Avenue – Pinal Avenue	2-lane arterial with left turn lanes	4,700	A	6,300	A
State Route 58, El Camino Real – Pozo Road	2-lane arterial with no left turn lanes	2,700	A	4,500	A

**Table 4.14-3. Existing Plus Approved Project Roadway Segment LOS**

Roadway Segment	Configuration	Existing (Includes Average Quarry Operations)		Existing Plus Approved Projects	
		ADT	LOS	ADT	LOS
State Route 58, east of Pozo Road	2-lane arterial with no left turn lanes	1,600	A	1,900	A
Pozo Road, south of State Route 58	2-lane arterial with no left turn lanes	1,100	A	2,600	A

Source: Pinnacle Traffic Engineering, 2013

**Proposed Project Trip Generation**

As discussed in EIR Section 2.1 (Project Summary), no change in annual production volumes or intensity is proposed beyond currently permitted levels. The Proposed Project would extend the duration of trips generated by existing quarry operations from the proposed 33-acre expansion area followed by reclamation of the entire quarry site, as expanded. Therefore, average and peak daily traffic from current quarry operations represents that generated by the Proposed Project.

Table 4.14-4 provides daily traffic generated by both average and maximum daily quarry operations. The peak traffic volumes shown in Table 4.14-4 are those utilized within this analysis to ensure worst-case conditions are analyzed, as average conditions are already accounted for in baseline conditions. As shown in Table 4.14-4, the majority of daily egress and ingress due to the quarry operational vehicle trips occur outside of the peak morning hours (between 7:00 a.m. and 9:00 a.m.) and peak afternoon/evening hours (between 4:00 p.m. and 6:00 p.m.) periods.

**Table 4.14-4. Proposed Project Trip Generation Estimates – Number of Quarry-Related Vehicle Trips**

	Morning Peak Hour		Afternoon/Evening Peak Hour		Total Daily Trips (In and Outside of Peak Hours)
	In	Out	In	Out	
<b>Average Quarry Operations (included as baseline conditions)</b>					
15 Full-time employees	8	3	2	6	30
Truckloads (89 average, round-trip)	8	8	4	4	178
Miscellaneous trips (maximum 10 per day, round-trip)	2	1	1	2	20
<b>Total</b>	<b>18</b>	<b>12</b>	<b>7</b>	<b>12</b>	<b>228</b>
<b>Peak Quarry Operations</b>					
15 Full-time employees	8	3	2	6	50
Truckloads (294 average, round-trip)	18	18	4	4	588
Miscellaneous trips (maximum 15 per day, round-trip)	3	12	2	3	30
<b>Total</b>	<b>29</b>	<b>23</b>	<b>8</b>	<b>13</b>	<b>668</b>

Source: Pinnacle Traffic Engineering, 2013

### 4.14.5 Project Impacts and Mitigation Measures

**Impact TR-1: Cause roadway operations to degrade from an acceptable LOS to an unacceptable LOS**

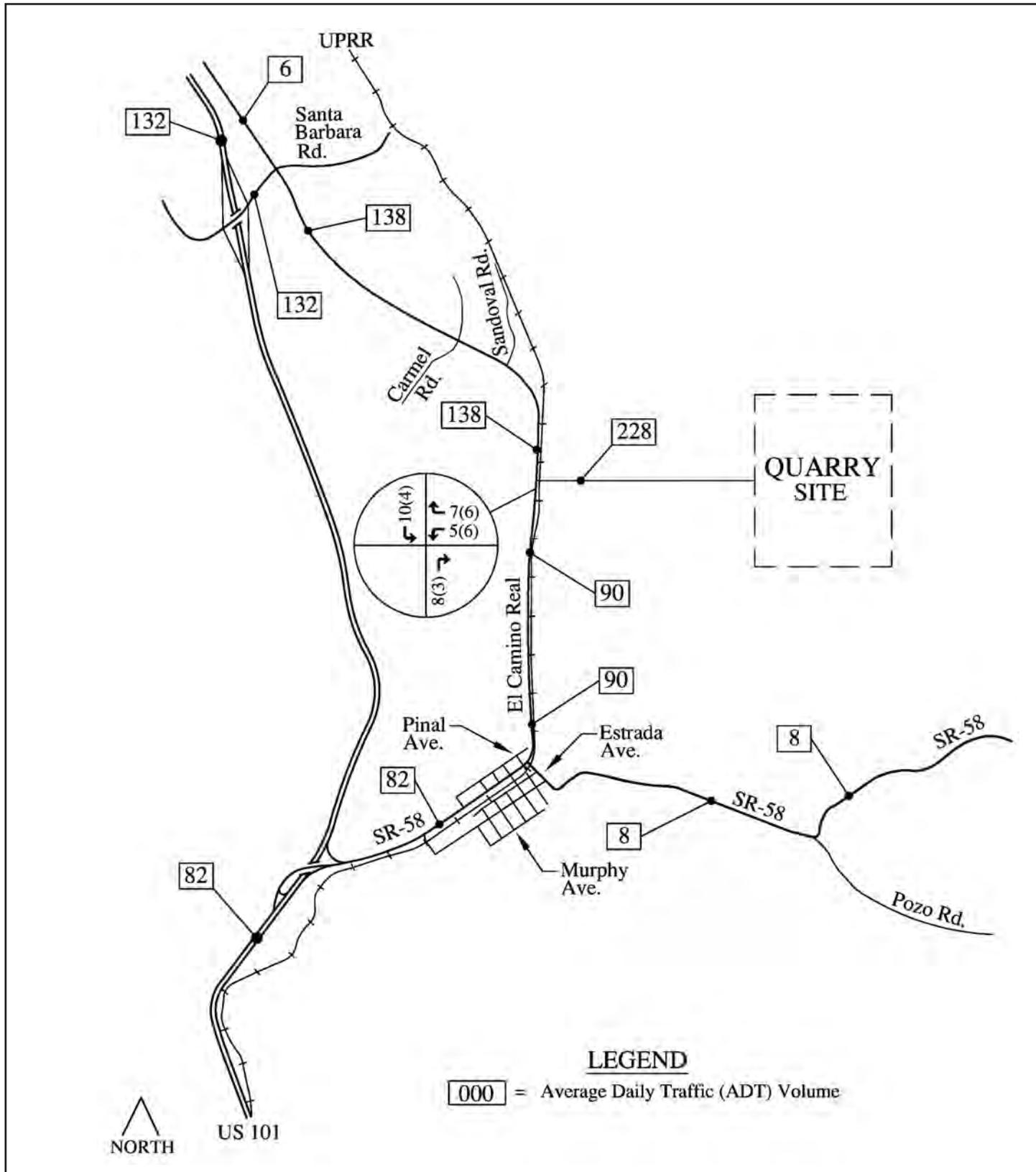
#### Excavation

Table 4.14-5 presents the results of the roadway segment LOS analysis when traffic associated with Proposed Project peak quarry operations is added to the existing plus approved project traffic demands. Average and peak operational quarry traffic trip distribution routes are graphically depicted in Figures 4.14-2 and 4.14-3. As shown in these figures, during “worst-case” peak periods, operation of the Proposed Project would not diminish El Camino Real or Santa Barbara Road to unacceptable LOS performance standard thresholds, as defined by the County (LOS C or better). The freeway segment LOS analysis for U.S. Highway 101 and State Route 58 indicates that the Proposed Project’s peak operations daily traffic volumes would also be within acceptable LOS performance standard thresholds, as defined by Caltrans (between LOS C and LOS D for all roadway study area segments except for State Route 58, where LOS E or better is considered acceptable for the segment of east of El Camino Real). Therefore, the Proposed Project would result in less than significant impacts with respect to the performance of the roadway study area (Class III).

**Table 4.14-5. Existing Plus Approved Project Plus Peak Quarry Operations Roadway Segment LOS Analysis**

Roadway Segment	Configuration	Existing Plus Approved Projects (Includes Average Quarry Operations)		Existing Plus Approved Projects Plus Quarry Peak Operations	
		ADT	LOS	ADT	LOS
U.S. Highway 101, north of Santa Barbara Road	4-lane freeway	46,000	C	46,278	C
U.S. Highway 101, Santa Barbara Road – State Route 58	4-lane freeway	44,100	C	44,100	C
U.S. Highway 101, south of State Route 58	4-lane freeway	46,800	C	46,952	C
Santa Barbara Road, U.S. Highway 101 northbound ramps – El Camino Real	2-lane arterial with left turn lanes	10,700	A	10,978	A
El Camino Real, south of Santa Barbara Road	2-lane arterial with no left turn lanes	6,800	C	7,080	C
El Camino Real, north of Project Access Road	2-lane arterial with no left turn lanes	4,300	A	4,580	A
El Camino Real, south of Project Access Road	2-lane arterial with no left turn lanes	4,200	A	4,360	A
El Camino Real, north of State Route 58	2-lane arterial with no left turn lanes	4,600	A	4,760	A
State Route 58, Murphy Avenue – Pinal Avenue	2-lane arterial with left turn lanes	6,300	A	6,452	A
State Route 58, El Camino Real – Pozo Road	2-lane arterial with no left turn lanes	4,500	A	4,508	A
State Route 58, east of Pozo Road	2-lane arterial with no left turn lanes	1,900	A	1,908	A
Pozo Road, south of State Route 58	2-lane arterial with no left turn lanes	2,600	A	2,600	A

Source: Pinnacle Traffic Engineering, 2013

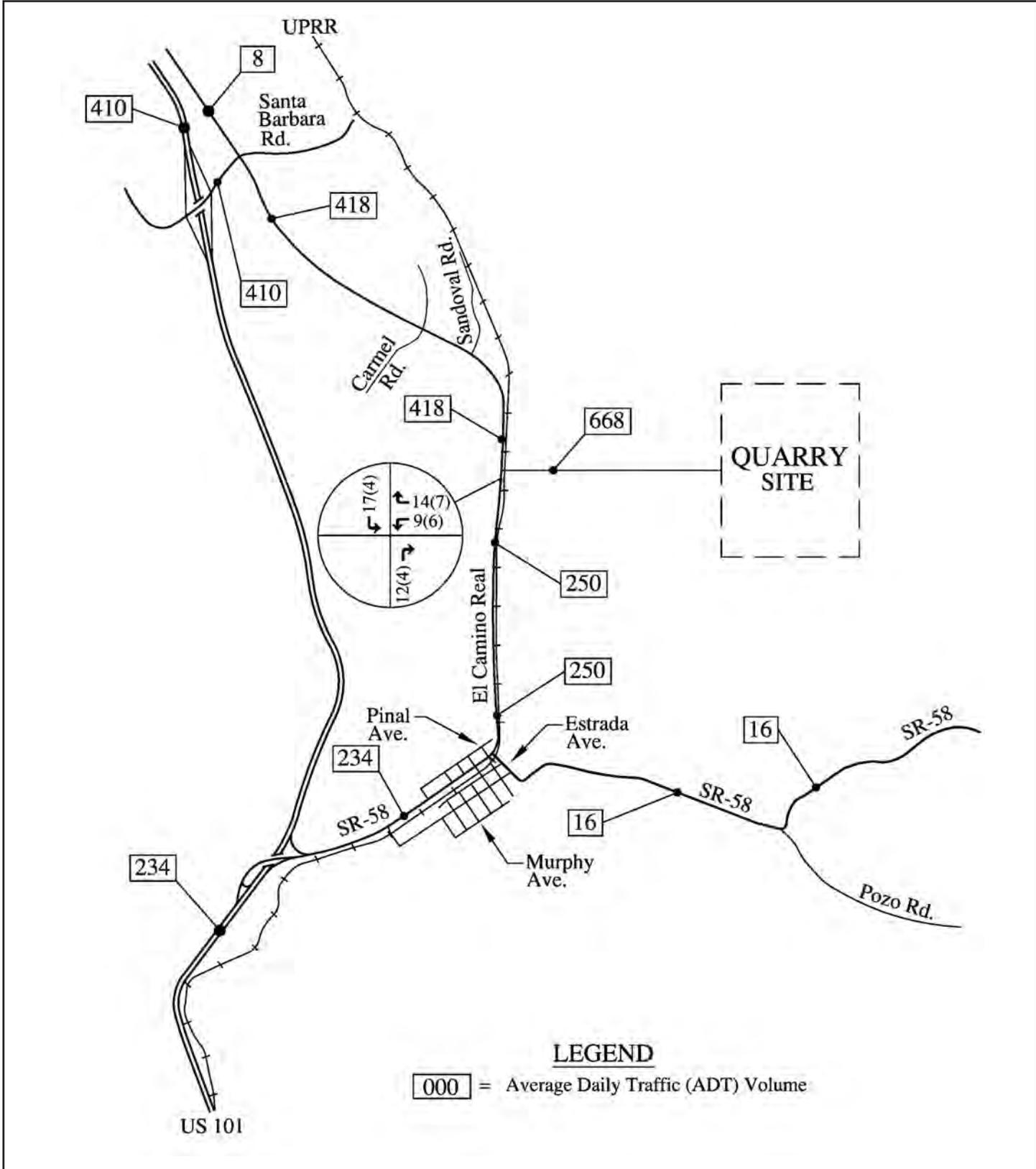


**Figure 4.14-2**

**Project Traffic Volumes  
(Average Operations)**



Source: Pinnacle Traffic Engineering, 2013



**Figure 4.14-3**

**Project Traffic Volumes  
 (Peak Operations)**



Source: Pinnacle Traffic Engineering, 2013

## Reclamation

Proposed reclamation activities would occur parallel to continued quarry operations for the lifetime of the Proposed Project, followed by final reclamation once the quarry has been closed. Per the activities discussed in EIR Section 2.6 (Reclamation Plan Amendment), reclamation activities would generate daily truck and passenger vehicle trips on study area roadways during dismantling and haul-off of existing quarry equipment and structures. However, the volume of these daily trips is not expected to exceed the number of daily aggregate haul trips and worker commute trips during quarry operation. Because these operational trips would cease at the time of reclamation, the short-term trips associated with reclamation are not expected to exceed or degrade the LOS of any study area roadway provided in Table 4.14-1. Impacts would be less than significant (Class III).

<b>Impact TR-2: Increase hazards due to design or incompatible uses, or result in unsafe conditions on public roads</b>
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## Excavation

As discussed earlier, the Proposed Project would continue existing operations of the quarry, including excavation within the proposed 33-acre expansion area and reclamation of the entire quarry site, as expanded. Therefore, the Proposed Project would not change any existing operations or entitlements and this would not introduce any new or incompatible uses to the roadway study area's circulation system. No impacts would occur (No Impact).

With respect to public roadway safety, quarry egress and ingress on El Camino Real has been examined. Access to the quarry is from a private road that intersects with El Camino Real, approximately 1.8 miles north of the State Route 58/El Camino Real intersection. The access road runs east to west, and is approximately 1.5 miles in length. The total length from the quarry entrance to El Camino Real is paved and allows for two-way traffic. El Camino Real adjacent to the quarry access road has a relatively straight alignment. Looking north and south along El Camino Real from the quarry access road, the vertical and horizontal line of sight is relatively unrestricted. The tangent (straight) section of El Camino Real north of the quarry access entrance is approximately one-half mile in length. About 600 feet south of the quarry access, El Camino Real curves slightly to the west.

A review of sight distance was conducted for quarry egress using criteria in the Caltrans Highway Design Manual (HDM). The results of this analysis are contained in Section IV of Appendix F. Corner sight distance is the minimum time required for a waiting vehicle to either cross all lanes of through traffic and turn left or cross the near lanes and turn right, without requiring through traffic to radically alter their speed. Since the line of sight looking north from the quarry access road is unrestricted (seeing southbound traffic on El Camino Real), the evaluation of corner sight distance focused on the ability of vehicles exiting the quarry looking south to see northbound traffic to ensure they have adequate time to safely enter El Camino Real. Based on the analysis, an average of approximately 13 travel seconds is available looking south along El Camino Real. This demonstrates that vehicles exiting the quarry have sufficient sight distance of northbound approaching vehicles on El Camino Real. This corner sight distance ensures less-than-significant safety impacts would occur to public motorists and bicycles traveling on El Camino Real with respect to Proposed Project-related vehicle egress from the quarry.

As shown in Table 4.14-2, there were 96 reported accidents during the six-year study period between 2005 and 2010 on Santa Barbara Road and El Camino Real proximate to the quarry. The data in Table 4.14-2 demonstrates that the existing accident rates on El Camino Road between the quarry access road and Santa Barbara Road, and through Santa Margarita (Estrada Avenue to Murphy Avenue) exceeded

the State average rates when applied to these segments. Separate left turn lanes recently constructed on El Camino Real at Carmel Road have improved safety and reduced the accident potential near this intersection. Various primary collision factors are attributable to the accidents along El Camino Real through Santa Margarita (Estrada Avenue to Murphy Avenue). When reviewing data provided for the accidents identified in Table 4.14-2, it is unlikely that implementation of the Proposed Project would impact or increase existing accident rates in the area because no changes to the quarry's exiting traffic volumes are proposed. Impacts would be less than significant (Class III).

As discussed in the introduction to this analysis, during the scoping period for the Proposed Project, the County's Department of Public Works submitted written comments regarding the Proposed Project. Several of these comments pertained to providing fair-share mitigation for safety improvements at the El Camino Real/Estrada Avenue intersection (the preparation of road widening and traffic signal plans for future improvements) and along El Camino Real from Estrada Avenue to Murphy Avenue (including the construction of a pedestrian refuge island at the Encina Avenue intersection). Fair-share mitigation involves spreading the cost of these proposed improvements to project developers with traffic generation on affected roadway segments, using a balanced, impact-based method of assessing costs for the necessary improvements.

As analyzed above under Impact TR-1, the Proposed Project would not generate any average or peak hour vehicle trips beyond that of current quarry operations (existing conditions). However, the Project would continue quarry traffic beyond the existing quarry permit that is considered to result in a cumulative contribution to intersection LOS degradation at the intersections of Estrada Avenue (State Route 58) and El Camino Real, and Estrada Avenue and H Street (location of the Santa Margarita Elementary School pedestrian crossing). The Project's contribution from continued traffic at these locations is considered a potentially significant impact that can be mitigated through implementation of Mitigation Measure TR-1, below. The intent of this measure is to ensure the Project Applicant pay a fair share contribution to these improvements necessary to ensure roadway and pedestrian safety. With the implementation of Mitigation Measure TR-1, impacts would be less than significant (Class II).

#### **Mitigation Measure for Impact TR-2**

**TR-1 Fair share contribution to 2030 traffic volumes within the community of Santa Margarita.** The Applicant shall enter into an agreement with the County that specifies a fair share contribution percentage and timing of payment toward improvements necessary to identified intersections in the community of Santa Margarita. The fair share contribution shall be evaluated and the agreement updated as necessary by the County in consultation with Caltrans, prior to the issuance of a Notice to Proceed.

#### **Reclamation**

Proposed reclamation activities would occur parallel to continued quarry operations for the lifetime of the Proposed Project, followed by final reclamation once the quarry has been closed. Per the activities described in EIR Section 2.6 (Reclamation Plan Amendment), reclamation activities would not generate daily trips on study area roadways beyond that associated with quarry operational trips. Furthermore, these daily trips would be short-term, suspending upon cessation of reclamation activities. Therefore, no increase in potential vehicle hazards during reclamation would occur over the analysis presented above for operational activities. Impacts would be less than significant with mitigation incorporated (Class II).

**Impact TR-3: Result in public roadway damage, necessitating the need for roadway improvements**

**Excavation**

As discussed in the Introduction to this analysis, the County's Department of Public Works submitted written public scoping comments regarding the Proposed Project. A number of these comments pertain to a request for roadway improvements, as follows:

- Analyze the need for a southbound left turn lane on El Camino Real (into the Proposed Project's access driveway).
- Consider potential impacts to the southbound shoulder of El Camino Real.
- Consider reconstruction of the Proposed Project's access driveway approach to meet County standards.

Section IV, starting on page 21, of Appendix F provides details regarding the potential need for a southbound left turn lane on El Camino Real at the quarry access driveway. The analysis demonstrates that traffic volumes approaching the quarry access road do not warrant that a separate left turn lane on the southbound approach of El Camino Real at the quarry access road is needed under Proposed Project peak operations. As discussed above under Impact TR-1, the Proposed Project would not impact the LOS on El Camino Real. Furthermore, average and peak daily traffic associated with the Proposed Project is identical to that generated by existing quarry operations on El Camino Real. Therefore, traffic associated with peak operation of the Proposed Project would have no direct or demonstrable effect triggering the need for this improvement. Therefore, the Proposed Project would result in less than significant impacts and no mitigation is required, pursuant to State CEQA Guidelines Section 15126.4(a)(3).

Under existing quarry operations, shoulder damage on southbound El Camino Real at the quarry access road has occurred from quarry egress of large southbound trucks. Currently, the southbound lane of El Camino Real at the quarry entrance has a width of approximately 11 to 11.5 feet, with four to five feet of shoulder. The County Department of Public Works' standard for new roadway construction requires a 12-foot travel lane with an 8-foot shoulder. Large trucks exiting the quarry with a destination to the south would occasionally swing wide to minimize trailer tracking and the amount of time that the trailer is crossing the northbound lane. While it is acknowledged that shoulder damage on El Camino Real is part of baseline conditions, the Proposed Project would extend quarry operations for 59 years (through Phase IV). Therefore, operation of the quarry under the Proposed Project would have a direct and demonstrable continuing effect on shoulder damage impacts to El Camino Real. Mitigation Measure TR-2 is therefore recommended to reduce the Proposed Project's impact to less than significant (Class II).

The County Department of Public Works additionally requested that standard deceleration and acceleration tapers for a rural driveway be required at the quarry entrance driveway. The County's existing standards include 75-foot deceleration and acceleration tapers for traffic entering and exiting rural access roads. This would require the existing quarry access driveway approach on El Camino Real to be reconstructed per the County's current standard, as detailed in Drawing Number B-1e of Appendix F). A review of the details provided in Appendix F indicates that there may be sufficient pavement already in place to accommodate a 75 feet deceleration taper with some minor striping improvements. However, minor roadway improvements may be necessary to provide this acceleration taper. While it is acknowledged that current quarry operations function without deceleration and acceleration tapers on El Camino Real, the Proposed Project would extend quarry operations for 59 years (through Phase IV). Therefore, operation of the quarry under the Proposed Project would have a direct and demonstrable continuing inconsistency with the current County standard for deceleration and acceleration tapers for a rural driveway.

Mitigation Measure TR-2 is recommended to reduce the Proposed Project's impact associated with rural driveway design to less than significant (Class II).

The following discusses Project traffic volumes with respect to roadway damage contribution on State Route 58. When comparing the ADT shown on Figure 4.14-1 to Project average and peak traffic volumes, as illustrated in Figures 4.14-2 and 4.14-3, the following is shown:

- Average quarry trips account for:
  - 1.7 percent of ADT on State Route 58 between U.S. 101 and El Camino Real;
  - 0.3 percent of ADT on State Route 58 between El Camino Real and Pozo Road;
  - 0.5 percent of ADT on State Route 58 east of Pozo Road.
- Peak quarry trips account for:
  - 5.0 percent of ADT on State Route 58 between U.S. 101 and El Camino Real;
  - 0.6 percent of ADT on State Route 58 between El Camino Real and Pozo Road;
  - 1.0 percent of ADT on State Route 58 east of Pozo Road.

While worst-case peak traffic volumes from the Project are minimal along these segments of State Route 58, based on information contained in the Oster/Las Pilitas Quarry Final EIR (County of San Luis Obispo, 2014), truck trips generated by the Project would cause incremental damage and wear to roadway pavement surfaces along State Route 58. The degree to which this wear and tear would occur depends on the roadway's design (pavement type and thickness) and its current condition. The Project's contribution of continued heavy truck traffic along these segments of State Route 58 is considered a potentially significant impact that can be mitigated through implementation of Mitigation Measure TR-3, below (Class II). The intent of this measure is to ensure on-going maintenance of State Route 58 along the haul route such that the highway does not experience major degradation beyond the existing condition of the highway without the Project. With the implementation of Mitigation Measure TR-3, impacts would be less than significant.

### **Mitigation Measures for Impact TR-3**

**TR-2 Coordinate and implement El Camino Real improvements at quarry access driveway.** Prior to the start of operations under the Project's Notice to Proceed, the Applicant shall coordinate with the San Luis Obispo County Department of Public Works to establish the need for, and implementation of, the following roadway improvements:

- Improve or widen the El Camino Real southbound shoulder at the quarry access road driveway to ensure adequate paved area is available to support the turning radius for quarry egress of all vehicles, and repair any future shoulder damage demonstrably attributed to Proposed Project operation through Phase IV activities. Any improvements shall ensure Class II (or applicable) bicycle lane status is maintained on El Camino Real.
- Improve El Camino Real at the quarry access driveway to ensure consistency with applicable County's Rural Driveway Approach standard(s) pertaining to deceleration and acceleration tapers. Any improvements shall ensure Class II (or applicable) bicycle lane status is maintained on El Camino Real.

**TR-3 Reduce Project contribution to deterioration of State Route 58 structural conditions.**

- Option 1: Prior to issuance of a Notice to Proceed, the Applicant shall prepare a pavement monitoring program for State Route 58 between Mile Marker (MM) 0.00 and MM 5.44 for review and approval by the County in consultation with Caltrans. The program shall provide before and after video evidence of pavement conditions, require the posting of a pavement repair bond or other mechanism to fund the repair of roadway deterioration resulting from the project, and a mechanism that ensures the funds collected will only be used for improvements /repairs to State Route 58 between MM 0.00 and MM 5.44. The Applicant shall coordinate with the maintenance division of Caltrans regarding the details of the monitoring program and any requirements for road repair should they become necessary. The program shall include criteria for when maintenance is required and the type of repairs required for various pavement deterioration conditions that may result from heavy truck traffic. Any improvements / repairs resulting from the pavement monitoring program shall be made in accordance with the Complete Streets Program.
- Option 2: Prior to issuance of a Notice to Proceed, the Applicant shall enter into an agreement in a form acceptable to the County of San Luis Obispo or Caltrans to pay for the Project's fair share of impacts to State Route 58 roadway (between MM 0.00 and MM 5.44). The agreement shall include a mechanism that ensures the funds collected will only be used for improvements/repairs to State Route 58 between MM0.00 and MM5.44. The cost per load /cost per ton shall be established using project generated information and / or assumptions consistent with Caltrans standards including the cost associated with any improvements required by the Complete Streets Program.

### Reclamation

Proposed reclamation activities would occur parallel to continued quarry operations for the lifetime of the Project, followed by final reclamation once the quarry has been closed. Per the activities discussed in EIR Section 2.6, reclamation would not generate daily trips on study area roadways beyond that associated with quarry operational trips. Furthermore, these daily trips would be short-term, suspending upon cessation of reclamation activities. Therefore, no increase in potential roadway damage during reclamation would occur over the analysis presented above for operational activities. No impacts would occur (No Impact).

<b>Impact TR-4: Result in inadequate parking capacity</b>
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### Excavation

The Proposed Project would continue existing operations of the quarry, including providing on-site parking for workers and no truck queuing on public roadways. Therefore, the Proposed Project would not change the accessibility or numbers of existing public parking areas or spaces. No impacts would occur (No Impact).

### Reclamation

Reclamation would generate short-term daily trips, suspending upon cessation of reclamation activities. Similar to quarry excavation operations, reclamation activities would include providing on-site parking for workers and no truck queuing on public roadways. Therefore, reclamation would not change the accessibility or numbers of existing public parking areas or spaces. No impacts would occur (No Impact).

**Impact TR-5: Result in inadequate emergency access**

**Excavation**

The Proposed Project would continue existing operations of the quarry. Therefore, the Proposed Project would not introduce any new or incompatible uses to the roadway study area's circulation system that could impede emergency access into the quarry. Furthermore, as discussed in Impact TR-3, Mitigation Measure TR-2 will improve quarry egress and ingress on El Camino Real. With the implementation of Mitigation Measure TR-2, less than significant impacts to emergency access on El Camino Real and into the quarry would occur during quarry operation (Class II).

**Reclamation**

Reclamation would generate short-term daily trips, suspending upon cessation of reclamation activities. Similar to quarry excavation operations, reclamation activities would not impede emergency access. Furthermore, quarry egress and ingress on El Camino Real would be improved by Mitigation Measure TR-2. With the implementation of Mitigation Measure TR-2, less than significant impacts to emergency access on El Camino Real and into the quarry would occur during reclamation (Class II).

**Impact TR-6: Conflict with an adopted policies, plans, or programs supporting alternative transportation**

**Excavation**

The Proposed Project would continue existing operations of the quarry. As discussed in Impact TR-1, the Proposed Project would not change any existing operations or entitlements and thus would not introduce any new or incompatible uses to the roadway study area circulation system that could impact modes of alternative transportation. Furthermore, as discussed under Impact TR-2, Mitigation Measure TR-3 would ensure quarry access improvements maintain Class II (or applicable) bicycle lane status on El Camino Real.

In addition to the above, bike lanes are located along portions of State Route 58. As discussed above in Impact TR-3, the Project's average and peak quarry traffic account for a small percentage of State Route 58 ADT volumes. However, with respect to these ADT volumes, they are heavy truck trips. A review of Caltrans bicycle level of service (BLOS) score for those segments of State Route 58 affected by the Project indicate an existing BLOS of "F" (County of San Luis Obispo, 2014). BLOS scores are based, in order of importance, on five variables, including:

- Average effective width of the outside through lane;
- Motorized vehicle volumes;
- Motorized vehicle speed;
- Heavy vehicle (truck) volumes;
- Pavement condition.

The primary contributing factors associated with Caltrans' calculated BLOS "F" for affected segments of State Route 58 is due to the existing and proposed future percentages of heavy vehicles trips. Based on information provided by Caltrans, the County has determined that BLOS more appropriately describes a bicyclist's perception of the experience that he/she would perceive along a segment of roadway (County of San Luis Obispo, 2014). However, any degradation of the existing or future BLOS on State Route 58

from continued traffic volumes of the Proposed Project on State Route 58 could be mitigated to a level of less than significant (Class II) with implementation of Mitigation Measure TR-3, which may, at Caltrans discretion and in consultation with the County, be used to determine the appropriateness of providing shoulders, restriping and/or other improvements to ensure that all travelers, including bicyclists, can be accommodated on the State highway system.

Based on the above analysis, while the Project would continue heavy truck trips on segments of State Route 58 that has an existing BLOS F, impacts to adopted policies, plans, or programs supporting alternative transportation would be less than significant with implementation of Mitigation Measure TR-3 (Class II).

#### **Mitigation Measure for Impact TR-6**

**TR-3        Reduce Project contribution to deterioration of State Route 58 structural conditions.**

#### **Reclamation**

Reclamation would generate short-term daily trips, suspending upon cessation of reclamation activities. Similar to quarry excavation operations, reclamation activities would not introduce any new or incompatible uses to the roadway study area's circulation system that could impact modes of alternative transportation. Less than significant impacts to alternative transportation would occur during reclamation (Class III).

